XII. CONGRESS of THE WORLD SOCIETY of EMERGENCY SURGERY
2025 ANTALYA
OCTOBER 21st - 25th, 2025 TÜRKİYE

The XII CONGRESS of The WORLD SOCIETY of EMERGENCY SURGERY



wses2025antalya

OCTOBER, 21st-25th, 2025

ANTALYA / TÜRKİYE

Turkish Association of Trauma and Emergency Surgery
Sehremini Neighborhood, Koprulumehmetpasa Street, Dadasoglu Apartment,
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Prof. Mehmet ERYILMAZ, MD
MBAH, FACS, FEBS (EmSurg), FTBS

Dear Esteemed Colleagues....

It's very big honour for us to announce that the 12th World Congress of Emergency Surgery will be held in Antalya, Turkiye, from October 21-25, 2025.

This prestigious congress will bring together global experts, experienced clinicians, researchers and young professionals in the field of trauma and emergency surgery, providing a unique platform for sharing knowledge, experience and recent developments.

This year's main theme, "The Globalization of Best Practices Through Innovations in Emergency Surgery", emphasizes the importance of collaboration and innovation in our field.

The congress program will include the following scientific content:

- Interactive sessions, panels and plenary sessions by internationally renowned speakers.
- Current discussions on new trends and global guidelines in emergency and trauma surgery.
- Courses, workshops, drills and simulation studies.
- Sharing of the latest research through oral and poster presentations.

The participants will have the opportunity to discuss the latest trends and new evidence of both trauma and general non-traumatic emergency surgery and attend highly interactive debates, key note speeches and lectures, new and updated existing clinical practice guidelines discussions, multidisciplinary panels and roundtable meetings, gamified training activities, satellite events and selected oral presentation and video sessions.

In addition to these, a comprehensive scientific program enriched with multidisciplinary panels, interviews with experts and satellite symposiums awaits you at our congress.

Our carefully prepared social program includes evening events, cultural tours and the opportunity to share knowledge and experience with experts at worlwide in a friendly environment. The participants will also have the opportunity to discover the rich cultural and historical beauties of Antalya.

Your participation will add value to our congress and contribute to important discussions that will shape the global future in the field of emergency surgery and trauma.

At the five-star Susesi Luxury Resort Hotel, where you will stay in an all-inclusive concept, you will also be able to find some rest between your busy work schedule and the opportunity to communicate face-to-face with colleagues from different countries of the world. You will be able to get to know the new products of the industry. You will spend time in the fun dynamics of the social program and have the opportunity to swim in the pool or the sea. You will be able to visit the historical and touristic places of Antalya and witness its cultural richness.

We are looking forward to meeting you in Antalya on behalf of the local organizing committee and the WSES board of directors.

Warmly greetings....



Prof. Dr. Walter L. Biffl, MD
FACS

Greetings To The Global Surgical Community!

As many of you know, we had a very successful congress in Rodos, Greece in June 2024. We are pleased to announce the next World Congress of the World Society of Emergency Surgery in Antalya, Turkiye in 2025! The details of the Congress remain to be confirmed, but we can promise an outstanding educational program.

Dr. Mehmet Eryılmaz will be coordinating the Congress in Turkey, and he has assured us of an excellent venue and a memorable experience. In the coming months we will be developing an outstanding scientific program. Please save the date and plan to meet us in Turkey!

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Yiğit Önaloğlu	Türkiye
Yücel Yüksel	Türkiye

Oct. 21st, 2025 Tuesday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
	Course 1	**Course 2**	**Course 3**	**Course 4**		
13.30 - 17.30	**SURGICAL PUBLISHING NAVIGATING THE PUBLICATION OF SURGICAL BOOKS AND PAPERS** Directors: **Rifat Latifi (USA)** **Fausto Catena (Italy)** *Session 1* **Surgical Book Publishing: Insights And Strategies - 1** Moderators: **Rifat Latifi (USA)** **Fausto Catena (Italy)** **H. Kemal Raşa (Türkiye)** Writing, Editing, Publishing Books and Building Your Legacy: Personalization in Surgical Publishing- **Rifat Latifi (USA)** Writing, Editing, and Publishing: Author and Editor Perspectives **Fausto Catena (Italy)** Collaborative Writing in Surgical Publishing **Federico Coccolini (Italy)** Overcoming Barriers to Surgical Authorship **Discussion Session:** All Panelists **Surgical Book Publishing: Insights And Strategies - 2** Moderators: **Fikri Abu-Zidan (UAE)** **Fausto Catena (Italy)** **Rifat Latifi (USA)** Leveraging Technology and Statistics in the Publishing Process **Fikri Abu-Zidan (UAE)**	**CLINICAL REASONING AND CRITICAL DECISION MAKING** Directors: **Fikri Abu-Zidan (UAE)** **Arda Işık (Türkiye)** *Session 1* Basics of clinical reasoning Why are we here? Distractions and reality **Fikri Abu-Zidan (UAE)** Understanding clinical reasoning **Fikri Abu-Zidan (UAE)** Dissecting the mind Preventing Medical Errors **Arda Işık (Türkiye)** Discussion: Learning from medical errors **Arda Işık (Türkiye)**	**WAR SURGERY** Director: **Mehmet Eryılmaz (Türkiye)** *Session 1* Chairs: **Mehmet Eryılmaz (Türkiye)** **Gökhan İbrahim Öğünç (Türkiye)** Greetings & Introduction **Mehmet Eryılmaz (Türkiye)** History and Geographic Characteristics of Wars **Cengizhan Yiğitler (Türkiye)** Changing Acute Care Consepts of Combat Related Injuries **Ufuk Sarıkaya (Türkiye)** Wounding Mechanism of Small Arms **Gökhan İbrahim Öğünç (Türkiye)** Biomechanism of blast injuries **Fikri Abu-Zidan (UAE)** Burn Injuries **Alfredo Cordova (USA)**	**HANDS ON OPEN ABDOMEN** Director: **Ali Fuat Kaan Gök (Türkiye)** **Registration and Welcome** **Introduction of Faculty Members** *Session 1* Chairs: **Ali Fuat Kaan Gök (Türkiye)** **Ufuk Oğuz İdiz (Türkiye)** Definition and Indications of Open Abdomen **Fevzi Çebi (Türkiye)** Intra-abdominal Hypertension and Abdominal Compartment Syndrome **Leman Damla Ercan (Türkiye)** Damage Control Surgery **Haluk Kerim Karakullukçu (Türkiye)** Intra-abdominal Sepsis **Yasir Musa Kesgin (Türkiye)** Discussion		
	Course 1	**Course 2**	**Course 3**	**Course 4**		
13.30 - 17.30	Navigating Revisions and Resubmissions **Mario Giuffrida (Italy)** Summary and Shared Insights **Fausto Catena (Italy)** **Rifat Latifi (USA)** *Session 2* **Dissecting The Anatomy Of Scientific Paper Publishing: Practical Approaches** Moderators: **Süleyman Utku Çelik (Türkiye)** **Vishal Shelat (Singapore)** The Anatomy of a Scientific Paper: Types and Structures **Manu Malbrain (Belgium)** **Ernest E. Moore(USA)** Crafting an Abstract for Scientific Meeting Presentation: Avoiding Mistakes That Will Reject Your Abstract **Vishal Shelat (Singapore)** Paradigm Shifts in Surgical Publishing: The Role of Open Access in Global Equity **Federico Coccolini (Italy)** **Fausto Catena (Italy)** Utilizing Major Databases to Develop Surgical Guidelines: An In-Depth Overview **Belinda de Simone (France)** Navigating Authorship: Guidelines, The Ethics, and Responsibilities in Academic Publishing **Rifat Latifi (USA)** A writing Exercize with audience **Fausto Catena (Italy)** **Rifat Latifi (USA)** **Summary** - One Main Slide from Each Topic	*Session 2* Applications of medical reasoning Methods of teaching clinical reasoning **Fikri Abu-Zidan (UAE)** The Six thinking hats approach **Fikri Abu-Zidan (UAE)** Six thinking hats exercise: Teamwork What did we learn? Wrap-up	*Session 2* Chairs: **Mehmet Eryılmaz (Türkiye)** **Murat Kalemoğlu (Türkiye)** Behind Armor Blunt Trauma Mechanics Associated with Personal Protective Equipment **Mert Can Şimşek (Türkiye)** Basic & Advanced Life Support at Battlefield **A. Kemalettin Koltka (Türkiye)** Principles of Damage Control Resuscitation **Sami Eksert (Türkiye)** Principles of Damage Control Surgery **Murat Kalemoğlu (Türkiye)** Major Vascular Repair and Ligation Techniques **Andreas Hecker (Germany)** ONLINE *Session 3* Chairs: **Mehmet Eryılmaz (Türkiye)** **Cengizhan Yiğitler (Türkiye)** Rational strategies in shelter for surgical management **Mehmet Eryılmaz (Türkiye)** Artificial Intelligence in Military Medicine **Andrey Litvin (Belarus)** New Triage Consept for Mass Casualties **Mehmet Eryılmaz (Türkiye)** Scenario & Triage Game - Simulations on Board with Triage Tags **Mehmet Eryılmaz (Türkiye)** **Fikri Abu-Zidan (UAE)** **Hatice Ayhan (Türkiye)** **Vahit Onur Gül (Türkiye)** **Fulya Okudur (Türkiye)** **Mehmet Burak Eşkin (Türkiye)** Debriefing of Course **Mehmet Eryılmaz (Türkiye)**	*Session 2* Chairs: **Ali Fuat Kaan Gök (Türkiye)** **Ahmet Sürek (Türkiye)** Temporary Abdominal Closure Techniques in Open Abdomen Management **Sezer Bulut (Türkiye)** Complications of Open Abdomen **Ufuk Oğuz İdiz (Türkiye)** Management of Enteroatmospheric Fistula **Ahmet Sürek (Türkiye)** Case-based Applications **Ali Fuat Kaan Gök (Türkiye)** Discussion Hands-on Group Practice		

Oct. 22nd, 2025 Wednesday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
07.00 - 07.45	**MEET THE EXPERTS** **Acar Aren (Türkiye)** Acil Serviste Şiddet Violence in the Emergency Department	**MEET THE EXPERTS** **Çetin Kotan (Türkiye)** Özefagus Acillerinde Cerrahın Rolü Surgeon's role in the esophageal emergencies	**MEET THE EXPERTS** **Gökhan Akbulut (Türkiye)** Travma ve Acil Cerrahide Yapay Zekanın Rolü Role of AI in Trauma and Emergency Surgery	**MEET THE EXPERTS** **Mehmet Mihmanlı (Türkiye)** Hekimlikte Stres ve Belirsizlikle Baş Etmek: Cerrahi Pratikten Yaşama Coping with Stress and Uncertainty in Medicine: From Surgical Practice to Life		
NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**		*Course 5*	*Course 6*	*Course 7*		
08.00 - 08.15	**Saygı Duruşu / Moment of Silence** **İstiklal Marşı / National Anthem** **Hoş Geldiniz / Welcome**	**ADVANCED EMERGENCY ABDOMINAL SURGERY** Director: **Micheal Sugrue (Ireland)**	**EMERGENCY VASCULAR SURGERY** Director: **Arda Çetinkaya (Türkiye)**	**IFADmicro** Director: **Manu Malbrain (Belgium)**		
08.15 - 09.15	**Travma ve Acil Cerrahide Mesleki Sorun Sahaları -I / Professional Challenges in Trauma and Emergency Surgery - I** Oturum Başkanları /Chairs: **Semra Günay, Mehmet Mihmanlı** Türkiye'de Travma ve Acil Cerrahi Eğitiminin Dinamiği / The Dynamics of Trauma and Emergency Surgery Training in Türkiye **Şahin Kaymak** Travma ve Acil Cerrahi Alanında Finansal Sorunlar, Ekonomik Eşitsizlikler / Financial Challenges and Economic Inequalities in Trauma and Emergency Surgery **Aziz Ahmet Sürel** Akademik Yükselme ve Yayıncılık / Academic Career Advancement and Publishing **Ali Fuat Kaan Gök** Malpraktis Olgularının Yönetimi / Management of Malpractice Cases **Sezgin Yılmaz**	*Session 1* Welcome **Mehmet Eryilmaz (Türkiye)** Introduction to EASC **Micheal Sugrue (Ireland)** Complex Appendicitis Surgical Approaches **Head to Head with Matti Tolonen** Case Scenario **Rifat Latifi (USA)** **Dieter G. Weber (Australia)** **Ali Fuat Kaan Gök (Türkiye)** **Walter L. Biffl (USA)** **Ana Maria Gonzalez Castillo (Spain)** Surgical Approach to Hinchey 3 and 4 **Head to Head with Rifat Latifi** Case Scenario **Belinda de Simone (France)** **Pantelis Vassiliu (Greece)** **Fausto Catena (Italy)** **Hakan Yiğitbaş (Türkiye)** **Tayfun Yücel (Türkiye)** *To be continued*	*Session 1* Chairs: **Mehmet Kurtoğlu (Türkiye)** **Uğur Bengisun (Türkiye)** Opening and the presentation of the speakers **Uğur Bengisun (Türkiye)** The methods of examination and imaging in peripheral vascular surgery **Can Y. Boztuğ (Türkiye)** Mesenteric vascular diseases **Ö.Arda Çetinkaya (Türkiye)** The management of abdominopelvic major vascular injuries: How to repair, what to sacrifice? **Mehmet Kurtoğlu (Türkiye)** Discussion with audience	*Session 1* Introduction to Fluid Stewardship Chairs: **Manu Malbrain (Belgium)** **Nezih Akkapulu (Türkiye)** Introduction to Fluid Stewardship: The 10D framework of fluid therapy **Manu Malbrain (Belgium)** Honorary opening lecture: The best fluids for resuscitation in intra-abdominal hypertension and sepsis **Federico Coccolini (Italy)** Hemodynamic monitoring and assessment of fluid responsiveness: anything new? **Nezih Akkapulu (Türkiye)** Role of POCUS in evaluating the fluid excess (VExUS) **Manu Malbrain (Belgium)** Innovative monitoring with continuous IAP and APP **Vishal Shelat (Singapore)** Demo of non-invasive hemodynamic monitoring and PLR **Manu Malbrain (Belgium)** *To be continued*		
09.15 - 09.30	COFFE BREAK /KAHVE ARASI					
NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**		*Course 5*	*Course 6*	*Course 7*		
09.30 - 10.00	*Conference / Konferans* **Ol(a)mayanların Hikâyesi:** **Otuz Yılın Ardından** **The Story of the Unfulfilled:** **After Three Decades** Oturum Başkanı /Chair: **Mehmet H. Kurtoğlu** Konuşmacı / Speaker **Cemalettin Ertekin**	Large Bowel Obstruction with Primary Anastomosis: when and how! **Head to Head with Ari Leppäniemi** **Rifat Latifi (USA)** **Gustavo Fraga (Brasil)** **Arda Işik (Türkiye)** **Salih Tosun (Türkiye)** Case Scenario Open abdomen advanced techniques in closure **Micheal Sugrue (Ireland)** Case Scenario **Federico Coccolini (Italy)** **Rifat Latifi (USA)** **Dieter G. Weber (Australia)** **Walter L. Biffl (USA),** **Salih Tosun (Türkiye)** **Fausto Catena (Italy)** **Mehmet Eryılmaz (Türkiye)** Changing practice 5min of evidence an 10 min of consultant refection. One to one in the hot seat ! **Mesenteric Ischaemia** **Matti Tolonen (Finland)** Closing the Abdomen **Rifat Latifi (USA)** Case Scenario **Belinda de Simone (France)** **Rifat Latifi (USA)** **Dieter G. Weber (Australia)** **Ari Leppäniemi (Finland)** **Arda Işik (Türkiye)** **Fausto Catena (Italy)** *To be continued*	*Session 2* Moderators: **Mehmet Kurtoğlu (Türkiye)** **Ö.Arda Çetinkaya (Türkiye)** How can we manage a case of acute abdominal surgical disease accompanying abdominal aortic aneurysm? **Uğur Bengisun (Türkiye)** The management of extremity traumas **Mehmet Kurtoğlu (Türkiye)** The instruments, suture materials, and grafts used in vascular surgery **Can Y. Boztuğ (Türkiye)** Discussion with audience Hands-on models-Time to practice! *To be continued*	*Session 2* Closing Session Chairs: **Manu Malbrain (Belgium)** **Arda Işik (Türkiye)** Hemodynamic shock pattern recognition **Manu Malbrain (Belgium)** Case presentation with interactive discussion **Andy Kirkpatrick (Canada)** **Federico Coccolini (Italy)** **Arda Işik (Türkiye)** **Nezih Akkapulu (Türkiye)** Honorary Closing lecture: Lessons Learned from the ICU: How Physiology Guides Practice **Arda Işik (Türkiye)** Post test examination and Closing ceremony - IFA prize award for top 3 winners and group photo **Manu Malbrain (Belgium)** Q & A All speakers *To be continued*		

Oct. 22nd, 2025 Wednesday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
	NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**	Course 5	Course 6	Course 7		
10.00 - 11.15	**Travma ve Acil Cerrahide Mesleki Sorun Sahaları -II / Professional Challenges in Trauma and Emergency Surgery - II** Oturum Başkanları /Chairs: **Cemalettin Ertekin, Orhan Yalçın** Cerrahi Asistanlarında Tükenmişliğin Temel Özellikleri / Core Features of Burnout in Surgical Residents **Elif Mangan** Acil Cerrahide Karşılaşılan Klinik ve Organizasyonel Güçlükler / Clinical and Organizational Challenges in Emergency Surgery **Mehmet Özer** Acil Cerrahi Kliniklerinden İdari, Mali ve Hizmete Dair Beklentiler / Administrative, Financial, and Service-Related Expectations from Emergency Surgery Departments **Kayhan Özdemir** Acil Servis ile Genel Cerrahi Servisi Arasındaki İlişki: İletişim, Sorumluluk, Organizasyon / Emergency Department–General Surgery Collaboration: Communication, Responsibility, and Organization **Serap Ulusoy**	*Session 2* The Impossible Gallbladder **Head to Head with Ana Gonzalez** **Pantelis Vassiliu (Greece)** **Mircea Chirica (France)** **Rifat Latifi (USA)** **Arda Işik (Türkiye)** **Vishal Shelat (Singapore)** Case Scenario How to deal with CBD Stone Head to Head with Vishal Shelat **Case Scenario** **Rifat Latifi (USA)** **Dieter G. Weber (Australia)** **Ali Fuat Kaan Gök (Türkiye)** **Vishal Shelat (Singapore)** **Walter L. Biffl (USA)** **Ana Maria Gonzalez Castillo (Spain)** 10 steps to changing your consultant practice **Micheal Sugrue (Ireland)**	Vascular anastomosis techniques **Mehmet Kurtoğlu (Türkiye)** **Uğur Bengisun (Türkiye)** **Ö.Arda Çetinkaya (Türkiye)** **Can Y. Boztuğ** • Arteriotomy • Primary repair • Repair with patch • End-to-end arterial anastomosis • End-to-side arterial anastomosis	**IFADmicro** Manu Malbrain		
11.15 - 11.30	**COFFEE BREAK**					
	NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**	Course 5	Course 6	Course 7		
11.30 - 12.45	**Komplikasyonlar: Ne yapalım? / Complications: What Should We Do?** Oturum Başkanları /Chairs: **Birol Bostancı, Adnan Özpek** Akut Divertikülit / Acute Diverticulitis **Erdinç Kamer** Zor Kolesistektomilerde *Bail-Out* Prosedürleri / *Bail-Out* Procedures in Difficult Cholecystectomies **Mert Mahsuni Sevinç** Bariatrik Cerrahi Kaçaklarında Acil Tedavi Yaklaşımları / Management of Acute Leaks Following Bariatric Surgery **Oktay Banlı** Apendektomi Sonrası Komplikasyon Yönetimi? / Management of Post-Appendectomy Complications **Remzi Kızıltan**	Quick Fire Case Scenario **Walter L. Biffl (USA)** **Belinda de Simone (France)** **Dieter G. Weber (Australia)** **Arda Çetinkaya (Türkiye)** **Ari Leppäniemi (Finland)** Oh No Case Scenarioa **Rifat Latifi (USA)** **Arda Işik (Türkiye)** **Hakan Yiğitbaş (Türkiye)** **H. Segovia Lohse** **Pantelis Vassiliu (Greece)** **L. Ansaloni** OMG Case Scenario **Fausto Catena (Italy)** **Mircea Chirica (France)** **Walter L. Biffl (USA)** **Matti Tolonen (Finland)** **Sezai Leventoğlu (Türkiye)** **Ana Maria Gonzalez Castillo (Spain)** Close of meeting and key learning points	**EMERGENCY VASCULAR SURGERY** **Arda Çetinkaya**	**IFADmicro** Manu Malbrain		
12.45 - 14.00	LUNCH					

Oct. 22nd, 2025 Wednesday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
	NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**	*Course 5*	*Course 8*	*Workshop*		
14.00 - 15.15	**Acil Cerrahide Zor Hasta Yönetimi / Challenging Cases in Emergency Surgery: Management Strategies** Oturum Başkanları /Chairs: **Tolga Canbak, Mert Mahsuni Sevinç** Cerrahın Kabusu: Enteroatmosferik Fistülün Eşlik Ettiği Açık Karın / The Surgeon's Nightmare: The Open Abdomen With Enteroatmospheric Fistulas **Seracettin Eğin** Akut Kolesistit Cerrahi Yaklaşım / Surgical Approach to Acute Cholecystitis **Mehmet İlhan** Apendektomide Güdük Nasıl Kapatılmalıdır? / Stump Closure Techniques in Appendectomy **Burhan Mayır** Perfore Gastrik Tümörlerde Cerrahi Müdahale: Radikal Girişim mi, Palyatif Çözüm mü? / Surgical Intervention in Perforated Gastric Tumors: Radical Intervention or Palliative Solution? **Saygın Altıner**	**ADVANCED EMERGENCY ABDOMINAL SURGERY** **Micheal Sugrue**	**ANORECTAL EMERGENCIES COURSE** Director: **Salih Tosun (Türkiye)** *Session 1* Anatomy of the Anal Region and Benign Anal Diseases **Salih Tosun (Türkiye)** Hemorrhoids in Emergency: How to Treat? **Sezai Leventoğlu (Türkiye)** Anal Abscess Management: Imaging, Drainage, Definitive Surgery **Cihangir Akyol (Türkiye)** Single session therapy: Anal abscess and fistula treatment **Hakan T. Yanar (Türkiye)** *Hands-on 1* Hemorrhoid Management -Rubber Band Ligation -Laser Ablation -Hemorrhoidopexy **Sezai Leventoğlu (Türkiye)** **Cihangir Akyol (Türkiye)** **Salih Tosun (Türkiye)** **Hakan T. Yanar (Türkiye)**	**THE ROLE OF ERROR IN MEDICINE & SURGERY FROM TABOO TO LEARNING TOOL** Directors: **Belinda de Simone (France)** **Fausto Catena (Italy)** Welcome & Introduction **Belinda De Simone (France)** *Session 1* Lightning Talks – Framing the Error Turning Surgical Mistakes into Teaching Moments **Fausto Catena (Italy)** Myths of Error in Surgery: Changing the Narrative **Walter L. Biffl (USA)** Statistical Errors and Bias in Clinical Research **Fikri Abu-Zidan (UAE)** The Risk Management and Nontechnical Skills **Francesca Dal Mas (Italy)** The Second Victim: Emotional Consequences of Error **Haytham Kaafarani (USA)**		
15.15 - 15.30	COFFEE BREAK					
	NATIONAL DAY **15th TURKISH NATIONAL CONGRESS OF TRAUMA AND EMERGENCY SURGERY**	*Course 5*	*Course 8*	*Workshop*		
15.30 - 16.45	**Karın Travmaları Yönetimi / Abdominal Trauma Management** Oturum Başkanları /Chairs: **Çetin Kotan, Ali Coşkun** Penetran Karın Travmalarının Ameliyatsız Yönetimi / Non-Operative Management of Penetrating Abdominal Trauma **Orhan Alimoğlu** Penetran Kolon Travmalarında Operatif Karar Verme ve Sonucu Belirleyen Faktörler / Operative Decision-Making and Outcome-Determining Factors in Penetrating Colon Trauma **Server Sezgin Uludağ** Künt Karın Travmalarının Ameliyatsız Yönetimi / Non-Operative Management of Blunt Abdominal Trauma **Adnan Özpek** Bir Cerrahın En Zor Sınavı: Komplike Hepatik Travmalar / The Surgeon's Most Difficult Challenge: Complex Liver Traumas **Yücel Yüksel (Türkiye)**	**ADVANCED EMERGENCY ABDOMINAL SURGERY** **Micheal Sugrue**	*Hands-on 2* Anal Abscess Draniage and Seton Placement for Definitive Surgery **Hakan T. Yanar (Türkiye)** **Sezai Leventoğlu (Türkiye)** **Cihangir Akyol (Türkiye)** **Salih Tosun (Türkiye)** *Hands-on 3* Imaging With Anoscopy **Sezai Leventoğlu (Türkiye)** **Cihangir Akyol (Türkiye)** **Hakan T. Yanar (Türkiye)** **Salih Tosun (Türkiye)**	*Session 2* Expert Roundtable Discussion • Defining learning vs negligent error • Changing cultures of silence Moderators: **Walter L. Biffl (USA)** **Fausto Catena (Italy)** Real life experiences **Ali Fuat Kaan Gök (Türkiye)** **Rifat Latifi (USA)** Research & Systemic Error Publishing & Trials Avoiding Common Mistakes in Publishing: An Editorial Perspective **Kemal Raşa (Türkiye)** Surgical Sepsis and the Power of Scientific Myth **Robert Sawyer (USA)** Barriers to Global RCTs: What I Learned from the COOL Study **Andrew Kirkpatrick (Canada)** **Followed by:** *"Ask the Editor" Q&A* Closing Remarks & Call to Action **Belinda De Simone (France)** • Key take aways: "Gender, education and skills: the role of the Trainer/ Mentor"		
18.30 -20.30	*Opening Ceremony*					
	Honorary Lecture: "On Protection: An Engineer's Journey"- Serpil Gönenç Dinçer (Türkiye)					

Oct. 23th, 2025 Thursday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
07.00 - 07.45	**MEET THE EXPERTS** **Ernest E. Moore (USA)** **What are the Qualities of True Leadership?**	**MEET THE EXPERTS** **Ruben Peralta (Qatar)** **Trauma Induced Coagulopathy**	**MEET THE EXPERTS** **Haytham Kaafarini (USA)** **Leadership in Trauma Bay**	**MEET THE EXPERTS** **Mehmet H. Kurtoğlu (Türkiye)** **Why Sports Matter for a Surgeon?**	Free Papers	Free Papers
08.00 - 08.30	**Management Strategies for Solid Organ Injuries** Chairs: **Mario Testini (Italy)** **Federico Coccolini (Italy)** Conservative Management of Liver Trauma: A Three-Year Experience in a Trauma Hospital **Agron Dogjani (Albania)** Operative Management of Patients with Hepatic Trauma **Gültekin Hoş (Türkiye)**	**Damage Control Resuscitation** Chairs: **Manu Malbrain (Belgium)** **Ruben Peralta (Qatar)** Current Fluid Resuscitation Strategies of a Bleeding Trauma Patient **Kemalettin Koltka (Türkiye)** Lessons Learned from the Dutch Prehospital Emergency Medical System **Edward Tan (Netherlands)**	*Updates 1* **PAMAP Study (Practices and Attitudes of Emergency Surgeons in Managing Acute Appendicitis)** **Belinda de Simone (France)**	*Guidelines 1* **Guidelines for the Management of Stoma Complications: MISSTO and WSES Collaboration** Chair: **Ali Fuat Kaan Gök (Türkiye)** Speaker: **Dario Parini (Italy)**		
08.30 - 09.15	Splenic Preservation in Trauma - when and how? **Arda Işık (Türkiye)** Optimizing Pancreatojejunostomy: Innovative strategies to Minimize Postoperative Pancreatic Fistula **Manos Pikoulis (Greece)**	TXA Use For Trauma, Pathologic Fibrinolysis Phenotypes **Ernest E. Moore (USA)** The Use Of Blood And Blood Products in Trauma **Sandro Rizoli (Qatar)**		*Guidelines 2* - **a** **WSES Guidelines – Emergency Surgery After Pancreatic Surgery (Kick-off session)** Chair: **Lorenzo Cobianchi (Italy)** Speaker: **Simone Frassini (Italy)** Contributors: **Stefano Granieri (Italy)** **Matteo Massaro (Italy)**		
09.15 - 09.30	COFFE BREAK					
09.30 - 10.00	*Conference* **Urgent ERCP Applications for Critically Ill Patients. An Extensive Survey in Türkiye** Chair: **Luca Ansaloni (Italy)** Speaker: **Sezgin Yılmaz (Türkiye)**	**Technical and Clinical Challenges in Open Abdomen** Chairs: **Federico Coccolini (Italy)** **Jizanan Ren (China)** Open Abdomen (Classification, Management, Fistulas) **Ari Leppaniemi (Finland)** Open Abdomen and Source Control in Intraabdominal Sepsis **Andrew Kirkpatrick (Canada)** Rescue Surgery - How to Avoid Enteroatmospheric Fistula Formation **Matti Tolonen (Finland)** Optimizing Laparotomy Closure- Fixing the Fundamentals and More **Micheal Sugrue (Ireland)**	*Updates 2* **2025 Update of the WSES Guidelines on Acute Appendicitis** Chairs: **Mauro Podda (Italy)** **Fausto Catena (Italy)** Introduction Diagnosis **Paola Fugazzola (Italy)** Non-Operative Management of Uncomplicated Acute Appendicitis **Mauro Podda (Italy)** Timing Of Appendectomy and In-Hospital Delay **Belinda De Simone (France)** Surgical Treatment **Belinda De Simone (France)** Management of Perforated Appendicitis With Abscess **Mauro Podda (Italy)** Perioperative Antibiotic Therapy **Marco Ceresoli (Italy)**	*Guidelines 2* - **b** **WSES Guidelines – Emergency Surgery After Pancreatic Surgery (Kick-off session)** Chair: **Lorenzo Cobianchi (Italy)** Speaker: **Simone Frassini (Italy)** Contributors: **Stefano Granieri (Italy)** **Matteo Massaro (Italy)**	Free Papers	Free Papers
10.00 - 10.45	**Emergency Biliary Surgery Revisited: Updates, Pitfalls, and Tips** Chairs: **Walter L. Biffl (USA)** **Mustafa Kerem (Türkiye)** Evaluation and Management of Choledocholithiasis and Suspected Choledocholithiasis **Walter L. Biffl (USA)**					
10.45 - 11.15	Bailout Procedures During Laparoscopic Cholecystectomy for Acute Cholecystitis **Marco Ceresoli (Italy)** Common Bile Duct Injuries - How do They Happen and How To Prevent? **Selman Uranues (Austria)** Unexpected Emergencies in Hydatid Disease: Lessons for the Acute Care Surgeon **Hüseyin Kerem Tolan (Türkiye)**	*Conference* **Lower GI Bleeding: A surgeon's headache** Chair: **Mehmet Eryılmaz (Türkiye)** Speaker: **George Velmahos (USA)**				
11.15 - 11.30	COFFE BREAK					

Oct. 23th, 2025 Thursday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
11.30 - 12.45	*Interactive Session 1* **Pancreatic Trauma** Moderators: **Ari Leppaniemi (Finland)** **Walter L. Biffl (USA)** Keynote Speakers: The Pancreatic Trauma Nightmare **Walter L. Biffl (USA)** Emergency Whipple **Mario Testini (Italy)** Case Presenters: **Leman Damla Ercan (Türkiye)** **Katherine H. Albutt (USA)** Discussants: **Mircea Chirica (France)** **Mario Testini (Italy)** **Mustafa Kerem (Türkiye)** **April Mendoza (USA)** **Gültekin Hoş (Türkiye)** **Hilmi Anıl Dinçer (Türkiye)**	**The Art and Science of Trauma Training and Education** Chairs: **Dieter G. Weber (Australia)** **Hakan T. Yanar (Türkiye)** Training Civilian and Military Surgeons in Trauma **Demetrios Demetriades (USA)** Optimizing Surgical Training in a Multidisciplinary and Interprofessional Masterclass on Damage Control (DSTC and DATC Combined Courses 15 Years Experience) **Edward Tan (Netherlands)** The Pedagogical Value of Errors in Our Practices and the Modern Education **Belinda De Simone (France)** Education in Trauma and How to Use Education to Build Bridges Between Countries **Sandro Rizoli (Qatar)**	*Dedicated Session* **Emergency Surgery in Humanitarian Crisis and Disasters** Moderators: **Hakan Yiğitbaş (Türkiye)** **Peter Gogalniceanu (UK)** Maraş Earthquakes **Şükrü Yorulmaz (Türkiye)** Surgical Leadership in Times of Policrisis: Adapting, Innovating, Surviving **Anastasia Pikouli (Greece)** Fifteen Years of Surgical Experience in Humanitarian Aid **Orhan Alimoğlu (Türkiye)** The Impact of Gaza War on Health Care System **Sobhi Skaik (Türkiye)**	Free Papers	Free Papers	
12.45 - 14.00	*National Delegates Meeting* **Chairs:** **Mario Giuffrida** **Fausto Catena** **Walter L. Biffl**	**LUNCH**				
14.00 - 14.30	*Conference* **Reflections of an Academic Trauma Surgeon, Researcher and Educator** Chair: **Mehmet H. Kurtoğlu (Türkiye)** Speaker: **Demetrios Demetriades (USA)**	**War Surgery** Chairs: **Mehmet Eryılmaz (Türkiye)** **Peter Gogalniceanu (UK)** The Novel Threats in Gunshot Wounds in Urban Warfare Conditions **Gökhan İbrahim Öğünç (Türkiye)** Hospital Preparedness: Are we ready for War? **Edward Tan (Netherlands)** Trauma Induced coagulopathy **Lorenzo Ghiadoni (Italy)** Combat Limb Injuries: Targeted Evacuation and Orthoplastic Reconstruction Show a Reduction in Infection Rates **Stepan Kuchabskyi (Ukraine)**	*Guidelines 3* **WSES Antalya Consensus on End-of-Life Care in Emergency Surgery** **Chairs:** **Belinda de Simone (France)** **Fausto Catena (Italy)** **Walter L. Biffl (USA)** **Panelists:** Highlights on the EoL Care Survey Main Results **Belinda De Simone (France)** Definition and Recognition of End-of-Life in Emergency Surgery **Vishal Shelat (Singapore)** Advance Directives, DNR Orders, and Surrogate Decision-Makers **Nikolaos Pararas (Greece)** Shared Surgical Decision-Making and Multidisciplinary Involvement **Dimitris Damaskos (UK)** Communication and Ethical/Cultural Considerations **Arda Işık (Türkiye),** **Evika Karamagioli (Greece)** Symptom Management and Palliative Approaches **Belinda De Simone (France)** Documentation, Advance Planning, and Quality Improvement **Giovanna Di Meo (Italy)** Training, Protocols, and Institutional Support **Boris Sakakushev (Bulgaria)** Moderator: **Federico Coccolini (Italy)**	*Guidelines 4 - a* **Consensus section: WSES-PSOGI-SICO Guidelines in Surgical Emergencies in Peritoneal Surface Malignancies** Chair: **Luca Ansaloni (Italy)** Coordinators: **Paula Fugazzola (Italy)** **Simone Frassini (Italy)**	Free Papers	Free Papers
14.30 - 15.15	**Modern Strategies in Acute Pancreatitis** Chairs: **Luca Ansaloni (Italy)** **Michael Sugrue (Ireland)** Optimal Timing of Cholecystectomy for Acute Biliary Pancreatitis **Erdem Kınacı (Türkiye)** The Right Time to Act: ERCP Indications in Gallstone Pancreatitis **Berk Gökçek (Türkiye)**					
15.15 - 15.45	Peripancreatic Chaos: Strategies for Local Complications **Katherine H. Albutt (USA)** Optimal Timing of Debridement in Necrotizing Pancreatitis **Ari Leppaniemi (Finland)**	*Conference* **Our Experiences in Health Organization in Terrorist Attacks and Residential Conflicts** Chair: **Sandro Rizoli (Qatar)** Speaker: **Mehmet Eryılmaz (Türkiye)**				
15.45 - 16.00	COFFE BREAK					

Oct. 23th, 2025 Thursday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
16.00 - 16.30	**Supportive Strategies for the Critically Ill Surgical Patient** Chairs: **Suk Kyung-Hong (S. Korea)** **Erdem Kınacı (Türkiye)** Surgical Stabilization of Rib Fractures (SSRF): the WSES and CWIS Position Paper **Fausto Catena (Italy)** Early Mobilization in Critically Ill Surgical Patients **Suk Kyung-Hong (S. Korea)**	**From Catastrophe to Closure: Strategies in Abdominal Surgery** Chairs: **Manos Pikoulis (Greece)** **Ali Fuat Kaan Gök (Türkiye)** The Abdominal Compartment Syndrome has it Really Gone Away? **Micheal Sugrue (Ireland)** Complex Abdominal Catastrophes **Katherine H. Albutt (USA)** Surgical Decision-Making in CAWR in Post Intrabdominal Catastrophe: Tips and Tricks **Rifat Latifi (USA)** Abdominal Wall Repair After Open Abdomen; Early Or Late Fascial Closure **Salih Tosun (Türkiye)**	*Dedicated Session* **South East European Trauma (SEET) Collaborative Study Group** Moderators: **Mehmet Eryılmaz (Türkiye)** **Panthelis Vasiliu (Greece)** We are Stronger Together than Apart **George Velmahos (USA)** SEET Collaboration Up to Now **Panthelis Vasiliu (Greece)** Options and Recommendations for Enhanced SEET Collaboration **Marius T. Ciurea (Romania)** Things We Can Do in Cooperation Among Countries **Arda Işık (Türkiye)** Building Strong Professional Relationship **Krstina Doklestić Vasiljev (Serbia)** To Create a Unique SEE Shield for the Future **Kostas Fortounis (Greece)** To Create an İnternational Educational Cooperation? **Agron Dogjani (Albania)**	*Guidelines 4* - **b** **Consensus Section: WSES-PSOGI-SICO Guidelines in Surgical Emergencies in Peritoneal Surface Malignancies** Chair: **Luca Ansaloni (Italy)** Coordinators: **Paula Fugazzola (Italy)** **Simone Frassini (Italy)**	Free Papers	Free Papers
16.30 - 17.15	Driving Change in Pain Management in Acute Care Surgery **Dimitris Damaskos (UK)** Diaphragmatic Pacing for Quadriplegia and Acute Respiratory Failure **George Velmahos (USA)** Feeding the Surgical Patient: A focus in emergency and trauma surgery **April Mendoza (USA)**			*Guidelines 6* **Emergency General Surgery Organization and Function: Consensus Recommendations from the WSES** Chairs: **Fausto Catena (Italy)** **Süleyman Utku Çelik (Türkiye)** Spekaers: **Orestis Ioannidis (Greece)** **Mario Giuffrida (Italy)**		
17.15 - 17.30	COFFE BREAK					
17.30 - 18.45	**Current Concepts in the Comprehensive Care of Polytrauma Patients** Chairs: **Andrey Litvin (Belarus)** **Özgen Işık (Türkiye)** Radiological Interventions to Identify Urological Problems in The Multitrauma Patient **Fazilet Ergözen (Türkiye)** Traumatic Brain Injury: Classification, Models, and Markers **Tibet Kaçira (Türkiye)** Pediatric Surgical Perspectives in the Management of Multitrauma **Iljada Gaffar (USA)** Venous Thromboembolism Prophylaxis and the Place Of Vena Cava Filter in Patients With Multitrauma **Arda Çetinkaya (Türkiye)**	**Emergency Hernia Surgery: Techniques and Challenges** Chairs: **Rifat Latifi (USA)** **Salih Tosun (Türkiye)** Emergency Open Umbilical Hernia Repair - Think beyond the box! **Micheal Sugrue (Ireland)** Dancing with Medusae - Umbilical and Ventral Hernia Repair in Cirrhotic Patients **Rifat Latifi (USA)** Laparoscopic vs Open Repair in Strangulated Groin Hernias **Tayfun Yücel (Türkiye)** How to Gain Spaces in Chronic Complex Hernias in Emergency Settings? **George Velmahos (USA)**	**Urgent Anorectal Interventions: Evidence And Practice** Chairs: **Hakan T. Yanar (Türkiye)** **April Mendoza (USA)** Surgical vs. Conservative Approaches in Acute Thrombosed Hemorrhoids **Barış Mantoğlu (Türkiye)** The Incarcerated Prolapse That Won't Reduce: Sedation, Surgery or Something Else **Sezai Leventoğlu (Türkiye)** Recurrent Perianal Abscess: Risk Factors and Management Approaches **Jim Khan (UK)** Management of Perianal Abscess with Fistula: Tips & Tricks **Hakan T. Yanar (Türkiye)**	*Guidelines 5* **Shadows on the Tokyo Guidelines - Towards a New Consensus on Severe Acute Cholecystitis** Chairs: **Luca Ansaloni (Italy)** **Cengizhan Yiğitler (Türkiye)** Pitfalls of the Tokyo Guidelines classification of cholecystitis **Luca Ansaloni (Italy)** ACC in the High Risk Patient: Identification and Treatment **Paola Fugazzola (Italy)** Common Bile Duct Stones and Acc: Risks and Strategies **Simone Frassini (Italy)** Antibiotics and ACC: Prophylaxis, short course and treatment **Enrico Cicuttin (Italy)**	Free Papers	Free Papers
19.00 - 19.45	*WSES General Assembly*					

Oct. 24th, 2025 Friday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
07.00 - 07.45	**MEET THE EXPERTS** **Demetrios Demetriades (USA)** **Dogma In Trauma:** **An Obstacle To Progress**	**MEET THE EXPERTS** **Ari Leppaniemi (Finland)** **Future of Surgery**	**MEET THE EXPERTS** **Robert Sawyer (USA)** **Global Surgery**	**MEET THE EXPERTS** **Fausto Catena (Italy)** **History of WSES**	Free Papers	Free Papers
08.00 - 08.30	**Complex Intra-Abdominal Infections: Source Control and Critical Care Perspectives** Chairs: **Haytham Kaafarini (USA)** **Suk Kyung-Hong (Korea)** Pyogenic Liver Abscess - an Update **Vishal Shelat (Singapore)** Source Control in Intra-Abdominal Infections **Camilla Cremonini (Italy)** (ONLINE)	**Advances in Minimally Invasive Techniques for Emergency Surgery** Chairs: **Dimitris Damaskos (UK)** **Mehmet Mihmanlı (Türkiye)** Minimally Invasive Management of Boerhaave Syndrome **Mircea Chirica (France) (Italy)** Laparoscopy for Abdominal Trauma **Ali Fuat Kaan Gök (Türkiye)** Laparoscopy for Perforated Peptic Ulcer **Matti Tolonen (Finland)** The Role of Robotic Surgery in an Emergency Setting **Marco Milone (Italy)**	*Global Surgery 1* **WSES Global Surgery Group: Discussion on Future Planning** Chairs: **Francesco Piscioneri (Italy)** **Sezgin Yılmaz (Türkiye)** Speakers: **Edward Tan (Netherlands)** **Arda Işık (Türkiye)** **Fausto Catena (Italy)** **Evika Karamagioli (Greece)** **Hilmi Anıl Dinçer (Türkiye)**	*Updates 3* **Updates on the COOL Trial** Chairs: **Manos Pikoulis (Greece)** Spekaer : **Andrew Kirkpatrick (Canada)**		
08.30 - 09.15	Integrating Source Control Into Complex Decision Making **Robert Sawyer (USA)** Management of Complex Intraabdominal Infections **Ines-Rubio Perez (Spain)**			**One Survey & One Initiate** Chairs: **Krstina Doklestić Vasiljev (Serbia)** **Marius T. Ciurrea (Romania)** Panelists WSES Well-Being Project Survey **Francesca Dal Mas (Italy)** Global Barriers to Investigator Initiated Prospective Randomized Surgical Trials **Andrew Kirkpatrick (Canada)**		
09.15 - 09.30	COFFE BREAK					
09.30 - 09.50	*Conference* **Risk Factors for Bleeding in Older Patients With Stable Pelvic Fractures** Chair: **Gustavo P. Fraga (Brasil)** Speaker: **Walter L. Biffl (USA)**	**Damage Control Surgery** Chairs: **Andrew Kirkpatrick (Canada)** **Agron Dogjani (Albania)** New Technologies in The Service of Acute Care Surgery: The Helsinki Experience **Matti Tolonen (Finland)** Damage Control in Chest Trauma **Sandro Rizoli (Qatar)** Damage Control in Abdominal Trauma **Selman Uranues (Austria)** A New Era of Hybrid Approach in Emergency Surgery **Krstina Doklestić Vasiljev (Serbia)**	*Global Surgery 2* **Women in Trauma: A History of Women in Surgery** Chair: **Semra Günay (Türkiye)** Speaker: **April Mendoza (USA)**	Free Papers	Free Papers
09.50 - 10.45	*Interactive Session 2* **Extreme Scenarios in Trauma and Emergency Operations**		*Global Surgery 3* **Gender Equality, Opportunities and Barriers:** Chairs: **Katherine H. Albutt (USA)** **Leman Damla Ercan (Türkiye)** Panelists: **Elif Mangan (Türkiye)** **Banu Yiğit (Türkiye)** **April Mendoza (USA)** **Sezen Koyuncu (Türkiye)** **Seniha Deniz Şahin (Türkiye)**		
10.45 -11.15	Moderators: **Mehmet H. Kurtoğlu (Türkiye)** **Demetrios Demetriades (USA)** OP-019 MANAGEMENT OF ABDOMINAL GUNSHOT INJURIES: SURGICAL INTERVENTION OR CONSERVATIVE FOLLOW-UP? A SINGLE-CENTER EXPERIENCE Serhat Binici, Fırat Aslan, Burhan Beger, Orhan Beger, Abbas Aras, **İkbil Eryılmaz**, Enis Oğuz, İskan Çallı, Mehmet Çetin Kotan, Mehmet Eryılmaz OP-013 EMERGENCY PERIPHERAL BYPASS SURGERY FOR ACUTE ISCHEMIA AND TRAUMA: A SINGLE-CENTER EXPERIENCE FEVZİYE DUYGU AVLAR OP-267 THE IMPORTANCE OF TIME IN ABDOMINAL AORTIC RUPTURE MELİKE ELİF TEKER AÇIKEL Retrohepatic IVC Trauma: Real-Life Strategies for a Rare Catastrophe **Ernest E. Moore (USA)** Discussants: **Yücel Yüksel (Türkiye)** **Matti Tolonen (Finland)** **Arda Çetinkaya (Türkiye)** **Katherine H. Albutt (USA)** **Yasir Musa Kesgin (Türkiye)**	*Conference* **From Laparoscopic Emergency Surgery to Robotic Emergency Surgery: has a New Era Begun** Chair: **Acar Aren (Türkiye)** Speaker: **Fausto Catena (Italy)**			
11.15 - 11.30	COFFE BREAK					

Oct. 24th, 2025 Friday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
11.30 - 12.45	**Decision Making in Surgical Infections** Chairs: **Elif Mangan (Türkiye)** **Robert Sawyer (USA)** Antifungals in Emergency Surgery **April Mendoza (USA)** Fulminant Clostridium Difficile Colitis: The Fine Balance Between Nothing or Everything **George Velmahos (USA)** Fournier's Gangrene: Advances in Management and Long-Term Outcomes **Özgen Işık (Türkiye)** Necrotizing Soft Tissue Infection (NSTI): Do it Early and Do it Right **Rifat Latifi (USA)**	**Building Effective Trauma Systems from Local to Global Contexts** Chairs: **Matti Tolonen (Finland)** **Acar Aren (Türkiye)** Trauma Systems – Implementation May Prevent 1/3 of All Trauma-Related Deaths **Sandro Rizoli (Qatar)** Trauma Systems and Trauma Centers in the USA: Past, Present and Future **Demetrios Demetriades (USA)** Examples to Follow, Pitfalls to Avoid When Organizing a Trauma System: Successes and Mistakes **Pantelis Vassiliu (Greece)**	**Modern Trends in Appendicitis Treatment** Chairs: **Mauro Podda (Italy)** **Ines Rubio Perez (Spain)** Scoring Systems in Appendicitis: Helpful Tools or Outdated Habits? **Haytham Kaafarini (USA)** Outpatient Appendectomy: Are We Ready for Same-Day Discharge? **Süleyman Utku Çelik (Türkiye)** How to Manage the Periappendiceal Abscess? **Jae Gil Lee (Korea)** Management of Acute Appendicitis in Pediatric Population **Iljada Gaffar (USA)**	Free Papers	Free Papers	
12.45 - 14.00	LUNCH					
14.00 - 14.30	*Conference* **Hybrid Threats and Healthcare Security - What Next?** Chair: **Mehmet Eryılmaz (Türkiye)** Speaker: **Peter Gogalniceanu (UK)**	**Integrating AI Into Emergency Surgery and Trauma Systems** Chairs: **Fikri Abu Zidan (UAE)** **Nezih Akkapulu (Türkiye)** AI Capabilities in Emergency Surgery Education **Andrey Litvin (Belarus)** AI, Innovations, and Technologies in Emergency General Surgery – Focused on İmplementation Strategies, Barriers and Ethical Challenges **Belinda de Simone (France)** AI-Powered Trauma Classification: Real-Time Imaging Analysis and Smart Triage in the ER **Elif Mangan (Türkiye)** The Evolving Role of Artificial Intelligence and Robotics in Trauma, Emergency Surgery, and Disaster Response **Gökhan Akbulut (Türkiye)**	*Interactive Session 3* Students World Championship of Emergency and Trauma Simulation Moderator: **Andréa Fraga (Brasil)**	Free Papers	Free Papers	
14.30 - 15.15	**Contemporary Approaches to Complex Trauma Wounds** Chairs: **Edward Tan (Netherlands)** **Selman Uranues (Austria)** Extremity Compartment Syndrome: The Hidden Entity that Nobody Owns **George Velmahos (USA)** Traumatic Wound Management and Factors Affecting the Healing Process **Gaye Filinte (Türkiye)** Considerations Regarding Fasciotomy in Limb Trauma **Marius T. Ciurrea (Romania)**		*Updates 4* **Human Elements in Emergency Surgery** Chairs: **Fausto Catena (Italy)** **Süleyman Utku Çelik (Türkiye)** Moral and Legal Aspects of Surgical "Guilt" in Emergency Surgery Malpractice **Boris Sakakushev (Bulgaria)** Futility in Emergency Surgery and Assessment of Futility Determination Practices and Perceptions Among Healthcare Professionals **Vishal Shelat (Singapore)** Ethics-Related Issues **Francesca Dal Mas (Italy)**			
15.15 - 15.45	Extreme Surgery: Amputations at the Scene **Demetrios Demetriades (USA)**	*Conference* **Trauma Surgery Education for Medical Students and Trainees: The Experience From Brasil** Chair: **Mustafa Kayıhan Günay (Türkiye)** Speaker: **Gustavo P. Fraga (Brasil)**				
15.45 - 16.00	COFFE BREAK					

Oct. 24th, 2025 Friday

Time	Air Hall	Water Hall	Fire Hall	Earth Hall	Life Hall	Soul Hall
16.00 - 17.15	**Pelvic Fracture: Pelvic Binders, Preperitoneal Packing, REBOA and Other Myths!** Chairs: **Demetrios Demetriades (USA)** **Ernest E. Moore (USA)** Management of Patients With Unstable Pelvic Fractures **Walter L. Biffl (USA)** REBOA for Hemorrhage Control in Pelvic Fractures **Ernest E. Moore (USA)** Prophylactic Antibiotics and the Open Pelvic Fracture **April Mendoza (USA)** Update in Pelvic Ring Injuries Guidelines **Federico Coccolini (Italy)**	**Surgical Challenges in Small Bowel Obstruction** Chairs: **Dario Parini (Italy)** **Birol Bostancı (Türkiye)** The Role of Surgery in Small Bowel Obstruction in the Virgin Abdomen: Indications, Timing, and Outcomes **Anıl Dinçer (Türkiye)** Emergency Surgery for Primary Malignant Small Bowel Complications **Boris Sakakushev (Bulgaria)** Minimally Invasive Surgery in Small Bowel Obstruction **Kayhan Özdemir (Türkiye)** Internal Hernias: Small Openings, Big Challenges **Nikolaos Pararas (Greece)**	**Education & Traininig in Trauma & Emergency Surgery** Chairs: **Pantelis Vassiliu (Greece)** **Tayfun Yücel (Türkiye)** Education and Systems Development in Sub-Saharan Africa **Katherine H. Albutt (USA)** Promoting Trauma Research in a Developing Country **Fikri Abu Zidan (UAE)** Training Trends in Emergency Surgery **Manos Pikoulis (Greece)** ATLS training programs in Albania, our Experiences and Challenges in Implementing **Agron Dogjani (Albania)**	Free Papers	Free Papers	Free Papers
17.15 - 18.00	COFFE BREAK					
18.30 - 19.00	**Remarks by the Minister of Health of the Republic of Türkiye** **Prof. Kemal Memişoğlu, MD** **Minister of Health**					

Oct. 25th, 2025 Saturday

Time	Air Hall					
08.00 - 09.15	**Acute Burn Management** Chairs: **Hakan Yiğitbaş (Türkiye)** **Gaye Filinte (Türkiye)** Treatment of Pediatric Burn Patients in a Level 1 Trauma Center Piscioneri **Edward Tan (Netherlands)** The Management of the Acute Burn Patient **Marius T. Ciurrea (Romania)** Acute Extremity Saving Procedures for Electrical Burns **Gaye Filinte (Türkiye)** Graft?- Skin Equivalent?- Areas of use in Major Burns **Hakan Yiğitbaş (Türkiye)**					
09.15 - 09.30	COFFE BREAK					
09.30 - 11.00	**Emergency Surgery for Obstructive Colorectal Cancer** Chairs: **Cihangir Akyol (Türkiye,** **Jim Khan (UK)** Let's Dive Deep Into Pelvis: Anatomical landmarks **Cihangir Akyol (Türkiye)** The Role of Diverting Stoma After Primary Anastomosis for Emergency Left Colon Resection **Marco Ceresoli (Italy)** Is Stenting, as a Bridge to Surgery in Obstructive Left Colonic Cancer, Necessary? **Sacit Altuğ Kesikli (Türkiye)** Surgical Approach to Obstructive Colorectal Cancer **Hakan T. Yanar (Türkiye)**					
11.00 - 11.15	COFFE BREAK					
11.15 - 12.30	**Management of Complications in Upper GI Surgery** Chairs: **Krstina Doklestić Vasiljev (Serbia)** **Berk Gökçek (Türkiye)** Extreme Clinical Case of Leakage Following Coloplasty Reconstruction of Caustic Esophageal Stenosis **Mircea Chirica (France)** Total Gastrectomy Complications: Nightmare of the upper GI surgeon **Nezih Akkapulu (Türkiye)** Prevention and Treatment of Complications After Esophagectomy **Nurettin Albayrak (Türkiye)** Endoscopic Approach to Peripancreatic Fluid Collections **M. Yener Akpınar (Türkiye)**					
12.30 - 14.00	**CLOSING CEREMONY**					

Oral Presentations

Acute Abdominal and Gastrointestinal Emergencies

OP-002

MECKEL DIVERTICULITIS: A RARE AND UNUSUAL PRESENTATION FOR ACUTE ABDOMEN IN ADULT FEMALE PATIENT

Gabriela Nita[1], Matteo Stumpo[2], Raffaella Caselli[3], Filippo Beretti[2], Rosario Faraci[1]

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[3]Ausl Reggio Emilia, Sant'anna Hospital, Intensive Care and Anesthesiology Unit

Meckel diverticulum is a rare finding during abdominal surgical procedures. Its inflammation is uncommon, and its diagnosis is differential among those for acute appendicitis.

We present the case of Meckel diverticulitis in a 23-y old female, who arrived in the ER with low abdominal pain, mainly to her left side, initiated more than 24 hours prior, mimicking a renal colic and increased inflammatory markers. The radiological findings showed an

inflamed mass of 4,5 cm in the proximity of the ileum, in her left flank. The patient was admitted to the surgical ward for observation and treatment.

She underwent laparoscopic exploration in the next 24 hours mainly because of unresponsiveness clinical and laboratoristic to initial antibiotic treatment. During this

procedure, a mechanical resection was required because of its torsion at phlegmonous end, the blunt dissection of the adhesions was performed. The post-operative evolution was favorable, and the patient was discharged on the 3rd post-op day.

The Meckel diverticulum is mainly found in children, up to 4%, 2% in young adults, mostly in men. It originates from the incomplete atrophy of the omphalomesenteric duct. Its location is on the antimesenteric sidewall of the distal ileum. Its inflammation is more frequent in children. This condition can occur due to bacterial infection, and it can lead to gangrene. The typical presentation can be with pain in the right iliac fossa.

Among the wide range of possible radiological investigations, the CT is rarely the one which can differentiate between appendicitis, Meckel diverticulitis or Crohn's disease. In female patients, the gynecological disorders may also be taken into consideration for mimicking symptoms. In this case, the pain localized principally in the left quadrants, similar to passing of renal stones, and became crucial for differential diagnosis.

In conclusion, the Meckel diverticulitis is a rare pathological finding, its quick treatment can prevent a serious health issue.

Keywords: Meckel diverticulum, acute abdomen, laparoscopic procedure

Abdominal Trauma

OP-006

A NEW METHOD FOR PREDICTING DIAPHRAGMATIC INJURY IN LEFT THORACOABDOMINAL PENETRATING STAB WOUNDS: THE DIAPHRAGMATIC PENETRATION INDEX"

Ekrem Çakar[1], Onur Olgaç Karagülle[1], Yavuz Selim Kömek[1], Mahmut Emin Çiçek[1], Mustafa Ayvazoğlu[3], Taşkın Rakıcı[2], Mert Mahsuni Sevinç[1]

[1]University of Health Sciences, İstanbul Training and Research Hospital, Department of General Surgery
[2]University of Health Sciences, İstanbul Training and Research Hospital, Department of Radiology
[3]İstanbul Prof. Dr. Cemil Taşcıoğlu City Hospital, Department of General Surgery

Introduction and Method: Diagnostic laparoscopy has become the standard in the literature to control diaphragm damage in left trochoabdominal stab wounds, and diaphragm evaluation has become the standard after 48 hours even if there is no intraabdominal organ/thoracic injury with tomography findings or clinically in abdominal cases.Therefore, diaphragm injuries are encountered in diagnostic laparoscopy or laparotomy even if radiological findings after admission do not show diaphragm injury. The distance between the stab wound and the diaphragm was measured via CT. The left diaphragm area of the patients was calculated. DPI was calculated by comparing these two values.We present this new index calculated on area and distance to the literature.This is a retrospective study and the sample was taken with g power analysis with 80% test power. DPI was calculated by measuring the preoperative tomography of the patients by a radiologist (left diaphragm area / distance between the stab wound and the nearest diaphragm border). In cases where emergency or elective diagnostic laparotomy or laparoscopy was performed, diaphragm injuries were noted and the relationship between these and tomography findings was analyzed. The effectiveness of this new index in showing the diaphragm injury rate before diagnostic laparoscopy in left thoracolumbar stab wounds was examined (Figure1,2,3).

Findings: A total of 67 patients were included in this study (Table 1). The mean age of the patients was 29.37 ± 11.80 years, and the majority were male (94.0%). Regarding the type of surgery, laparoscopy was the most common approach (68.6%, n=46), followed by laparotomy (25.4%, n=17). A conversion from laparoscopy to laparotomy was required in 6.0% (n=4) of cases. In terms of surgical urgency, emergency procedures accounted for 52.2% (n=35), while elective surgeries were performed in 47.8% (n=32).

Concurrent organ damage was observed in 40.3% (n=27) of cases, and tube thoracostomy was required in 29.8% (n=20). Diaphragmatic injury was detected in 37.3% (n=25) of the patients (Table 1). For diaphragm-related parameters, the median diaphragm distance was 82.48 mm (range: 18.5 – 167.3 mm), and the total diaphragm area had a median of 32,450 mm^2 (range: 189.1 – 323,400.5 mm^2). The Diaphragmatic Penetration Index (DPI) had a median value of 394.9 with a range between 2.18 and 3968.10 (Table 1).

Receiver operating characteristic (ROC) analysis was performed to evaluate the predictive value of the Diaphragmatic Penetration Index (DPI) in determining the necessity of diaphragm repair (Table 2). The area under the curve (AUC) was

0.346 (95% CI: 0.214 –0.478, p = 0.0219), indicating a poor discriminatory ability of DPI for predicting diaphragm injury requiring surgical repair.

The optimal cutoff value for DPI, determined using Youden's index, was 159.89, yielding a sensitivity of 100.0% and a specificity of 4.76% (Table 2). While this threshold maximized sensitivity, it resulted in a high false-positive rate, suggesting that DPI alone may not be a reliable predictor of diaphragm repair necessity.

Result: Despite its high sensitivity, DPI has low specificity. No case with diaphragmatic injury was missed in cases above the 159.89 cut-off value. We present it to the literature as an index that can be calculated before diagnostic laparoscopy and used to predict preoperative diaphragmatic injury in the clinic and guide the clinician.

Keywords: Diaphragmatic Penetration Index, Diaphragma injury, Penetrating Stab Wounds

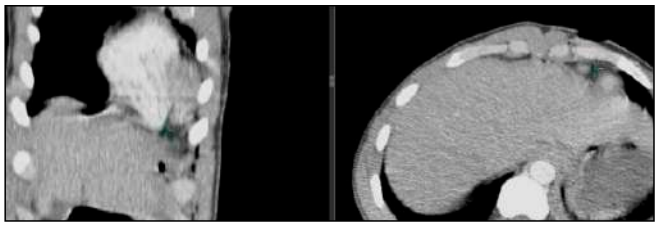


Figure 1. CT section showing the diaphragm with ROI marked and obtained with automatic contour in the axial plane without medication.

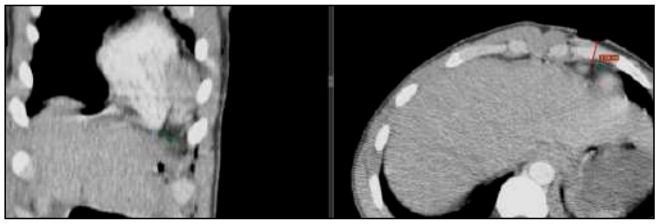


Figure 3. Measurement of the distance to the skin in the axial plane after detection with a 3D cursor in the examination with a 1 mm slice thickness in the coronal and axial planes.

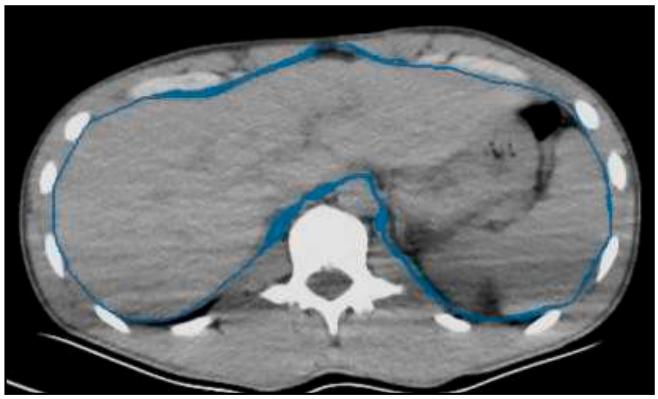


Figure 2. Detection of diaphragmatic injury in both planes with 3D cursor in 1 mm slice thickness examination in coronal and axial planes.

Table 1: Demographic and Clinical Characteristics of Patients

Parameters	Descriptive Data	N = 67
Age (years)	Mean ± SD	29.37 ± 11.80
Gender (Male)	N (%)	63 (94.0)
Type of Surgery		
Laparoscopy		46 (68.6)
Laparotomy	N (%)	17 (25.4)
Conversion from Laparoscopy to Laparotomy		4 (6.0)
Emergency / Elective Surgery		
Emergency	N (%)	35 (52.2)
Elective		32 (47.8)
Concurrent Organ Damage	N (%)	27 (40.3)
Tube Thoracostomy	N (%)	20 (29.8)
Diaphragm Injury	N (%)	25 (37.3)
Diaphragm Distance	Median [Min-Max]	82.48 [18.5 - 167.3]
Total Diaphragm Area	Median [Min-Max]	32450 [189.1 - 323400.5]
Diaphragmatic Penetration Index (DPI)	Median [Min-Max]	394.9 [2.18 - 3968.10]

Table 2: ROC analysis of the diagnostic performance of the Diaphragmatic Penetration Index (DPI) in determining the necessity of diaphragm repair

Parameter	AUC	Cut-off	Sensitivity (%)	Specificity (%)	95% CI	P value
DPI	0.346	159.89	100	4.76	0.214 – 0.478	0.0219

AUC: Area Under the Curve, CI: Confidence Interval

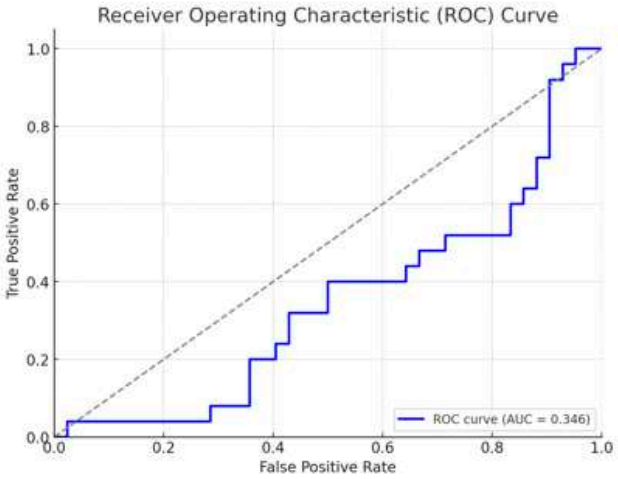


Figure 1. ROC curve for the diagnostic performance of the Diaphragmatic Penetration Index (DPI) in determining the necessity of diaphragm repair (p=0.0219)

Acute Abdominal and Gastrointestinal Emergencie

OP-008

"MISCHIEVOUS STENTS": INTERESTING BILIARY STENT MIGRATIONS AND CLINICAL OUTCOMES

Ekrem Çakar, Onur Olgaç Karagülle, Yavuz Selim Kömek, Bünyamin Gürbulak, Başar Can Turgut, Selim Doğan, Mert Mahsuni Sevinç

University of Health Sciences, İstanbul Training and Research Hospital, Department of General Surgery

Biliary stenting procedure performed with endoscopic retrograde cholangiopancreatography (ERCP) is the most frequently used treatment method in both benign and malignant obstructive jaundice. The most common complications are stent occlusion and cholangitis, while other complications that may develop are cholecystitis, bleeding, duodenal

perforation, pancreatitis, stent fracture and stent migration. Stent migration can be seen in 5- 10% of patients with biliary stents. The majority of migrated stents are expelled

spontaneously through passage. In our study, the stent that migrated to the sigmoid colon and perforated into the diverticulum in the first case, migrated to the gallbladder and was removed during cholecystectomy in the second case, and the stent that perforated in the incisional hernia of the patient with a history of ERCP and choledochus stents was removed in the third case. In the case, a stent was observed during ERCP, which caused fistulization by piercing the auricular papilla at its proximal end and whose distal end extended along the duodenal axis, and was extracted.

The first case was a 74-year-old female patient. Since intrahepatic bile ducts were dilated on MRCP and the diameter of the common bile duct was 13 mm, stone extraction could not be performed with ERCP, and a 10 cm 7F plastic stent was applied. The patient's tomography

taken 3 days after the procedure due to abdominal pain reported a foreign body extending posteriorly from the diverticulum in the sigmoid colon to the psoas muscle. Thereupon, she was hospitalized with a preliminary diagnosis of closed perforation. The stent that migrated into the sigmoid colon lumen during colonoscopy was removed. The patient was treated non-operatively and followed up (figure:case 1)

The second case was a 72-year-old male patient. After ERCP stenting due to

choledocholithiasis, a mobile tubular structure is noticed during elective cholecystectomy. The gallbladder control was opened and the migrated stent was reached and removed. Perop cholangiography was taken from the cystic duct to check the bile duct tree. Since there was no extravasation, the cholecystectomy was completed (figure: case 2)

In the third case, a 64-year-old male patient with an ERCP and choledochus stent history was interned with the preliminary diagnosis of a foreign body that caused perforation in the incisional hernia of the patient. During exploration, a stent that perforated the intestine and went out of the lumen was observed. The stent was removed from the colon and primary repair was performed. (figure: case 4)

In the fourth case, a 78-year-old male patient was observed to have a stent that did not cause any complaints during the procedure performed for stent removal. It was observed that the stent pierced the auricular papilla at the proximal end of the stent, creating fistulization, and its distal end extended along the duodenal axis. The stent was extracted (figure: case 3).

Biliary stents cause various results by creating interesting migrations and pathologies. We present the clinical results and experiences of these interesting stent migrations, which we call mischievous stents, to the experience of endoscopists performing ERCP and to the literature.

Keywords: Biliary stents, migrations, perforation

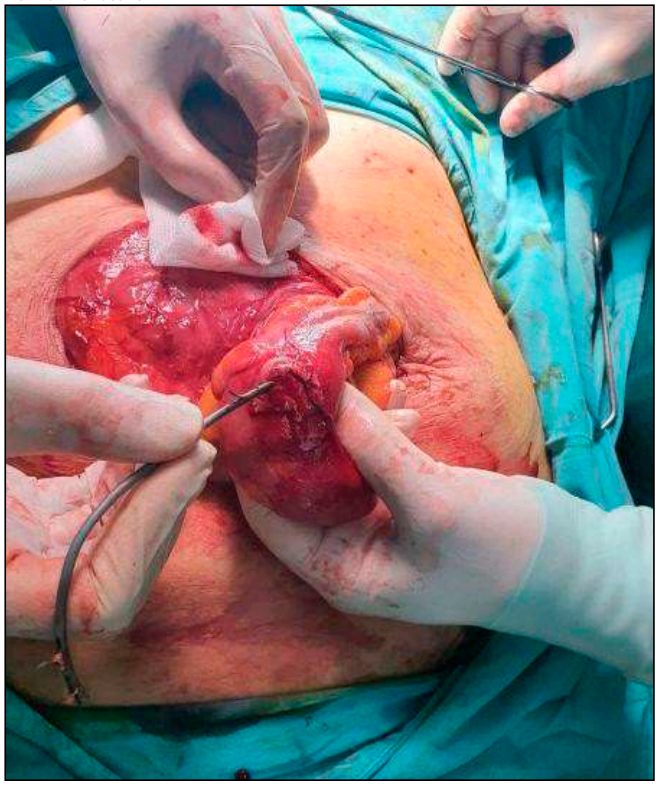
Case 4



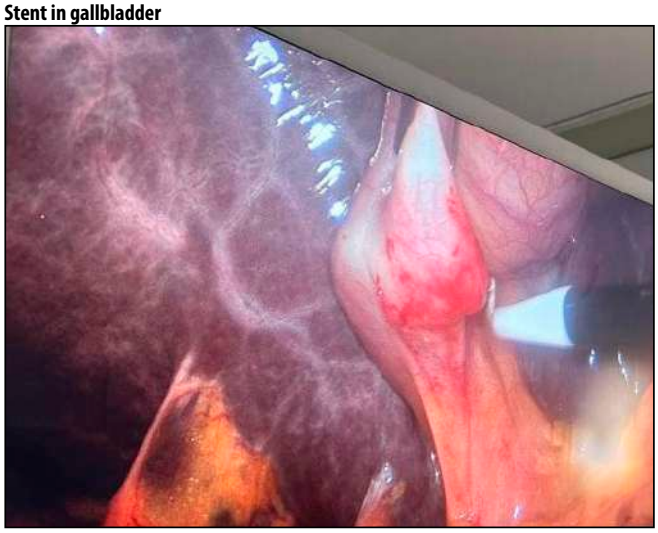
Sigmoid perforation



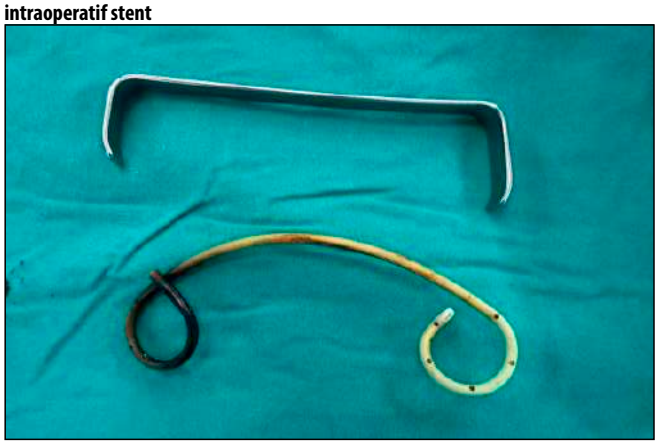
Hernia with stent



Stent in gallbladder



intraoperatif stent



Acute Abdominal and Gastrointestinal Emergencies

OP-010

MANAGEMENT OF A RARE CASE FOLLOWING RF ABLATION OF LIVER METASTASIS FROM COLORECTAL CANCER: COLOPLEURAL FISTULA AND HEPATIC ARTERY–COLON

Yavuz Selim Kömek[1], Mert Mahsuni Sevinç[1], Onur Olgaç Karagülle[1], Mustafa Vedat Doğru[2], Eren Özgür[3]

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[2]Yedikule Chest Diseases and Thoracic Surgery Training and Research Hospital Thoracic Surgery Department
[3]Istanbul Training and Research Hospital Interventional Radiology Department

A 46-year-old male patient underwent low anterior resection and colorectal anastomosis three years ago due to a rectal tumor. His medical history was unremarkable. Postoperatively, he received 30 sessions of radiotherapy and 8 months of chemotherapy.One year ago, PET-CT revealed metastases in liver segments 5 and 4b. Surgical resection of these segments was performed, and chemotherapy continued. Four months later, MRI showed a 10 mm metastatic lesion in the anterior right hepatic lobe, which was treated with radiofrequency (RF) ablation (100W, 5 minutes). The patient was followed up with chemotherapy. Seven months later, MRI revealed three new metastatic lesions: 2 cm at the segment 5–8 junction, and two 1.5 cm lesions in segments 6 and 8. RF ablation was applied to all three lesions (75W, 15 minutes). The patient was discharged uneventfully and chemotherapy was continued.Six months later, MRI revealed another 3x2cm metastasis adjacent to the middle hepatic vein in the anterior right lobe. RF ablation (100W, 5 minutes) was performed. One month later, the patient presented to the emergency department with dyspnea. Pulmonary embolism was suspected, but thoracic CT angiography revealed no emboli; the patient was discharged. Three days later, he returned with right upper quadrant pain and dyspnea.

Thoracoabdominal CT (with IV and oral contrast) revealed right pleural effusion, right lung infiltrates, and contrast leakage from the transverse colon to the liver ablation cavity and into the pleural space — consistent with a colopleural fistula. The patient was hospitalized, oral intake was stopped, and antibiotic therapy was initiated. Vitals were stable (BP 120/80 mmHg, HR 82 bpm, RR 18/min).Eighteen hours later, he developed painless hematochezia and became hemodynamically unstable. Urgent CT angiography showed contrast extravasation from a branch of the hepatic artery supplying segment 8. Selective angiography was performed, and embolization was achieved with coils.After stabilization and intensive care follow-up, combined surgery with thoracic surgery was planned. During laparotomy, due to severe adhesions, the fistulized colon segment could not be dissected, and a loop ileostomy from terminal ileum was created. Right thoracotomy revealed empyema and a 2 cm colopleural fistula at the diaphragm–costal junction, which was repaired using 1 polypropylene. Pleural cultures were taken, and chest tubes were placed over the diaphragm and toward the apex.Postoperatively, thoracic irrigation was performed three times daily with 500 cc saline for 15 days. After the lavage became clear, chest tubes were removed and the patient was referred to the oncology department for further treatment.

Keywords: Angioembolization, coil, colo-pleural fistula, arterio-colic fistula, hematochezia, gastrointestinal bleeding, empyema, radiofrequency ablation

The colonic segment that has fistulized into the metastasis cavity treated with RF ablation



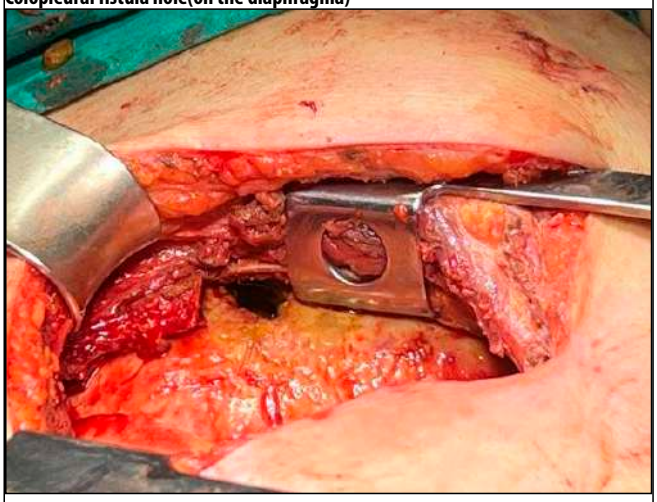
The radiopaque contrast material filling the colonic segment that has fistulized.



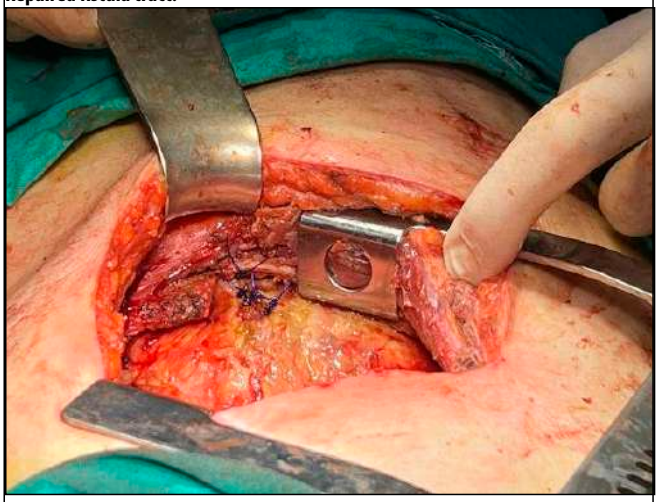
Contrast media extravasation from the artery, which is the segment 8 branch of the hepatic artery.



Colopleural fistula hole(on the diaphragma)



Repaired fistula tract.



Acute Abdominal and Gastrointestinal Emergencies

OP-011

FACTORS AFFECTING POSTOPERATIVE OUTCOMES IN PATIENTS OPERATED ON FOR NON- VARICEAL UPPER GASTROINTESTINAL BLEEDING

Yasir Musa Kesgin, Direnç Berksel, Özcan Düz, Özden Canöz, Can Ertuğ Çayırcı, Sezer Bulut, Müge Yurdacan Şahin, Ferman Özyalvaç, Ahmet Sürek

University of Health Sciences, Bakirkoy Dr. Sadi Konuk Training and Research Hospital

Introduction: Despite medical therapy being able to reduce the need for elective surgical procedures for benign upper gastrointestinal (GI) conditions, upper GI haemorrhage still represents a significant indication of emergency surgeries.

In this study, we aimed to identify factors affecting postoperative outcomes in patients undergoing surgery for non-variceal upper GI bleeding.

Methods: This retrospective study included all patients aged 18 years or over who underwent surgery for upper gastrointestinal bleeding between 2016 and 2025.

The following information was recorded and analysed: demographics; Charlson comorbidity index scores; endoscopy and blood transfusion information; the interval between the last endoscopy and surgery; and Rockall scores. Morbidity was defined as a CD score of ≥3a complications. Multivariate logistic regression analyses were also performed for morbidity and mortality.

Results: In univariate analysis for morbidity Age, ASA score, history of upper GI bleeding, number of preoperative endoscopies, clip placements, adrenaline injections and combined therapies in endoscopy, pre- and post-endoscopic Rockall scores were significantly related to morbidity. In univariate analysis for mortality ASA score, clinical finding, history of upper GI bleeding, adrenaline injection, pre- and post-endoscopic Rockall scores were found to have a significant relation with mortality In the multivariate analysis of morbidity some variables were found to have a significant effect. These were the ASA score, smoking status and previous history of upper GI bleeding , the number of preoperative endoscopy procedures, and post-endoscopy Rockall score. No variable was found to have a significant effect on mortality in multivariate tests.

Conclusion: In both univariate and multivariate analyses, the ASA score, history of upper GI bleeding, number of preoperative endoscopy procedures and Rockall score were found to have a significant effect on postoperative morbidity in patients who needed surgery to manage non- variceal upper GI bleeding. However, despite the effectiveness of the ASA and Rockall scores in the univariate test of mortality, the multivariate analysis did not support this. Upper GI bleeding remains a significant clinical issue with high morbidity and mortality rates. Identifying high-risk patients through larger prospective studies and focusing on relevant factors may contribute to improving the quality and success of surgical care.

Keywords: upper GI bleeding, morbidity, mortality, Rockall score, endoscopy, ASA score

Abdominal Trauma

OP-012

THE EFFECT OF OBESITY ON OUTCOMES IN PATIENTS UNDERGOING SURGERY FOR THORACOABDOMINAL GUNSHOT WOUNDS

Yasir Musa Kesgin, Özden Canöz, Kemal Sultanoğlu, Sezer Bulut, Nurettin Şahin, İsmail Kamacı, Ahmet Sürek, Murat Çikot

University of Health Sciences, Bakirkoy Dr. Sadi Konuk Training and Research Hospital

Introduction: While obesity is becoming increasingly prevalent worldwide, its impact on emergency department outcomes is also being discussed and studied more frequently. Another issue is that trauma remains a leading cause of death and represents a significant proportion of patients requiring emergency surgery. Gunshot wounds constitute a significant subgroup of trauma cases. It has been suggested that obesity provides protection against penetrating abdominal trauma in general and gunshot wounds in particular through concepts such as the 'cushion effect' and the 'armor phenomenon'. However, other studies have suggested that obese patients experience increased morbidity and mortality following such traumas.

In our study, we aimed to evaluate the impact of obesity on the outcomes of patients who underwent surgery for abdominal gunshot wounds.

Methods: This retrospective study included all thoracoabdominal gunshot patients aged 18 and over who underwent surgery at a referral trauma centre between 2018 and 2025. Patients with obesity were defined as having a body mass index (BMI) of ≥30. The following were analysed: demographics, vital signs, shock index, Injury Severity Score (ISS) and outcomes. Morbidity was defined as a CD score of ≥3a complications. Multivariate logistic regression analyses were also performed for morbidity and mortality.

Results: Twenty-four patients (21.4%) were obese. The obese group was similar to the other groups in terms of age, sex, arrival vital signs, and some forthcoming blood test results, such as lactate levels. ISS scores were also similar between groups. Although there were no statistically significant differences in mortality rates, patients with obesity had significantly higher morbidity (p=0.039), a longer ICU stay (p=0.001) and a longer duration of mechanical ventilation (p=0.006). In multivariate tests for morbidity, ISS (p = 0.014) and blood transfusion (p = 0.003) were significantly related. For mortality, multivariate tests revealed a significant effect of lactate levels and ISS (OR: 2.378, p = 0.006 and OR: 1.093, p = 0.012, respectively).

Conclusion: Despite similar mortality beween groups, obesity was found to increase morbidity and length of ICU and mechanic ventilation days. Multivariate analyses did not support a significant relation of obesity and worsening outcomes. In multivariate tests, need for blood transfusion was effective on morbidity and lactate levels was related to mortality. ISS was the only factor both related to morbidity and mortality in multivariate tests. Risk stratification via these factors help us to improve clinical outcomes. Further research is needed to verify the reproducibility of our results, identify effective factors and enhance them

Keywords: morbidity, mortality, abdominal gunshot wounds, injury severity score, shock index

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Abdominal Trauma

OP-014

TRAUMATIC RUPTURE OF THE APPENDIX: A RARE ENTITY LINKED TO BLUNT ABDOMINAL TRAUMA

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Introduction: This study reports a rare case of post-traumatic section of the vermiform appendix by blunt trauma in a 20-year-old male patient following a traffic accident.

Presentation of Case: A 20-year-old male patient was admitted by an ambulance car to the emergency department with complaints of abdominal pain along the seat belt area, after car accident. Upon admission, the patient was hemodynamic stable with pain in lower parts of the abdomen during palpation. On evaluation, contrast-enhanced computed tomography of the abdomen demonstrated: haematoma in the abdominal wall in the right illiac region; a small amount of fluid around the liver and in hepatorenal recess; wall thickening of the small bowell loop posterior to urin bladder and fluid in rectovesical recess. The patient underwent emergency laparoscopic exploration. During exploration, there were found: blood in all peritoneal recesses; transection of the appendix in the middle third and lession of the mesoappendix; a few large lacerration of the omentum with active bleeding; contusion the wall of the terminal ileal loop and the sigmoid colon without signs of deserosation. The surgical team decided to perform laparoscopic appendectomy with lavage and drainage abdominal cavity with one drain. The postoperative course was stable, and the patient was discharged after 5 days of hospitalization.

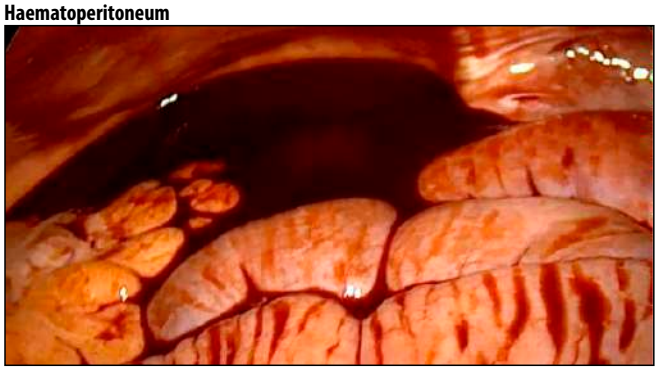
Conclusions: In this case report we described traumatic transection of the appendix due to blunt abdominal trauma. Early diagnosis and management are essential to prevent associated morbidity and mortality. Laparoscopy for stable patients is feasible and safe.

Keywords: Appendiceal transection, blunt abdominal trauma, laparoscopy.

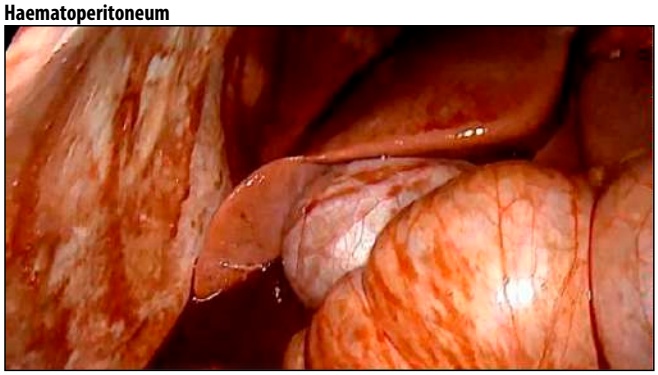
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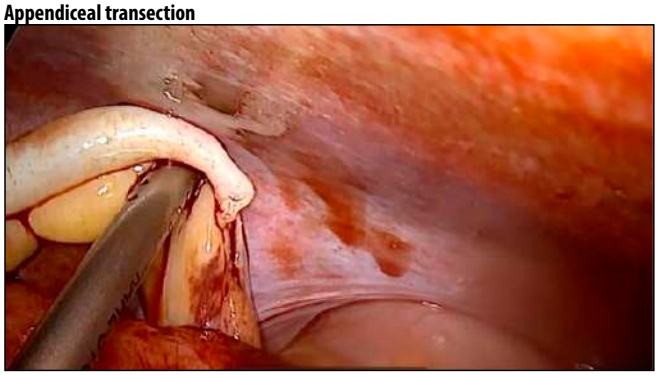
Haematoperitoneum



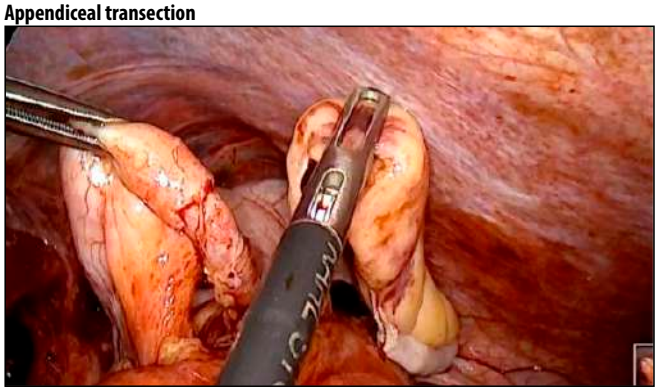
Haematoperitoneum



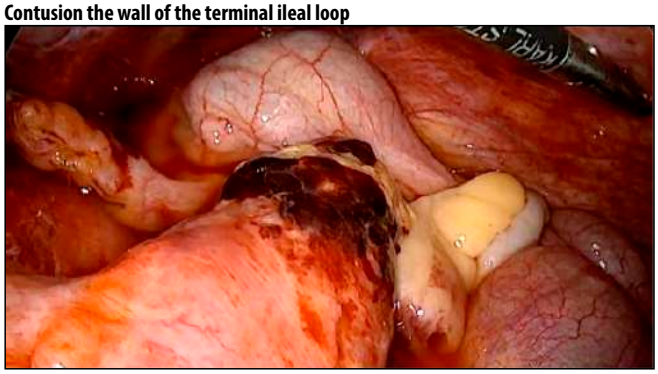
Appendiceal transection



Appendiceal transection



Contusion the wall of the terminal ileal loop



Acute Abdominal and Gastrointestinal Emergencies

OP-015

CLINICAL PRESENTATION AND SURGICAL MANAGEMENT OF PERFORATED PEPTIC ULCER IN A TERTIARY HOSPITAL IN MOGADISHU, SOMALIA: A 5-YEAR RETROSPECTIVE STUDY

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Background: Perforated peptic ulcer (PPU) is a life-threatening surgical emergency with high morbidity and mortality if not promptly managed. This study evaluated clinical presentation, risk factors, complications, and surgical outcomes of PPU patients.Methods: A 5-year retrospective review was conducted at a tertiary hospital in Mogadishu, Somalia, including patients who underwent surgery for intraoperatively confirmed PPU between January 2017 and December 2021.

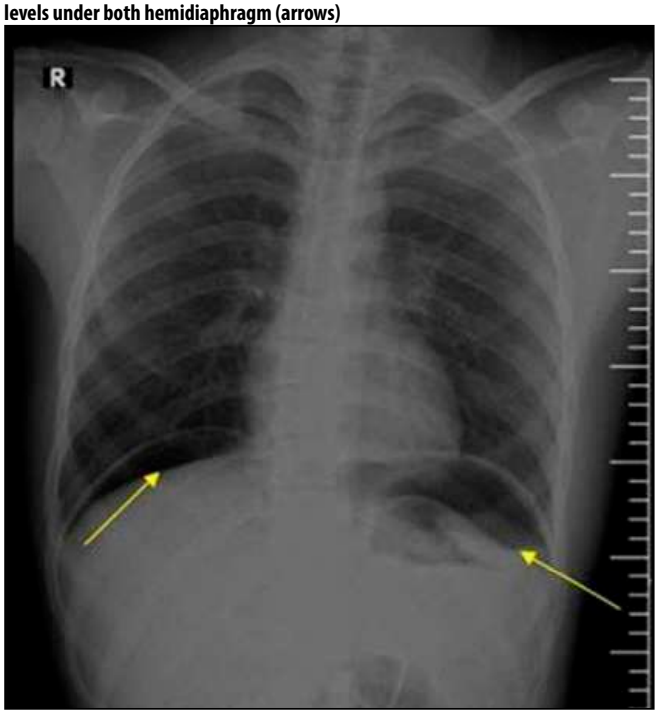
Results: Fifty-one patients were analyzed (88.2% males, mean age 35.5 ± 16.8 years). The most common symptom was sudden epigastric pain (82.4%). Delayed spresentation (>48h) significantly correlated with complications (P=0.005). Mortality rate was 7.8%. E. coli (22%) and Klebsiella (11%) were the most isolated organisms from peritoneal fluid; 51% showed no growth.Conclusion: PPU commonly affects young males and is worsened by delayed presentation due to poor access to healthcare. Public health education and improved healthcare accessibility are essential for better outcomes.

Keywords: Peptic ulcer perforation, Helicobacter pylori, NSAIDs, Exploratory laparotomy

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Chest X-ray showing a large volume of free sub-diaphragmatic gas with air–fuid levels under both hemidiaphragm (arrows)



An axial abdominal CT showing free sub-diaphragmatic with air– fluid levels under right hemidiaphragm (yellow arrow), extensive free intraperitoneal fluid (blue arrow), and left pleural effusion (red arrow)

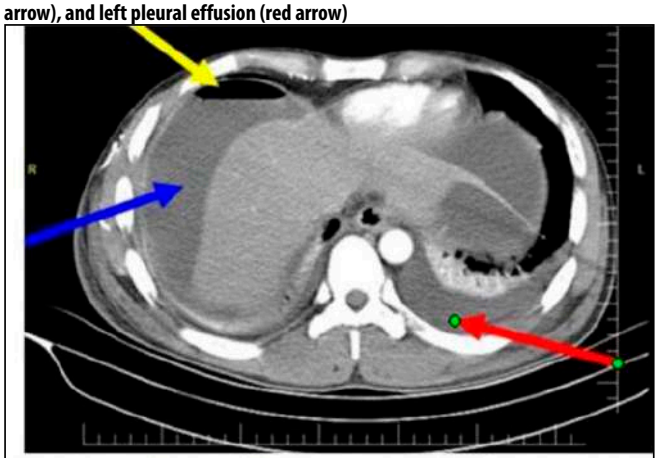


Fig. 3 An axial abdominal CT showing free sub-diaphragmatic with air–fluid levels under right hemidiaphragm (yellow arrow), extensive free intraperitoneal fluid (blue arrow), and left pleural effusion (red arrow)

Clinical presentation

Table 1 Clinical presentation

Clinical presentation	Frequency	Percentage
Severe abdominal pain	42	82.4
Abdominal tenderness	41	80.4
Abdominal distention	36	70.6
Vomiting	31	60.8
Classical signs of peritonitis	38	74.5
Shock on admission (SBP < 90 mmHg)	15	29.4

Microorganism detected in culture fuid analysis of peritoneal fuid

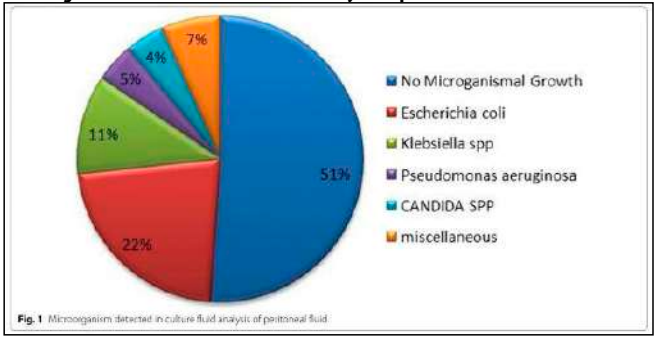


Fig. 1 Microorganism detected in culture fluid analysis of peritoneal fluid

Complications associated with perforated peptic ulcer

Table 2 Complications associated with perforated peptic ulcer

Complication	Frequency	Percentage
Atelectasis/pleural effusion	29	56.9
Acute renal failure	23	45.1
Surgical site infections	16	31.4
Intra-abdominal abscess	12	23.5
Incisional hernia	3	5.9
Leak	2	3.9

Associated risk factors and their frequencies

Table 3 Associated risk factors and their frequencies

Associated risk factors	Frequency	Percentage
Age < 40	34	66.7
Cigarette smoking	24	47.1
Use of NSAIDS	23	45.1
Previous history of peptic dyspepsia	25	49

Relationship between duration of perforation and postoperative complication

Table 4 Relationship between duration of perforation and postoperative complication

Duration of perforation in days	Complications						
	ARF	Atelectasis/pleural effusion	SSI	Intra-abdominal abscess	Leak	Incisional hernia	Death
1	0	0	0	0	0	0	0
2–3	9	9	6	7	0	1	1
4–5	8	14	7	9	1	1	3
>5	6	6	5	1	1	1	1
P value	0.061	0.013	0.5249	0.2261	0.3755	0.7915	0.5844

Predictors of complications according to bivariate and multivariate logistic regression analyses

Table 5 Predictors of complications according to bivariate and multivariate logistic regression analyses

Predictor (independent) variable	Complication N (%)	No complications N (%)	COR 95%CI		AOR 95%CI	
			Bivariate analysis	P value	Multivariate analysis	P value
Age						
<40	13 (38.24)	21 (61.76)	1			
≥40	1 (5.88)	16 (94.12)	99 (0.99–98.2)	0.015	25.0 (1.31–476.65	0.032
Gender						
Male	13 (28.89)	32 (71.11)	1.000			
Female	1 (16.67)	5 (83.33)	2.031	0.209	1.84 (.11–29.44)	0.665
Cigarette smoking						
Yes	4 (16.67)	20 (83.33)	1.000			
No	10 (37.04)	17 (62.96)	0.340	0.086	.22 (.04–1.21)	.083
Use of NSAIDS						
Yes	7 (30.43)	16 (69.57)	1.000			
No	7 (25.00)	21 (75.00)	1.313	0.377	3.97 (.70–22.51)	.119
Dyspepsia						
Yes	6 (24.00)	19 (76.00)	1.000			
No	8 (30.77)	18 (69.23)	0.711	0.302	.54 (.10–2.77)	.461
Duration of perforation						
<48	6 (42.86)	8 (57.14)	1			
>48	31 (83.78)	6 (16.22)	6.9 (1.30–31.48)	0.0088	16.03 (2.34–109.9)	0.005
CRP count						
<150	9 (25.71)	26 (74.29)	1.000			
≥150	5 (31.25)	11 (68.75)	0.792	0.204	.89 (.18–4.27)	.893
Site of perforation						
Gastric	10 (24.39)	31 (75.61)	1.000			
Duodenal	4 (44.44)	5 (55.56)	0.403	0.087	.12 (.014–1.13)	.065
Combined	0 (0.00)	1 (100.00)				

Acute Abdominal and Gastrointestinal Emergencies

OP-016

EMERGENCY INTESTINAL RESECTION AND PRIMARY ANASTOMOSIS: IS IT A SAFE STRATEGY?

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Ankara Etlik City Hospital, General Surgery Clinics

Background: Emergency small bowel resections are often performed in critical scenarios such as intestinal ischemia, perforation, or trauma. Choosing between primary anastomosis and fecal diversion is a pivotal surgical decision, especially considering the high risk of anastomotic leakage. This study investigates the safety of primary anastomosis in emergency resections and seeks to determine factors associated with leakage.

Methods: A retrospective cohort study was carried out at Ankara Etlik City Hospital, involving adult patients (≥18 years) who underwent emergency small bowel resection between January 2023 and December 2024. Elective procedures and patients with incomplete data were excluded. The primary outcomes were anastomotic leakage and 30-day postoperative mortality. Secondary outcomes included surgical method, anastomosis type, and postoperative complications. Statistical analyses comprised descriptive methods, chi-square testing, and multivariate logistic regression.

Results: Among 270 patients (mean age 59.4 years; 54.4% male), the vast majority (95.9%) underwent open surgery. Stapled anastomosis was used in 72.2% of cases. The anastomotic leak rate was 5.9%, and the 30-day mortality rate reached 25.9%. Multivariate analysis revealed no significant association between leak occurrence and factors such as age (p = 0.724), sex (p = 0.963), surgical technique (p = 0.634), or serum albumin (p = 0.580). Additionally, leakage rates did not significantly differ between patients with and without hypoalbuminemia (p = 0.999).

Conclusion: Primary anastomosis appears to be a viable and safe option in emergency small bowel resections, with a leakage rate consistent with prior studies. Its interesting that neither serum albumin level nor anastomosis technique (stapled vs. hand-sewn) was predictive of leakage. Notably, our findings challenge

the commonly held view that hypoalbuminemia predisposes patients to anastomotic failure, as it did not significantly influence outcomes in this one of the largest cohort in literature.

Keywords: Small Bowel Resection, Anastomosis, Emergency Surgery, Leak, Hypoalbuminemia

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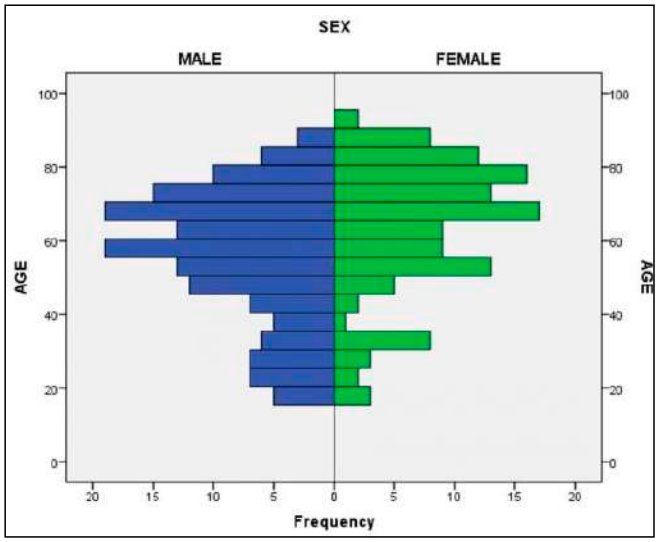


Figure 1. Age and sex distribution of the study population. This population pyramid illustrates the distribution of individuals by age groups and sex. The left side represents male participants (in blue), while the right side represents female participants (in green). The x-axis shows the frequency of individuals, and the y-axis indicates age groups in ascending order.

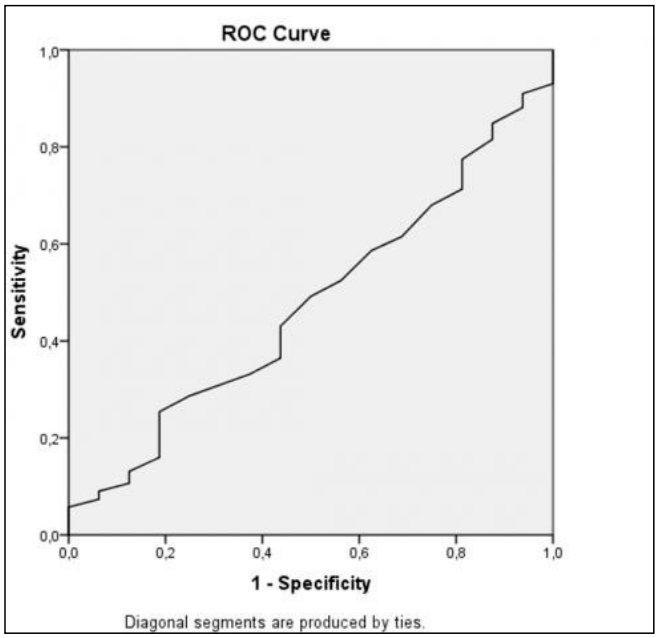


Figure 2. Receiver Operating Characteristic (ROC) Curve for Hypoalbuminemia as a Predictor of Anastomotic Leak. The ROC curve illustrates the diagnostic performance of serum albumin levels in predicting anastomotic leakage. The area under the curve (AUC) was calculated as 0.475, indicating poor discriminative ability. The curve closely follows the diagonal reference line (AUC = 0.5), suggesting that hypoalbuminemia has no significant predictive value for anastomotic leakage in this cohort.

Association Between Hypoalbuminemia and Anastomotic Leak

Albumin (<2.5 g/dL)	*Anastomotic Leak*	*No Leak*	*Total*	*Leak Rate (%)*
Yes (<2.5 g/dL)	3	70	73	4.1
No (≥2.5 g/dL)	13	174	187	7.0
Total	16	244	260	6.2

Table 1. Descriptive Statistics and Frequencies

Variable	*Category*	*Frequency*	*Percent (%)*
Sex	Male	147	54.5
	Female	123	45.6
Surgical Approach	Laparoscopic	11	4.1
	Open	259	95.9
Type of Resection	Enteroenteric	212	78.9
	Ileocolonic	58	21.1
Anastomosis Tech	Handsewn	75	27.8
	Stapled	195	72.2

Acute Abdominal and Gastrointestinal Emergencies

OP-018

THE ROLE OF POST-DIVERTICULITIS COLONOSCOPY IN THE MANAGEMENT OF ACUTE DIVERTICULITIS: OUTCOMES AND EXPERIENCE FROM A SINGLE INSTITUTION.

Kübra Ergin Karabalık, Firdevs Melike Onuktav, Mahfuz Şurhak İpek, İsmail Moustafa, Ali Levent Işık, Oğuzhan Aydın, Ahmet Aşkar, Ali Bekraki

Başakşehir Çam and Sakura City Hospital

Objective: Acute colonic diverticulitis represents a prevalent clinical challenge for general surgeons. Given its potential for severe complications, including abscess formation, perforation, fistula, and obstruction, prompt and accurate diagnosis is critical. Subsequent management, encompassing both non-surgical and surgical approaches, is essential to mitigate morbidity and mortality associated with this condition.

Material and Methods: A retrospective cohort study was conducted on patients who presented with acute abdominal pain and received a confirmed diagnosis of acute colonic diverticulitis between 2023 and 2025. Upon admission, all patients underwent a comprehensive diagnostic evaluation comprising physical examination, laboratory investigations, and computed tomography (CT) imaging. The severity of diverticulitis was classified using the modified Hinchey scoring system based on CT findings, which also informed subsequent treatment decisions. Management strategies included one of the following approaches: surgical intervention, image-guided interventional radiological procedures, or conservative treatment consisting of dietary modifications and intravenous antibiotic therapy. Patients who did not undergo surgical intervention were scheduled for follow-up colonoscopy at least one month after discharge. Colonoscopic findings were systematically recorded and categorized as normal, diverticulosis, inflammatory bowel disease, or colorectal malignancy.

Results: A total of 104 patients presenting with acute colonic diverticulitis were included in this study. Sixteen patients diagnosed with Hinchey IV diverticulitis underwent surgical intervention. Among them, five underwent one-stage resection with primary anastomosis, while the remaining eleven underwent resection with Hartmann's procedure. The remaining 88 patients, classified with Hinchey scores of I, II, or III, were managed conservatively with intravenous antibiotic therapy. A follow-up colonoscopy was performed at least one month after discharge for all patients treated non-surgically. The colonoscopic findings revealed:

· 19 patients with a normal colon
· 64 patients exhibiting diverticulosis
· 3 patients diagnosed with inflammatory bowel disease
· 3 patients found to have colonic malignancy

Conclusion: While the inflammatory processes underlying diverticulitis are well-established, the potential for co-occurring pathologies or occult colonic malignancy must not be overlooked. Current clinical guidelines recommend performing a control colonoscopy no sooner than one month after discharge following an acute diverticulitis episode. As demonstrated in the present study, this delayed endoscopic evaluation is of considerable clinical value. It enables the timely detection of conditions such as inflammatory bowel disease (IBD) and colorectal malignancy, which may be masked during the acute inflammatory phase or obscured by the limitations of cross-sectional imaging in diverticulitis.

Keywords: Acute diverticulitis, Colonoscopy, Colonic malignancy.

Surgical Infections

OP-023

APPROACH TO NON-FOURNIER NECROTIZING FASCIITIS: A CASE SERIES AND LITERATURE REVIEW

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Introduction And Purpose: Necrotizing fasciitis (NF) is a rapidly progressing, life-threatening soft tissue infection characterized by fascial and subcutaneous tissue necrosis, with high mortality (1). It may develop following surgery, trauma, or childbirth, but can also occur spontaneously (2,3). The infection spreads along fascial planes, causing thrombosis, ischemia, and epidermal necrosis (4). Bacterial collagenases contribute to horizontal spread, leading to indurated, edematous tissue with a "dishwater-like" appearance and subcutis detachment (5). Diabetes mellitus is the most frequent comorbidity and an independent risk factor, often associated with renal or cardiac failure, hypertension, or microangiopathy (6,7). NF is microbiologically classified into three types: Type 1 (polymicrobial), typically in immunocompromised or diabetic patients; Type 2 (monomicrobial), involving Streptococcus pyogenes ± Staphylococcus aureus (including MRSA); and Type 3 (rare), caused by Gram- negative organisms like Clostridium, Pseudomonas, Klebsiella, Vibrio, or Aeromonas, often after trauma or in chronic disease (8,9). The Laboratory Risk Indicator for Necrotizing Fasciitis (LRINEC) score (0–13) helps stratify risk (Table 1) : ≤5 low, 6–7 moderate, ≥8 high (10,11). Prompt surgical debridement and empirical antibiotics are mainstays of treatment. Here, we present our clinical experience with 10 NF cases and relevant literature review.

Materials and Methods: This retrospective study included patients aged ≥18 years who underwent surgery for NF at Ankara Bilkent City Hospital between January 1, 2019, and December 31, 2024. Only patients with complete data and management entirely at our center were included. Exclusion criteria were age <18, Fournier's gangrene, and incomplete records. Ten patients met inclusion criteria. Data on demographics, comorbidities, cultures, surgical findings, laboratory parameters, and treatments were collected and analyzed via SPSS.

Findings: All 10 patients underwent early debridement. Wound care was performed every 2–3 days either in the operating room or at bedside. Ciprofloxacin and metronidazole were started empirically, then tailored per culture. Mean age was 57.5 years; 60% were female. Each patient underwent a mean of 4 debridements. Hospital stay ranged from 7–48 days (mean: 25.5). Diabetes was present in 70%; 20% had no comorbidities. Mean BMI was 31.6. NPWT was applied in 30%; primary closure was achieved in 80%. Mortality was 10%. NF developed at prior surgical sites in 20%. Cultures were negative in 30%. LRINEC scores ranged from 6 to 9 (Table 2).

Discussion and Conclusion: NF requires high clinical suspicion and rapid management. Our patients' demographics align with previous data showing NF typically affects middle-aged adults (3), with diabetes as the most common comorbidity (1). Early, repeated debridement (mean: 4 procedures) contributed

to a low mortality rate (10%) compared to literature, likely due to timely surgical and antibiotic therapy (9,10,13,14). NPWT may support wound healing in selected cases. These findings highlight the importance of early diagnosis, aggressive surgical intervention, and tailored antibiotic regimens. Further large-scale prospective studies are needed to optimize NF management.

Keywords: Necrotizing Fasciitis, Bacterial İnfection, LRİNEC Score

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Table 1. LRİNEC Score

Variable	*Values*	*Point*
Crp (mg/L)	<150	0
	≥150	4
Wbc (cells/mm^3)	<15	0
	15-25	1
	>25	2
Hb (g/dL)	≥ 13.6	0
	11-13.5	1
	≤10.9	2
Na (mmol/L)	≥135	0
	<135	2
Kr (mg/dL)	≤1.6	0
	>1.6	2
Glucose (mg/dL)	≤180	0
	>180	2

Table 2. Demographic and Clinical Characteristics of Patients with Necrotizing Fasciitis

Gender	Female	6	%60
	Male	4	%40
Mortality	Alive	9	%90
	Dead	1	%10
VKİ	Med:31.6	Min:26	Max:41
Age	Med:57.5	Min:48	Max:90
Length of Stay	Med:25.5	Min:7	Max:48
Surgery in the Last Year	Yes	2	%20
	No	8	%80
Additional Diseases	Diabetes Mellitus	7	%70
	No Comorbidities	2	%20
	Malignancy	1	%10
Number of Operations	Med:4	Min:2	Max:10
VAC Status	Yes	3	%30
	No	7	%70
Discharge Method	Primary Suturation	8	%80
	Secondary Healing	1	%10
	Ex	1	%10
First Culture Results	No Breeding	3	%30
	Enterococcus faecium	2	%20
	Escherichia coli	1	%10
	Acinetobacter baumannii	1	%10
	Klebsiella pneumoniae	1	%10
	Proteus mirabilis	1	%10
	Corynebacterium amycolatum	1	%10
Necrotizing Fasciitis Area	Abdomen	5	%50
	Limb	3	%30
	Inguinal Region	2	%20
LRİNEC Score	6 point	3	%30
	7 point	4	%40
	8 point	2	%20
	9 point	1	%10

Acute Abdominal and Gastrointestinal Emergencies

OP-024

CLINICAL OUTCOMES IN PEPTIC ULCER PERFORATION: A SINGLE-CENTER RETROSPECTIVE STUDY

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Başakşehir Çam & Sakura City Hospital

Introduction: Peptic ulcer perforation (PUP) constitutes a critical surgical emergency globally, associated with substantial morbidity and mortality. This severe complication of inadequately managed peptic ulcer disease involves a full-thickness defect in the gastric or duodenal wall, leading to the spillage of luminal contents into the peritoneal cavity and subsequent peritonitis. The sequelae can be life-threatening. PUP predominantly affects individuals with pre-existing chronic peptic ulcers, with aggravating factors commonly including the use of non-steroidal anti-inflammatory drugs (NSAIDs), smoking, alcohol consumption, and Helicobacter pylori infection. This study retrospectively analyzes the demographic characteristics and postoperative outcomes of 87 consecutive cases of peptic ulcer perforation.

Methods: This study presents a retrospective analysis of 87 patients who underwent surgical treatment for peptic ulcer perforation (PUP) between January 2023 and April 2025. The cohort

comprised 70 males and 17 females. Data collected for each patient included age, gender, postoperative follow-up, and findings from upper gastrointestinal endoscopy.

Results: # Demographic Data:
- Mean age: 41.7 years (range 22-84)
- Gender distribution: 79,5 % male, 20,5% female
- Age distribution by gender:
- Males: Mean 40.1 years
- Females: Mean 45.2 years # Mortality:
- Overall mortality: 1 case (1,1%) # Postoperative Follow up:
- 38 patient had control with endoscopy :43,5 % # H. pylori Status:
- Positive :17 cases (44,5%)
- +1: 9 cases (23,5%)
- +2: 4 cases (10,5%)
  3: 4 cases (10,5%)
- Negative: 9 cases (23,5%)

Discussion: Our study of peptic ulcer perforation (PUP) patients revealed a significant male predominance, accounting for 79.5% of cases. The mean age of patients was 40.1 years. These demographic findings align with international literature, which consistently reports male-to-female ratios ranging from 3:1 to 5:1 and a peak incidence of PUP in the fourth to fifth decades of life (1).

A notable finding is our overall mortality rate of 1%, which compares favorably to reported rates of 6-30% in existing literature (2). This lower mortality may be attributed to advancements in perioperative care and earlier diagnosis within our cohort.

The prevalence of Helicobacter pylori positivity was 44.5%. This figure falls within the global average of 40-70% (3), suggesting that other etiological factors, such as NSAID use, stress, and dietary factors, may play a more prominent role in the etiology of PUP within this specific population.

However, a significant limitation of our study is the loss to follow-up of 56.5% of our cohort regarding postoperative care. This substantial lack of follow-up data restricts the comprehensive interpretation and generalizability of our findings.

Conclusion: Peptic ulcer perforation (PUP) is a critical medical emergency demanding immediate intervention. It continues to disproportionately affect middle-aged males, underscoring the importance of targeted awareness and early diagnostic strategies. For healthcare professionals, continuous education on the early recognition, effective acute management, and comprehensive postoperative care and follow-up of PUP is paramount to improving patient outcomes.

Keywords: Peptic ulcer perforation,Helicobacter pylori

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Acute Abdominal and Gastrointestinal Emergencies

OP-025

PREDISPOSING FACTORS OF SPLANCHNIC VENOUS THROMBOSIS AND EFFECTIVENESS OF ANTICOAGULANT TREATMENT IN PATIENTS WITH NECROTIZING PANCREATITIS

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Objective: Splanchnic venous thrombosis (SVT) is a common complication in necrotizing pancreatitis, contributing to increased morbidity. The role of anticoagulant therapy in the management of SVT remains controversial. This study aims to identify the factors influencing SVT formation and recanalization in patients with necrotizing pancreatitis and to evaluate the efficacy of anticoagulant treatment.

Materials and Methods: A retrospective analysis was conducted on 121 patients diagnosed with necrotizing pancreatitis between July-2013 and August-2022. Sociodemographic and clinical characteristics, comorbidities, anticoagulant use, and computed-tomography findings at admission and during follow-ups up to one year were evaluated.

Results: SVT was detected in 51 (42.1%) of 121 patients. Among them, 24 (47.1%) had partial occlusion and 27 (52.9%) had total occlusion. Recanalization occurred in 18 (35.3%) of 51 patients. Thrombosis incidence correlated with higher computed tomography severity index (CTSI) scores. Recanalization rates were significantly lower in total occlusions ($p < 0.001$).

Diabetes mellitus was associated with lower recanalization rates ($p = 0.019$). No significant association was found between therapeutic-dose anticoagulant therapy and thrombosis formation ($p = 0.239$) or recanalization ($p = 0.438$).

Conclusion: Clinical course of necrotizing pancreatitis is a dynamic and complex process and SVT is strongly associated with both the severity and persistence of inflammation. Recanalization primarily depends on the resolution of inflammation, and therapeutic-dose anticoagulant therapy does not appear to provide significant benefit. Diabetes mellitus negatively affects recanalization outcomes. Total occlusion makes recanalization more difficult.

Keywords: Anticoagulation, Diabetes Mellitus, Necrotizing Pancreatitis, Recanalization, Thrombosis

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Figure 1: Thrombus Location

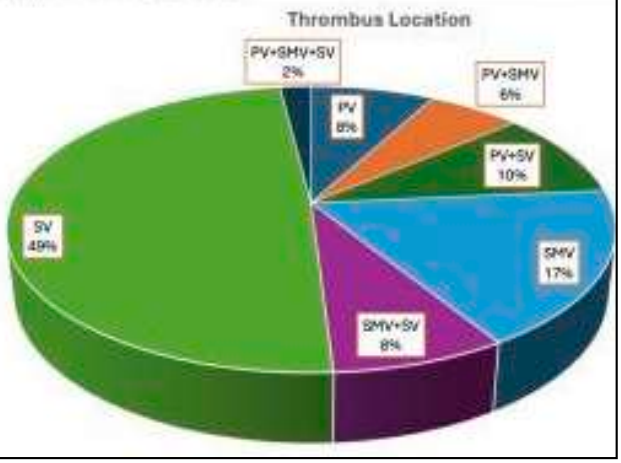


Figure 2: Mean CT Severity Index Scores According to the Presence of Thrombosis

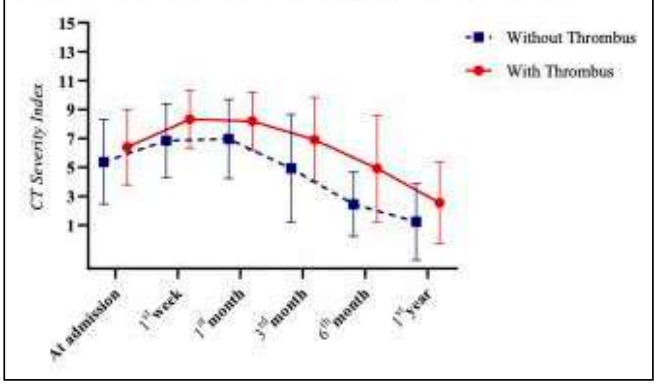
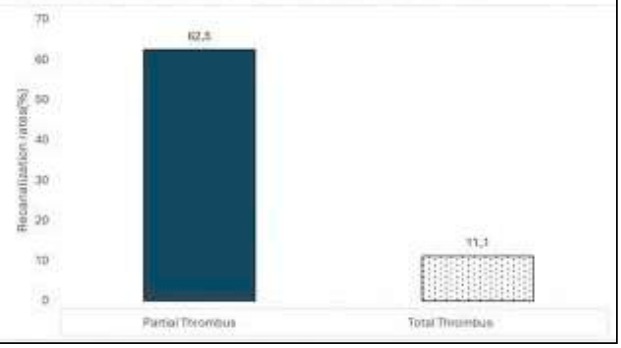
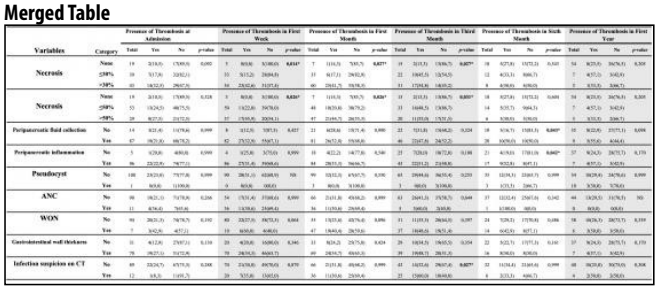


Figure 3: Recanalization Rates According to Level of Thrombus Formation



Merged Table



Acute Abdominal and Gastrointestinal Emergencies

OP-026

ROLE OF ENDOPERITONEAL VAC THERAPY IN THE TREATMENT OF REPEATED ENTERIC FISTULAS IN ONCOLOGY PATIENTS

Lorenzo Vona[1], **Greta Di Stefano**[1], **Battistino Puppio**[1], **Pasqualina Modano**[2], **Vagliasindi Alessio**[1]

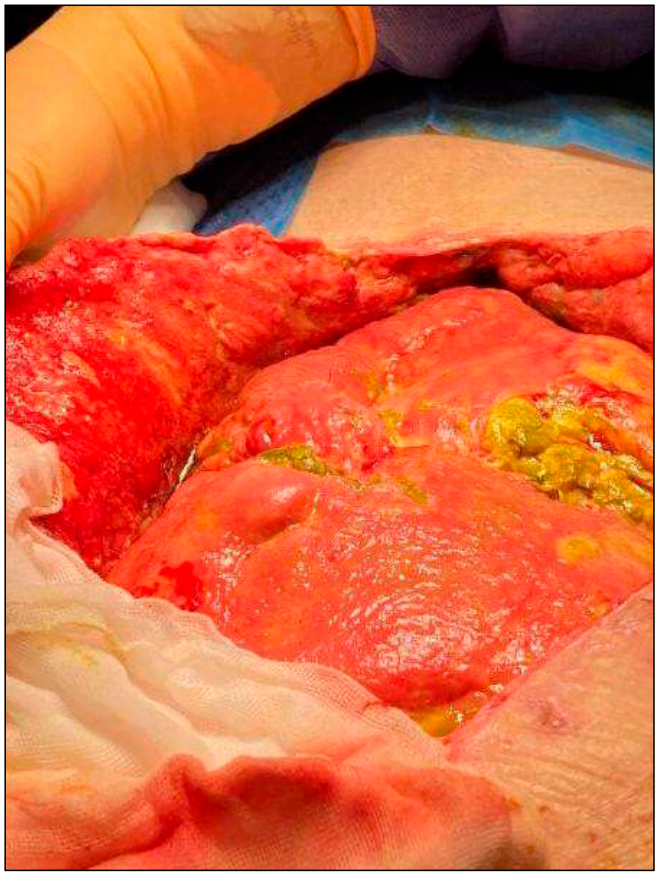
[1]IRCCS Crob, Rionero İn Vulture, U.O.C. Chirurgia Addominale E Mini-invasiva
[2]IRCCS Crob, Rionero İn Vulture, U.O.C. Anestesia E Terapia Intensiva Post-operatoria

The management of postoperative enteric fistulas in patients surgically treated for CRC recurrences can represent a real challenge. Although enteric resection or intestinal enterorrhaphy represent the primary approach, in complex cases these procedures may not be effective owing to tenacious adhesions related to previous surgical and chemoradiotherapic treatments. In these scenarios endoperitoneal VAC therapy could be considered a reliable tool that could stabilize a complex enteric fistula by a peritoneal fibrotic compartimentalization of small bowel that can evolve to a spontaneous enterostomy. We present a clinical case of complex postoperative enteric fistula treated by endoperitoneal VAC. The clinical case concerns a 60-year-old woman diagnosed with sigmoid adenocarcinoma with hepatic lesions, who had undergone left hemicolectomy with colorectal end to end anastomosis and hepatic metastasectomy, followed by adjuvant CHT. 3 years later the patient came to our attention due to anastomotic CRC recurrence treated by preoperative RT-CHT followed by radical cytoreductive surgery. Exploration of the abdominal cavity revealed a pre-sacral pelvic recurrence that infiltrated the colorectal anastomosis and a segment of terminal ileum. Resection of the colorectal anastomosis associated with PME, ileal resection with handsewn side to side anastomosis and end colostomy were performed. During the 13th postoperative day, owing to enteric fistula from the surgical wound the patient underwent relaparotomy with extensive adhesiolysis, ileal resection (anastomotic segment) and end ileostomy. The postoperative course was characterized (on the 5th and 6th postoperative day) by a recurrence of enteric fistula treated by ineffective enterorrhaphy; 2 days later the patient underwent a surgical exploration with segmental ileal resection, the closure of end ileostomy and the placement of endoperitoneal device for VAC THERAPY (negative pressure: -100 mm Hg). The following post-operative course was characterized by the gradual clinical stabilization with a progressive parietalization of ileal fistula related to the intraperitoneal granulation tissue; this tissue has progressively obliterated all the peritoneal recesses. Endoperitoneal device was renewed every 72 hours and it was removed after 45 days, when it was

obtained a complete fibrotic parietalization of ileal fistula; a following suprafascial VAC treatment completed the parietalization of the enteric fistula. The patient was discharged four months later from the first cytoreductive surgical procedure. Endoperitoneal VAC Therapy could represent a valid and reliable tool for the treatment of postoperative enteric fistulas in multi-treated oncological patients.

Keywords: endoperitoneal VAC therapy, repeated enteric fistulas, enteric fistulas in oncology patients

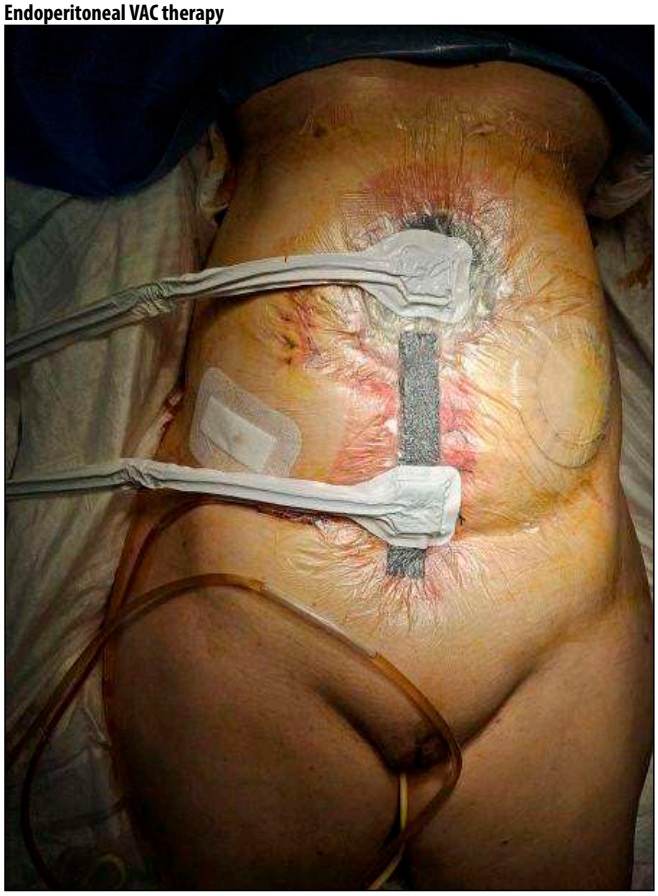
Ileo-ileal anastomosis fistula



Parietalization of the enteric fistula



Endoperitoneal VAC therapy



Acute Abdominal and Gastrointestinal Emergencies

OP-027

DELAYED SURGICAL INTERVENTION AND MORTALITY RISK IN EMERGENCY LAPAROTOMY: A RETROSPECTIVE ANALYSIS FROM A TERTIARY CARE HOSPITAL IN PAKISTAN

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Introduction: Surgical delays including late patient presentation, referral delays, prolonged preoperative resuscitation, and decision-making bottlenecks significantly worsen outcomes in resource-limited settings. This study examines how these delays affect 30-day mortality in emergency laparotomy patients at Mayo Hospital, Lahore, a public tertiary care hospital in Pakistan.

Methods: A retrospective analysis of 145 patients was conducted who underwent emergency laparotomy for Perforated bowel from February 2022 to January 2024. Using multivariable logistic regression and Cox proportional hazards models, impact of Emergency Room Time (ERT), Operation Room Time (ORT), age, and Charlson Comorbidity Index (CCI) on mortality outcomes was evaluated. Non-parametric tests compared results between survivors and non-survivors.

Results: The 30-day mortality rate was 18.6%. Non-survivors experienced significantly longer ORT delays (median 17 vs. 9 hours, $p<0.001$) and had higher CCI scores (median 5 vs. 2, $p<0.001$). Each hour of ORT delay increased mortality odds by 3% (aOR 1.03, 95% CI 1.01-1.05, $p=0.01$) and mortality hazard by 4% (aHR 1.04, 95% CI 1.02-1.06, $p=0.005$). Age (aOR 1.04, $p=0.02$) and CCI (aOR 1.35, $p=0.001$) emerged as independent predictors. While ERT delays showed a non-significant trend (median 44 vs. 24 hours, $p=0.08$), patients with delayed ORT required more ICU admissions ($p=0.01$) and had longer hospital stays ($p=0.03$).

Conclusion: Delays in surgical intervention, particularly operating room delays, represent critical modifiable risk factors for mortality in emergency laparotomy cases. These findings highlight the urgent need for protocol-driven interventions to minimize preoperative delays in resource-limited settings. Future multi-centre prospective studies could further validate these associations and guide systemic improvements in surgical care delivery.

Keywords: Emergency Laparotomy, Surgical Care, Acute Abdomen, Bowel Perforation

Descriptive Analysis

Variable	Mean	Standard Deviation	Range
30-day Mortality	0.186	0.389	0.0 – 1.0
Hospital Stay (days)	9.19	5.08	2 – 27
ICU Admission	0.389	0.487	0.0 – 1.0

Multivariate Logistic Regression

Multivariable logistic regression analysis				
OR: odds ratio, CI: confidence interval				
Variable	Adjusted Odds Ratio (aOR)	95% Confidence Interval	p-Value	Interpretation
Age (per year increase)	1.04	1.01–1.07	0.02	Each year of age increases mortality odds by 4%.
Charlson Index (per unit)	1.35	1.12–1.63	0.001	Each CCI point increases mortality odds by 35%.
ERT (per hour delay)	1.01	0.99–1.02	0.08	Not statistically significant.
ORT (per hour delay)	1.03	1.01–1.05	0.01	Each hour delay increases mortality odds by 3%.

Multivariate Cox Regression

Multivariable Cox Regression Results				
(Dependent variable: Time to death in days, with 30-day mortality as event)				
Variable	Adjusted Hazard Ratio (aHR)	95% Confidence Interval	p-Value	Interpretation
Age (per year increase)	1.03	1.01–1.06	0.02	Each year increases mortality hazard by 3%.
Charlson Index (per unit)	1.3	1.10–1.55	0.003	Each CCI point increases hazard by 30%.
ERT (per hour delay)	1	0.99–1.01	0.15	Not significant.
ORT (per hour delay)	1.04	1.02–1.06	0.005	Each hour delay

T-Test and Mann-Whitney U Test

T-Test Comparisons of Key Variables				
Variable	Group Comparison	Mean ± SD	p-Value	Conclusion
ORT (hours)	Survived vs. Expired	9.0 ± 3.2 vs. 17.0 ± 5.1	<0.001	Expired had longer delays.
Hospital Stay (days)	Survived vs. Expired	8.5 ± 4.1 vs. 14.2 ± 6.3	0.03	Expired had longer stays.
ORT (hours)	ICU vs. Non-ICU	14.0 ± 4.8 vs. 8.5 ± 3.6	0.01	ICU patients had longer del

Mann-Whitney U Test Results				
Comparison	Median (IQR)	U-value	p-value	Effect Size (r)
ORT (hours): Survived vs. Expired	9 (6-12) vs. 17 (15-18)	210.5	<0.001	0.42
Hospital Stay (days): Survived vs. Expired	7 (5-10) vs. 14 (10-17)	315	0.002	0.32
ORT (hours): ICU vs. Non-ICU	14 (11-16) vs. 8 (6-11)	980.5	0.008	0.28

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Surgical Infections

OP-030

ANTIBIOTIC RESISTANCE PATTERN AND SURGICAL OUTCOME IN COMPLICATED INTRA-ABDOMINAL INFECTIONS

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Background: Intra-abdominal infections (IAIs) are one of the leading causes of non-traumatic death in emergency surgery units, with an overall estimated mortality rate of 9.2%. Treatment involves the early start of empirical antibiotic therapy, source control of the infectious focus, and appropriate resuscitation. Antibiotic therapy is initially empirical and based on the local epidemiology of antibiotic resistance patterns. The appropriateness of empirical antibiotic therapy is fundamental for the clinical outcome and for limiting the spread of resistance associated to a precise knowledge of the local epidemiology of antibiotic resistance patterns.

Methods: This study evaluated a monocentric cohort of patients undergoing emergency surgery with diagnoses of colonic perforation due to complicated acute diverticulitis, colorectal carcinoma, or colonic ischemia from 2015 to 2024 with collected intrabdominal infected fluid sample. The aim is to describe the antibiotic resistance patterns of bacteria isolated in these patients and to assess the presence of a correlation between patient outcomes, immune status at diagnosis, and infection/antibiotic resistance status based on collected cultures.

Results: 321 patients undergoing emergency surgery were analysed, with an average age of 70.2 years. The main diagnoses were complicated diverticulitis (58%), colorectal carcinoma perforation (18%), and acute intestinal ischemia (24%). 80.4% were immunocompromised, the average hospital stay was 15.6 days, and 60.1% developed postoperative complications. Total in-hospital mortality was 20%, higher in patients with ischemia (48.7%). Microbiological cultures were available for 111 patients: 56.7% had mono-microbial infections and 43.3% multi-microbial infections, with the identification of 29 species of bacteria and fungi. 53 antibiotics and 9 antifungals were tested, with resistance rates exceeding 20% for many pathogens. Multivariate analyses showed that documented intra-abdominal infections are associated to longer postoperative hospital stays (p 0.003 CR 8.075) but not directly with patient mortality (p 0.031). Specifically, prolonged hospital-stay and postoperative courses were more commonly observed in patients with polymicrobial infections or infections caused by multi-drug resistant organisms (p 0.03; p 0.003).

Conclusion: Microbiological characteristics of isolated bacteria do not directly influence mortality; however, the presence of polymicrobial infections and resistant pathogens directly affects the duration of hospitalization and often leads to the development of chronic disease condition.

Keywords: Intraabdominal Infection, Drug Resistance, Microbial, Multidrug Resistant (MDR)

Acute Abdominal and Gastrointestinal Emergencies

OP-031

AGE IS NOT SO IMPORTANT FOR RISK STRATIFICATION IN EARLY CHOLECYSTECTOMY FOR ACUTE CALCULOUS CHOLECYSTITIS: A POST-HOC ANALYSIS OF THE SPRIMACC STUDY

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Introduction: Early cholecystectomy (EC) is considered to be the first-line treatment for acute calculous cholecystitis (ACC). However, in recent years, less invasive techniques have been developed; thus, a reliable tool to select high-risk patients who could benefit from those alternatives is needed. In previous studies, age has been considered, among others, to have a role in risk stratification for EC in ACC.

Aim of the study: This study aims to determine whether age alone is a valid risk prediction factor for a complicated course after EC in patients with ACC.

Methods: This is a post-hoc analysis of the S.P.Ri.M.A.C.C. study, where an univariate and a multivariate analysis of the role of age on 30-day major complications (CD>2) and 30-day mortality were performed. The S.P.Ri.M.A.C.C. study is a WSES prospective multicenter observational study. From 1st September 2021 to 1st September 2022, 1253 consecutive patients admitted in 79 centers with a diagnosis of ACC and who were eligible for EC were included. Different prediction models were analyzed, the S.P.Ri.M.A.C.C. allowed to validate the Chole-possum score, but POSSUM PS was the best risk prediction model for a complicated course after EC for ACC.

Results: In the univariate analyses, age was found to be a statistically significant risk factor for both 30-day major complications ($p < 0.001$) and 30-day mortality ($p = 0.003$). However, in the multivariate analysis, age alone was not a significant predictor for either outcome, with p-values of 0.419 and 0.094, respectively. The only significant risk factor associated with both 30-day mortality and major morbidity in the multivariate model was the POSSUM Physiological Score (PS).

Conclusion: Age alone cannot be considered a reliable risk predictor for a complicated post- operative course after EC in patients with ACC. Frailty, rather than chronological age, should be assessed to predict the outcome of these patients.

Keywords: Acute Cholecystitis, Laparoscopic Cholecystectomy, Aged

Abdominal Trauma

OP-033

REFINING THE DIAGNOSTIC ACCURACY OF CECT FOR TRAUMATIC HOLLOW VISCUS AND MESENTERIC INJURIES: CRITICAL APPRAISAL OF THE NIGUARDA SCORING MODEL

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Background: Traumatic hollow viscus and mesenteric injuries (THVMI) are rare but critical lesions in abdominal trauma, often requiring surgical correction. Contrast-enhanced CT (ceCT) is the cornerstone of diagnostic work-up in hemodynamically stable patients, its limited specificity and lack of standardized interpretation criteria pose significant challenges, potentially leading to both delayed interventions and unnecessary laparotomies. In 2020, our group published a study assessing the diagnostic accuracy of multiple ceCT findings in a mixed population of blunt and penetrating trauma. We critically reviewed our data and conducted a refined analysis limited to blunt trauma cases, with updated statistical modeling and external validation.

Methods: This retrospective study included patients with blunt abdominal trauma admitted between 2010 and 2018 who underwent both ceCT and laparotomy. Six binary ceCT criteria were evaluated: free fluid without solid organ injury, free intraperitoneal air, gastrointestinal wall alteration, mesenteric alteration, intramesenteric fluid, and mesenteric blushing. Two logistic regression models were developed: (1) a full model including all six predictors, and (2) a simplified model using only the total number of positive findings. Internal validation was performed via bootstrap resampling. External validation was conducted on an independent cohort of 268 blunt trauma patients (January 2019 – December 2021), including both operated and observed cases.

Results: The development cohort included 85 patients (48 with surgically confirmed HVMI). The full model demonstrated excellent discrimination (Bootstrap corrected C-index 0.94) but showed a tendency to overfitting (bootstrap corrected calibration slope 0.52). The simplified model achieved similar discrimination (Bootstrap corrected C-index 0.93) and superior calibration stability (slope ≈1), with a strong association between number of ceCT findings and the likelihood of surgically relevant HVMI. Both models were validated externally, maintaining high C-index (0.904 and 0.93, respectively) (Figures 1 and 2). Excluding the least informative variable (GI wall alteration) from a penalized logistic regression model improved discrimination compared to the externally validated full model (AUC = 0.92), maintaining a good calibration.

Conclusions: We developed and externally validated a practical ceCT-based scoring system to guide the diagnosis and management of HVMI in blunt trauma. The number of positive CT criteria correlates strongly with the need for surgical repair. The simplified model is accurate, stable, and easier to implement in emergency settings, allowing improved triage of patients to surgery or observation.

Keywords: Blunt trauma, hollow viscus and mesenteric injuries, THVMI

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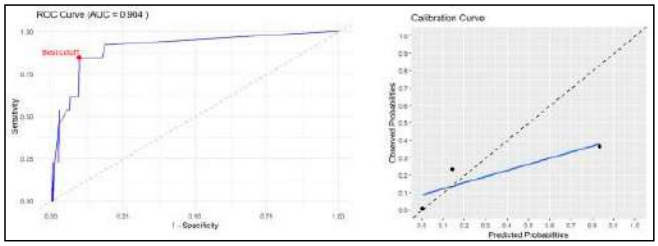


Figure 1. Full model external validation

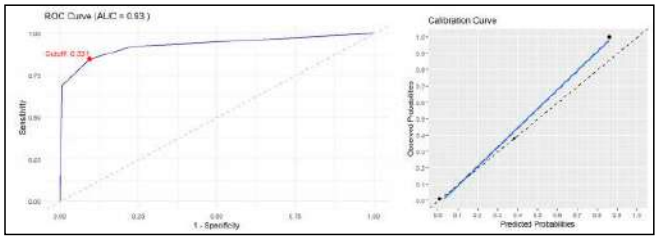


Figure 2. Reduced model external validation

Acute Abdominal and Gastrointestinal Emergencies

OP-034

A CATASTROPHIC EMERGENCY: BOERHAAVE SYNDROME

Gabriele Soldini, Alessandra Casali, Silvia Coriele, Francesca Pessi, Veronica Raveglia, Lorenzo Latham

Moriggia-pelascini Hospital

Boerhaave syndrome is a rare condition with full-thickness spontaneous rupture of the esophagus after forceful emesis. Most commonly it affects men between 50 and 70 years old. Clinically, the Mackler triad is vomiting, severe chest pain and subcutaneous emphysema but it's present in only 14% of patients.

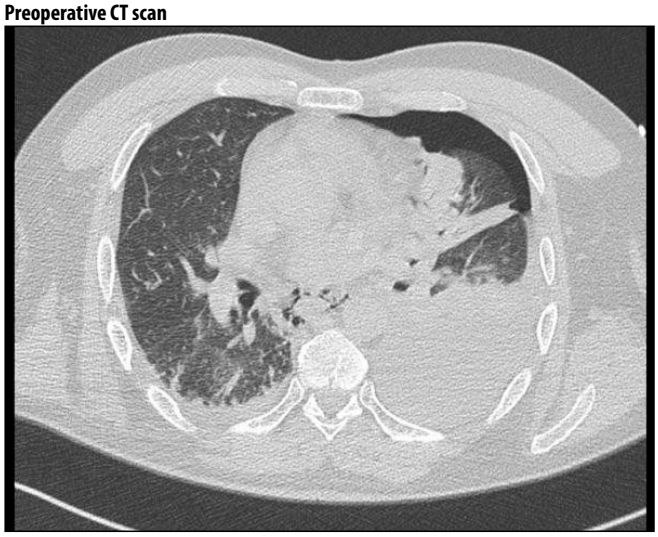
This condition poses a considerable challenge to the entire interdisciplinary team.

The delay in diagnosis explains the high mortality rate of this pathology up to 40-60% in patients treated at 48 hours. The prognosis improves if treatment, surgical and medical, is granted within the first 24 hours.

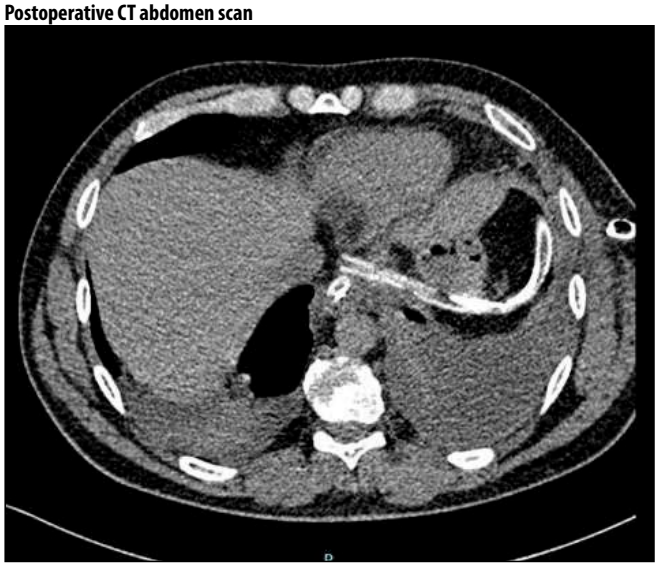
We report a case of a 50 year old man treated for Boerhaave Syndrome in our centre. The clinical course, radiological findings, surgical intervention and multidisciplinary management are discussed below.

Keywords: Esophageal Perforation, Boerhaave syndrome

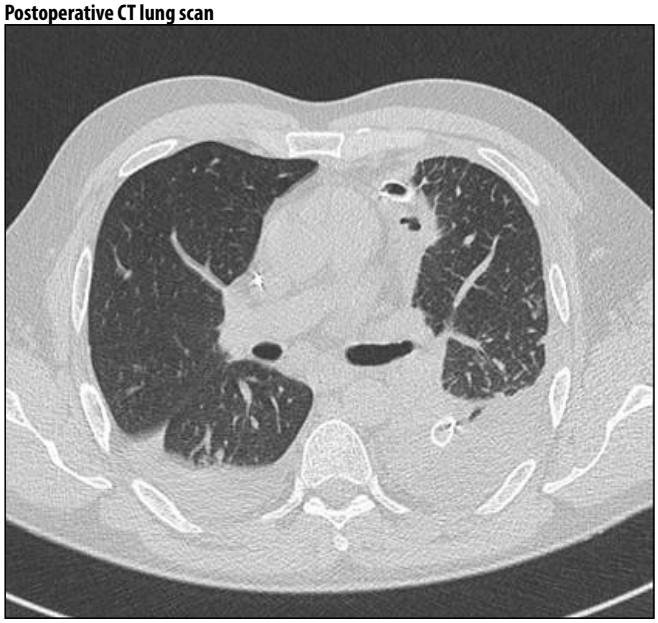
Preoperative CT scan



Postoperative CT abdomen scan



Postoperative CT lung scan



Acute Abdominal and Gastrointestinal Emergencies

OP-035

SARCOPENIA, MYOSTEATOSIS, AND FRAILTY PARAMETERS TO PREDICT ADVERSE OUTCOMES IN PATIENTS UNDERGOING EMERGENCY LAPAROTOMY

Brittany Park[1,2], Alain Vandal[1], Fraser Welch[1,2], Tim Eglinton[1,2], Jonathan Koea[1,2], Ashish Tanjea[1,2], Ahmed Barazanchi[1,2], Andrew Hill[1], Andrew MacCormick [1]

[1]University of Auckland
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Background: Functional compromise contributes significantly to adverse outcomes after emergency laparotomy. Sarcopenia, defined as reduced muscle strength and muscle quantity, has been seldom assessed in patients undergoing emergency laparotomy. The aim of this study was to examine functional compromise in emergency laparotomy using sarcopenia, myosteatosis, and frailty parameters and evaluate impacts on functional and patient-centred outcomes.

Methods: Patients aged greater than or equal to 55 years who underwent emergency laparotomy and preoperative computed tomography (CT) at two hospitals in New Zealand between February 2022 and October 2023 were included in a prospective database. Sarcopenia was measured using the SARC-F questionnaire, isokinetic dynamometry to measure hand grip strength, and skeletal muscle quantity according to CT. Myosteatosis was determined using CT and frailty was assessed using the Clinical Frailty Scale. Predictors for rehabilitation, days alive and out of hospital at 90 days, and risk of not returning home were analysed using relative risk and proportional means regression. Secondary outcomes were 3- and 6-month mortality and inpatient morbidity defined using the Clavien–Dindo classification.

Results: A total of 101 patients undergoing emergency laparotomy during the study interval were analysed; 21.6% of participants had sarcopenia, 34.7% had myosteatosis, and 24.8% were living with frailty. Muscle strength parameters (low grip strength and a positive SARC-F questionnaire) had significant relationships with primary outcomes. Low grip strength (less than 27 kg for male patients and less than 16 kg for female patients) was most significant for risk of admission for rehabilitation (adjusted risk ratio 5.48 (95% c.i. 2.03 to 14.82)). A positive SARC-F questionnaire (an overall score of greater than or equal to 4 out of 10) was most significant for not returning home (adjusted risk ratio 8.26 (95% c.i. 1.81 to 37.76)).

Isolated low muscle quantity (less than 52.4 cm2/m2 for male patients and less than 38.5 cm2/m2 for female patients) demonstrated no relationship. Being frail was most significant for a reduced number of days alive and out of hospital at 90 days (−13.4% compared with non-frail participants (95% c.i. −24.3% to −0.8%)). Sarcopenia and low grip strength were the only parameters to demonstrate a relationship with 3- and 6-month mortality.

Conclusion: Sarcopenia and frailty parameters are major determinants of functional compromise and predict adverse outcomes after emergency laparotomy. Muscle strength is more important than mass, and measurable without imaging, streamlining its clinical application.

Keywords: frailty, laparotomy, skeletal muscles, patient-centered care, diagnostic imaging, morbidity mortality rehabilitation, sarcopenia, muscle strength, grip strength, primary outcome measure

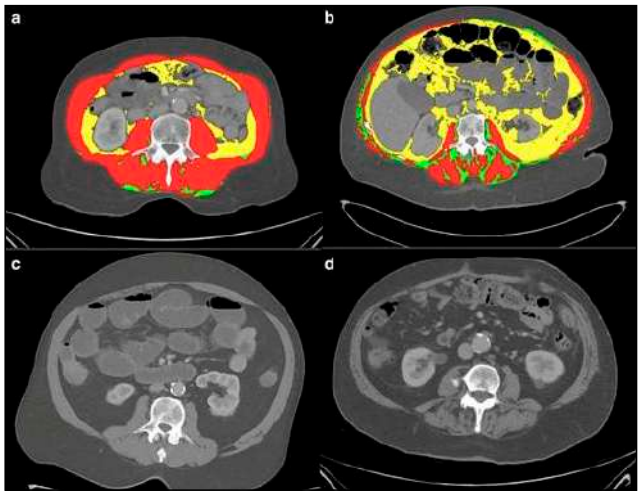


Figure 1. Comparison of normal versus reduced skeletal muscle mass and normal versus reduced skeletal muscle radiation attenuation

Acute Abdominal and Gastrointestinal Emergencies

OP-036

SHORT- AND LONG-TERM IMPACT OF SARCOPENIA ON OUTCOMES AFTER EMERGENCY LAPAROTOMY: A SYSTEMATIC REVIEW AND META-ANALYSIS

Brittany Park, Sameer Bhat, Cameron Wells, Ahmed Barazanchi, Andrew Hill, Andrew MacCormick

University of Auckland

Background: Sarcopenia refers to the progressive age and pathology-associated loss of skeletal muscle, which has been shown to independently predict mortality in patients undergoing major elective surgery. Emergency laparotomy is commonly performed for a range of procedures and is associated with high rates of mortality. However, the prognostic utility of sarcopenia after emergency laparotomy remains unknown. The aim of this study was to compare short and long-term survival between patients with and without sarcopenia undergoing emergency laparotomy.

Methods: MEDLINE, EMBASE, and Scopus databases were systematically searched for articles comparing survival outcomes between adults with and without radiologically defined sarcopenia after emergency gastrointestinal surgery regardless of indication and approach (open/laparoscopic). The primary outcome was postoperative mortality. Sensitivity analysis of adjusted multivariate analyses was performed.

Results: Twenty articles comprising 6,737 patients were included. Sarcopenia was most commonly assessed using axial abdominal computerized tomography at L3, although cut-off thresholds were heterogeneous and rarely sex-specific. Postoperative mortality was higher among patients with sarcopenia than without in the in-hospital setting, and at 30- and 90-day follow-up on univariate but not on multivariate meta-analysis. However, mortality was significantly higher among sarcopenic cohorts in the 1-year (odds ratio 2.8, 95% confidence interval: 1.5–5.6; P = .002) follow-up period, despite adjusting for confounding preoperative and patient factors.

Conclusion: The meta-analysis has shown sarcopenia to provide useful long-term prognostic information following emergency laparotomy. This may aid with preoperative risk assessment, patient counseling, and in perioperative decision-making for patients undergoing emergency laparotomy.

Keywords: Sarcopenia, Emergency Laparotomy, Patient-Centred outcomes

Acute Abdominal and Gastrointestinal Emergencies

OP-037

GASTROINTESTINAL INVOLVEMENT AND PERFORATION IN BEHÇET'S DISEASE: A CASE-BASED PRESENTATION

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Introduction: Behçet's disease is a chronic, multisystemic, idiopathic vasculitis characterized by recurrent oral and genital ulcers, ocular involvement, and cutaneous lesions. Although gastrointestinal (GI) involvement is rare, it can lead to significant morbidity and mortality.

The terminal ileum and cecum are most commonly affected, with ulcerations potentially progressing to perforation.

Case: We present the case of a 33-year-old female patient with Behçet's disease who developed gastrointestinal involvement and perforation. The patient had been followed for seven years with concurrent diagnoses of rheumatoid arthritis, ankylosing spondylitis, Raynaud's phenomenon, and familial Mediterranean fever. Despite multiple immunosuppressive treatments, the disease remained active. Since December 2021, systemic symptoms had worsened, and for the last 1.5 months, she had complaints of abdominal pain, diarrhea, and loss of appetite. Colonoscopy performed for hematochezia revealed extensive ulcerations and active bleeding in the terminal ileum. Persistent abdominal pain after the procedure raised suspicion of acute abdomen, and the patient underwent emergency surgery with a diagnosis of GI perforation.

Intraoperative findings revealed multiple perforation sites and an enteroenteric fistula in the small intestine segment extending from the 210th cm distal to the Treitz ligament to 30 cm proximal to the ileocecal valve. The affected segment was resected, and a terminal ileostomy with a mucous fistula was created.

Conclusion: Although ileocecal involvement is most common, Behçet's disease can affect the entire gastrointestinal tract. Diagnosis is based on clinical findings, and evidence-based treatment strategies remain limited. Surgery should be considered in medically refractory cases. Histopathological examination will help determine whether neutrophilic phlebitis or large-vessel involvement (e.g., mesenteric arteries) is the predominant pathological mechanism.

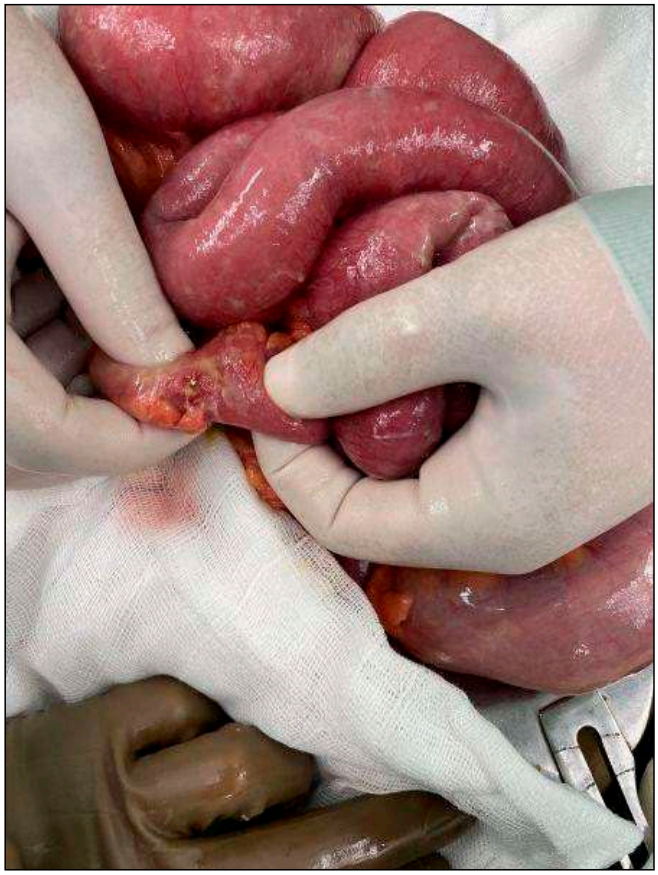
Keywords: Behçet's disease; Gastrointestinal involvement; Intestinal perforation

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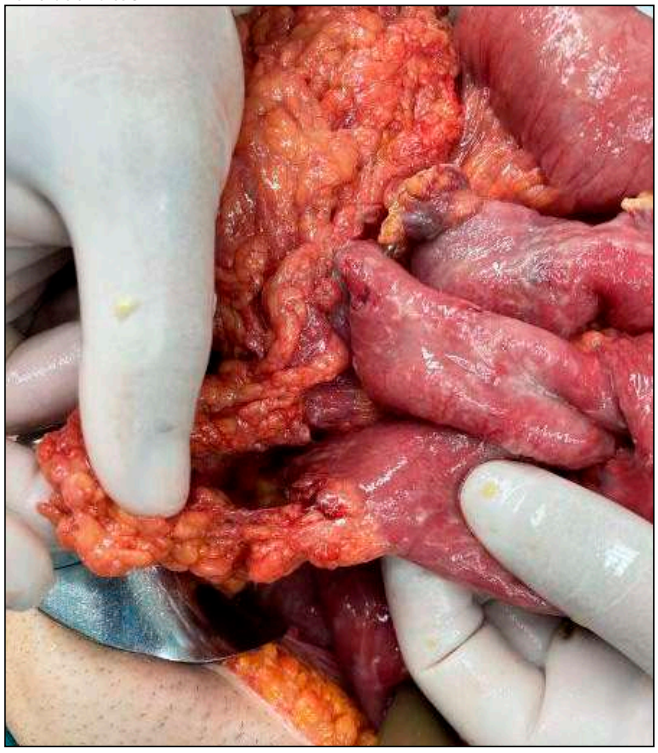
Perforation site 1



Perforation site 2



Perforation site 3



Acute Abdominal and Gastrointestinal Emergencies

OP-039

AI IN APPENDICITIS MANAGEMENT: A COMPARATIVE STUDY OF LARGE LANGUAGE MODELS IN CLINICAL DECISION-MAKING

Gunes Oral[1], **Ali Karabulut**[2], **Turkan Mahmudova**[3]

[1]*Vize Devlet Hastanesi*
[2]*Bagcilar Egitim Arastirma Hastanesi*
[3]*Yalova Egitim Arastirma Hastanesi*

Objectives: This study aimed to evaluate the diagnostic and treatment recommendation capabilities of various Large Language Models (LLMs) in acute appendicitis management, comparing their performance against human clinical decisions and assessing the impact of data quantity on their accuracy and consistency. The hypothesis was that medical finetuned LLMs would demonstrate superior performance and consistency compared to general purpose LLMs, and that increased data input would enhance diagnostic accuracy across all models.

Methods: A retrospective cohort study was conducted using anonymized data from 50 patients who underwent appendectomy between January 1st and March 31st, 2025, with their condition confirmed by postoperative histopathological examination. A total of 28 distinct LLMs were utilized, categorized into General Purpose and Medical Finetuned groups, which also implicitly distinguished between open-source and proprietary models. Data fed to the LLMs included physical examination, blood work, ultrasonography, and computed tomography findings, provided in various permutations and combinations. Internal consistency of each LLM was evaluated by asking the exact same programmatically generated query five times with a clean context. Decisions were then analyzed against human clinical outcomes, with agreement and internal consistency being key metrics.

Results: Google/medgemma-27b-text-it demonstrated the highest performance among all LLMs, achieving disagreement with human decisions in only 8 patients (16.0%) and 94.0% internal consistency. Diagnostic performance, measured by F1-score, consistently improved with increasing amounts of input data, from 0.28 with only physical examination to 0.83 when all combined modalities were provided. Medical Finetuned Models achieved a significantly higher average F1-score (0.693) compared to General Purpose LLMs (average F1- score 0.587), confirmed by an independent samples t-test ($t=-2.775$, $p=0.010$). A statistically significant but clinically modest correlation ($\rho=0.29$, $p<0.05$, 95% CI: 0.02-0.52) was observed between LLM parameter count and diagnostic performance, suggesting model complexity contributes to, but does not guarantee, superior clinical reasoning. No statistically significant difference was found between closed-source and open-source models.

Conclusion: Large Language Models exhibit promising capabilities in assisting with appendicitis diagnosis and treatment recommendations, with performance significantly enhanced by comprehensive data input and specialized medical fine-tuning. While medical finetuned models generally outperform general purpose models, further validation in diverse, prospective settings is crucial for their clinical integration.

Keywords: artificial intelligence, large language model, appendicitis, decision, ai, llm

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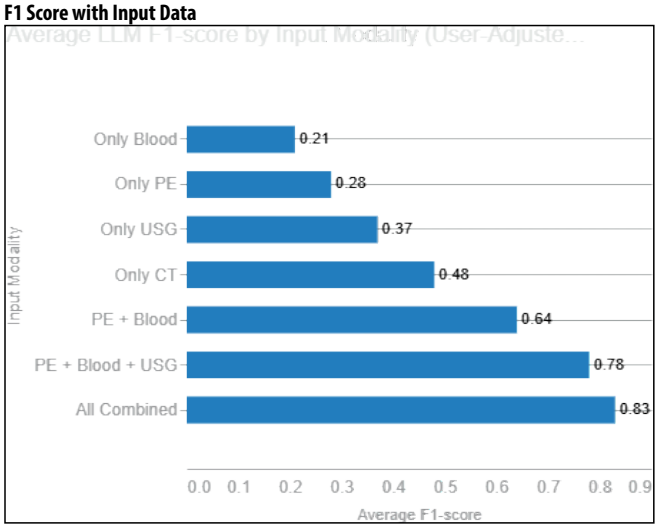
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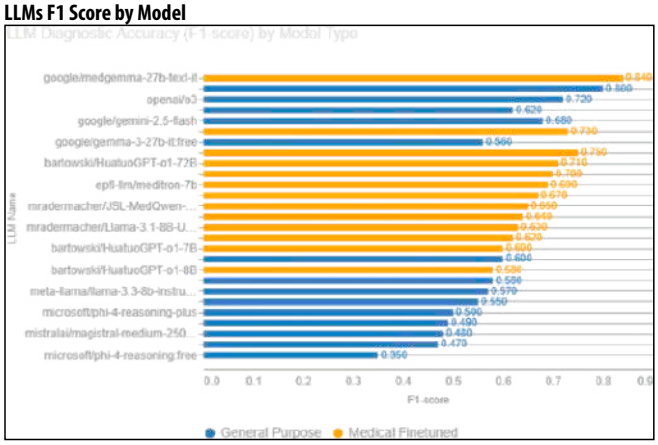
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F1 Score with Input Data



LLMs F1 Score by Model



LLM Internal Consistency (%) by Model

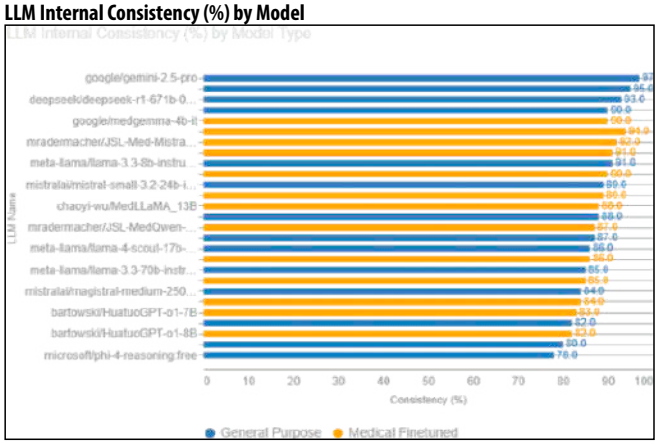


Table 1. Comparison of General Purpose vs. Medical Finetuned LLM Performance

Metric	General Purpose Mean	Medical Finetuned Mean	t-statistic	p-value	Significance (p<0.05)
F1-score	0.587	0.693	-2.775	0.010	Yes
Consistency	0.871	0.887	-0.755	0.458	No

Table 2. Pearson Correlation Coefficients (Parameter Count vs. Performance Metrics)

Metric	Pearson Correlation (rho)
F1-score	0.312
Consistency	0.288

Acute Abdominal and Gastrointestinal Emergencies

OP-042

RUPTURED LIVER HYDATID CYSTS MANAGED BY EMERGENCY SURGERY: A SINGLE-CENTER RETROSPECTIVE ANALYSIS

Onur Oztel, Serap Ulusoy, Mustafa Dönmez
Ankara Bilkent City Hospital

Objective: *Echinococcus granulosus* is an intestinal helminth that, when ingested by humans—one of its intermediate hosts—can penetrate the intestinal mucosa and enter the portal circulation. The liver is the most frequently involved organ, leading to hydatid cyst disease, a chronic and often asymptomatic condition. Türkiye is among the endemic regions for this parasitic infection. Hydatid cysts may rupture, either spontaneously or secondary to trauma, into intraperitoneal or other adjacent compartments. This study aims to present and analyze the clinical characteristics, surgical management, and outcomes of patients who underwent emergency surgery for ruptured hepatic hydatid cysts at our institution.

Materials and Methods: A retrospective analysis was conducted on 20 patients who presented to the Emergency Department or General Surgery Outpatient Clinic of Ankara Bilkent City Hospital with clinical signs and symptoms of hepatic hydatid cyst rupture and subsequently underwent emergent surgical intervention between July 2019 and May 2025. Demographic data, clinical presentations, surgical procedures, and follow-up outcomes were systematically reviewed.

Results: Of the 20 patients included, 12 (60%) were male and 8 (40%) were female, with an age range of 20 to 72 years (median: 53.5 years). The interval between symptom onset and hospital admission varied from 0 to 30 days, with 9 patients (45%) presenting within the first 24 hours. Regarding cyst localization, 13 patients (65.0%) had ruptures in the right hepatic lobe, 6 (30.0%) in the left lobe, and 1 (5.0%) in both lobes. Pericystectomy with peritoneal lavage was performed in 15 patients (75.0%), while the remaining 5 patients (25.0%) underwent partial pericystectomy with lavage. The diameter of the ruptured cysts ranged from 4.0 to 20.0 cm (median: 9.1 cm). Postoperative recurrence was observed in 12 patients (60.0%). According to the surgical technique, recurrence occurred in 9 (60.0%) patients who underwent total pericystectomy and 6 (60.0%) patients who underwent partial pericystectomy. One patient died on postoperative day 49; the remaining 19 patients survived and were followed postoperatively.

Discussion and Conclusion: Although rare, hydatid cyst rupture should be considered in the differential diagnosis of acute abdomen, particularly in endemic regions and in patients presenting with hepatic cystic lesions and intra-abdominal free fluid following trauma. In our cohort, the majority of ruptures occurred spontaneously. Larger cyst size appears to be a significant risk factor for perforation. Consistent with existing literature, the right hepatic lobe was the most commonly affected site. Surgical intervention remains the cornerstone of management; however, the high recurrence rate emphasizes the necessity for vigilant postoperative follow-up and prompts reconsideration of current treatment strategies.

Keywords: Hydatid Cyst, rupture, surgery

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Table 1. Relationship Between Surgical Technique and Recurrence (n=20)*

	Recurrence exist n (%)	No Recurrence n (%)
Pericystectomy + peritoneal lavage	9 (%60,0)	6 (%40,0)
Partial pericystectomy + peritoneal lavage	3 (%60,0)	2 (%40,0)

Table 2. Time to Hospital Admission and Length of Hospital Stay (n=20)

	Median (min–max)	Mean ± SD
Time from symptom onset to hospital admission (days)	3,0 (0,0-30,0)	5,4±7,2
Length of hospital stay (days)	9,0 (3,0-45,0)	12,0±10,0

Table 3. Distribution of Some Descriptive Characteristics of Patients (n=20)

Gender	*n*	*%*
Male	12	60,0
Female	8	40,0
Liver Hydatid Cyst Location		
Right lobe	13	65,0
Left lobe	6	30,0
Left lobe + right lobe	1	5,0

Acute Abdominal and Gastrointestinal Emergencies

OP-044

GASTRIC PERFORATION SECONDARY TO NECROSIS: A RARE CASE ACCOMPANIED BY UNINTENTIONAL WEIGHT LOSS

Zeynep Şevval Aliş, Muhammet Oğuz Çelikkaya, Elif Dilara İzbudak, Gültekin Hoş, Aylin Acar, Tolga Canbak, Adnan Özpek

University of Health Sciences, Ümraniye Training and Research Hospital, Department of General Surgery

Background: Gastric necrosis is an extremely rare but potentially fatal cause of acute abdomen. It is most often linked to gastric dilation, ischemia, vascular occlusion, or underlying conditions such as anorexia nervosa, diabetes, or substance abuse [1–4]. When complicated by perforation, it carries a high mortality rate due to the rapid progression of peritonitis [5].

Case Presentation: We present a 22-year-old previously healthy female who experienced an involuntary 30 kg weight loss in one month while living abroad in a dormitory. She was admitted to the emergency department with severe abdominal pain, nausea, and vomiting. There was no history of drug use, chronic illness, or eating disorder. Vital signs revealed tachycardia (134 bpm) and hypotension (97/68 mmHg). Abdominal exam showed diffuse tenderness without rebound or rigidity. Laboratory analysis showed leukopenia (WBC 3,500/mm^3), elevated CRP (3.5 mg/dL), lipase (1329 U/L), and amylase (293 U/L).

Upright abdominal radiograph and contrast-enhanced CT scan demonstrated diffuse free air and peritoneal fluid, suggesting perforation. Emergent laparotomy revealed a 10×10 cm area of gastric necrosis with a 0.5 cm perforation at the greater curvature. Wedge resection using endoscopic staplers was performed, and the peritoneal cavity was thoroughly irrigated. Two drains were placed. The patient recovered uneventfully in the intensive care unit and was discharged without complication.

Discussion: Gastric necrosis is usually observed in the context of risk factors such as acute gastric dilatation [2,3], mechanical obstruction [5], ischemic injury [7], or fundoplication-related compression [6]. Several cases have been linked to infectious gastritis [6], massive gastric distension [7], or mesenteric ischemia [8]. However, our case is unique: the only identifiable risk factor was a rapid and profound involuntary weight loss.

Hypoperfusion and microvascular dysfunction are thought to underlie the ischemic pathogenesis of gastric necrosis in malnourished or underperfused states [9–11]. In this patient, the significant nutritional deficit may have impaired gastric mucosal blood flow, leading to ischemia and necrosis [12]. Tang et al. emphasized that ischemic gastritis often has multifactorial origins, including low-flow states and microvascular compromise, which could be precipitated by severe undernutrition [13].

To our knowledge, this is the first reported case of gastric necrosis with perforation in a patient without any systemic comorbidity or eating disorder, but solely linked to rapid involuntary weight loss. This may represent an underrecognized etiology in similar patients presenting with acute abdomen.

Conclusion: Gastric necrosis is a rare but life-threatening condition that demands prompt recognition and surgical intervention. This case highlights that rapid involuntary weight loss—although often overlooked—may pose a significant risk for ischemic gastric injury. Surgeons should consider gastric necrosis in the differential diagnosis of acute abdomen, especially in malnourished patients without obvious underlying disease.

Keywords: Gastric Perforation; Weight Loss; Emergency Surgery; Ischemic Gastritis; Wedge Resection; Exploratory Laparotomy

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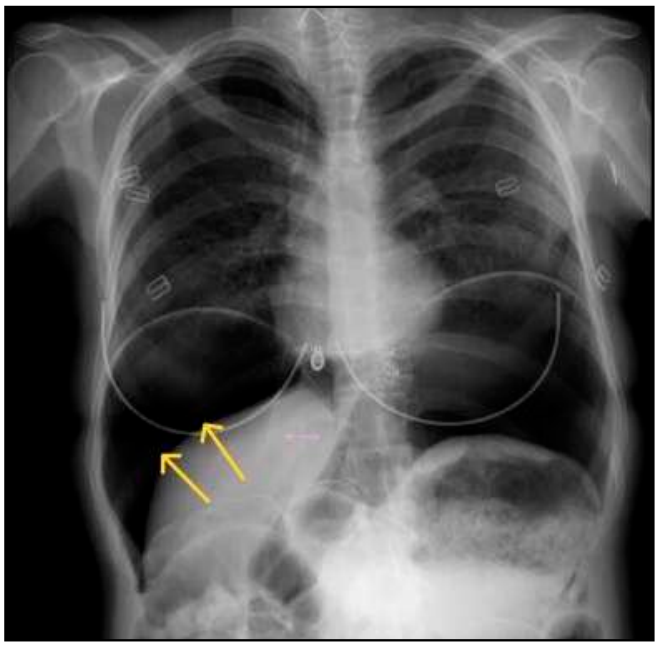


Figure 1. Subdiaphragmatic free air on upright abdominal radiograph



Figure 2. CT image showing perforated necrotic area at the greater curvature of the stomach

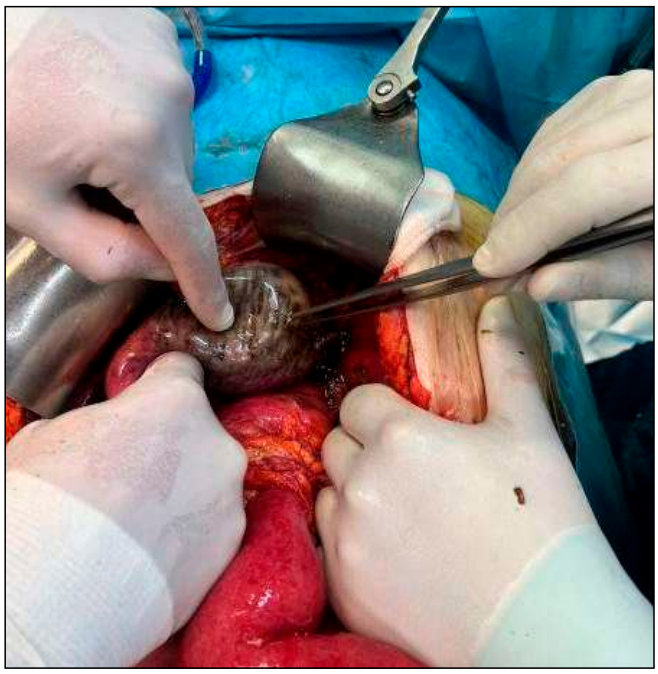


Figure 3. Intraoperative view of gastric necrosis and perforation on the greater curvature

Acute Abdominal and Gastrointestinal Emergencies

OP-046

ADULT TRANSVERSE COLON INTUSSUSCEPTION: A CASE REPORT AND LITERATURE REVIEW

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Adult Transverse Colon Intussusception: A Case Report and Literature Review Background: Adult intussusception is a rare cause of bowel obstruction, comprising 1-5% of cases in the UK, with 65% of colonic intussusceptions associated with malignancy. Unlike pediatric cases, adult intussusception typically involves a pathological lead point, necessitating surgical intervention due to risks of ischemia and perforation. Diagnosis relies on computed tomography (CT), though imaging may miss critical findings like perforation. This report presents a case of transverse colon intussusception in a frail elderly patient, highlighting diagnostic challenges, surgical management, and perioperative complexities in the context of severe frailty and comorbidities.

Case: An 84-year-old male with severe frailty (Clinical Frailty Scale 7) presented with a 5-day history of vomiting, abdominal distension, delirium and weakness. His medical history included cardiovascular disease, Parkinson's disease, hypertension, chronic kidney disease, anemia, and Iron Deficiency anemia under investigation. Examination revealed suspected peritonitis, metabolic acidosis (pH 7.2, lactate 4.8 mmol/L), leukocytosis (WBC 18.5 × 10^9/L), and acute kidney injury (creatinine 245 μmol/L, eGFR 18 mL/min). CT suggested bowel obstruction and pneumoperitoneum but did not identify intussusception. Emergency laparotomy revealed a perforated transverse colon intussusception with a 5 × 5 cm mucinous adenocarcinoma as the lead point. A palliative transverse colon resection with end ileostomy was performed due to frailty and hemodynamic instability. Postoperatively, the patient was admitted to the ICU with vasopressor support. Parkinson's medications were delayed until postoperative day (POD) 2, exacerbating rigidity. Enteral feeding began on POD 3, but recurrent hypoglycemia and hypoactive delirium persisted. By POD 7, transfer to a high-acuity unit occurred, but sepsis, fluid overload, and hypovolemia developed. Given refractory organ dysfunction and frailty, the patient transitioned to end-of-life care and died on POD 12.

Conclusion: This case underscores the challenges of managing adult transverse colon intussusception in frail elderly patients. CT's diagnostic limitations highlight the need for clinical correlation in acute abdominal presentations. Severe frailty and comorbidities, including Parkinson's disease and metabolic instability, contributed to poor outcome. Surgical resection with ileostomy was appropriate given the malignancy and perforation, but the patient's physiological reserve limited recovery. Multidisciplinary care and early palliative considerations are critical in such cases. Further research should focus on tailored perioperative strategies for this vulnerable population.

Keywords: Adult intussusception, transverse colon, mucinous adenocarcinoma, frailty, bowel obstruction, surgical management, perioperative care

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Acute Abdominal and Gastrointestinal Emergencies

OP-047

MANAGEMENT OF SMALL BOWEL OBSTRUCTION IN A VIRGIN ABDOMEN: A RETROSPECTIVE COHORT STUDY FROM A DISTRICT GENERAL HOSPITAL

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Background: Small bowel obstruction (SBO) is a common surgical emergency, most often caused by post- operative adhesions. Non-operative management is typically the first-line treatment for adhesional SBO. However, SBO can also occur in patients with a virgin abdomen—that is, with no history of abdominal surgery—usually due to congenital bands or adhesions. While traditional surgical teaching has favoured operative intervention in these cases, emerging evidence now supports a trial of non-operative management in selected patients. We sought to evaluate the treatment and outcomes of patients presenting with SBO in a virgin abdomen at a UK district general hospital.

Methods: We conducted a retrospective analysis of patients admitted with CT-confirmed small bowel obstruction (SBO) at a UK district general hospital between 01/01/19 and 08/07/24. Patient were included if they had a CT confirming SBO with a clear transition point and no past history of any abdominal surgery, radiotherapy or intra-abdominal inflammatory disease such as appendicitis or diverticulitis. Patients were excluded if they had SBO from abdominal wall hernias, malignancy, crohn's disease, strictures or foreign bodies. Data collected was collected from electronic health records including demographics, clinical features, CT findings, management (operative vs non-operative), time to surgery, use of contrast, length of stay, complications (Clavien-Dindo), and readmission.

Results: A total of 37 patients met the inclusion criteria (59% male, 41% female, age range: 26–96 years).

- 11 patients (29.7%) underwent operative management during their admission.
- 26 patients (70.3%) were managed entirely non-operatively during their admission Operative Group
- Indications for surgery included suspected ischaemia (3/11) and internal hernia (1/11)
- 8 procedures (72.7%) were laparoscopic; 3 (27.3%) were open, including 1 conversion from laparoscopy.
- 2 out of 11 patients underwent small bowel resection for non-viable bowel.
- 9 patients had simple adhesiolysis or band division.
- One patient experienced a Clavien-Dindo IIIa complication (umbilical wound infection requiring drainage).
- Median time to surgery was 1 day. Non-operative Group
- 10/26 patients received water-soluble contrast.
- None required surgery during the index admission.
- Out of the 26 non-operative patients, 20 had an NG tube inserted as part of their management

Outcomes

- Mean LOS: 7.7 days (operative), 7.2 days (non-operative).
- Three patients (8.1%) were readmitted (within 30 days):
  - 1 for wound infection
  - 1 for recurrent SBO (managed conservatively)
  - 1 for SBO(initially managed with laparoscopic adhesiolysis) requiring repeat adhesiolysis
  - No patients were readmitted beyond the 30-day follow-up period.

Conclusion: Our findings suggest that non-operative management is a viable treatment strategy in selected patients with SBO. 70% of patients presenting with SBO in a virgin abdomen could be managed completely non-operatively. Patients without an indication for immediate surgery such as suspected ischaemia or internal hernia can be managed non-operatively.

Furthermore, median length of stay between operative and non-operative groups were similar. Therefore, our data supports challenging the prevailing surgical dogma of operative management in SBO in a virgin abdomen.

Keywords: Small bowel obstruction Virgin abdomen Non-operative management Adhesions

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Acute Abdominal and Gastrointestinal Emergencies

OP-048

BAILOUT PROCEDURES IN LAPAROSCOPIC CHOLECYSTECTOMY FOR ACUTE SETTINGS OR DIFFICULT CONDITIONS: A PROSPECTIVE MULTICENTER OBSERVATIONAL STUDY.

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Introduction: Laparoscopic cholecystectomy (LC) remains the gold standard for the treatment of gallbladder disease, including acute and complex cases. In difficult scenarios—such as severe inflammation, distorted anatomy, or high-risk intraoperative findings—bailout procedures (e.g., subtotal cholecystectomy, conversion to open surgery, hand-assisted procedure) are essential tools to avoid major complications. Despite their relevance, there is a lack of high-quality prospective data defining their indications, safety, and outcomes [1], [2], [3], [4].

The BaPriLac – PRO Project (Bailout Procedures in Laparoscopic Cholecystectomy – Prospective Research and Outcomes) is a prospective, multicenter observational study designed to investigate current practices, adoption rates, and outcomes associated with bailout strategies in emergency and complex laparoscopic cholecystectomy.

Methods: This study involves adult patients undergoing laparoscopic cholecystectomy for acute cholecystitis, or other urgent/complex indications. Data are collected prospectively and in-

clude clinical presentation, intraoperative findings, bailout strategy (if adopted), and postoperative outcomes [Fig.1].

The primary outcome is the rate of adoption of bailout procedures, defined as any intraoperative deviation from standard cholecystectomy due to difficult anatomy or safety concerns. Secondary endpoints include postoperative morbidity, length of hospital stay (LOS), and the incidence, type, and timing of postoperative complications or readmissions.

The power calculation assumed an expected 20% rate (according to the literature, reported values range between 10% and 35%) of bailout procedures, with a desired margin of error of ±3% and 95% confidence level, resulting in a minimum required sample size of 683 patients [5], [6]. To allow for subgroup analyses and potential dropouts, the initial recruitment target was set at 900 patients.

Descriptive statistics will summarize patient demographics, surgical details, and outcomes. Categorical variables will be compared using Chi-square or Fisher's exact test; continuous variables will be analyzed using Student's t-test or Mann–Whitney U test, as appropriate. A multivariable logistic regression model will identify independent predictors of bailout procedure adoption. Secondary analyses will explore associations between surgical strategy and clinical outcomes.

Results: Preliminary analyses confirm the validity of the sample size assumptions, with early data supporting the estimated incidence of bailout procedures. Interim results—including the types of bailout techniques employed, associated patient and surgical characteristics, and short-term outcomes—will be presented at the meeting. In addition, the structure and distribution of participating centers will be outlined, reflecting the multicentric and collaborative framework of the study and highlighting potential for further international expansion.

Conclusions: The BaPriLac – PRO Project provides a unique opportunity to clarify the real-world application and effectiveness of bailout strategies in laparoscopic cholecystectomy under acute or difficult conditions. These preliminary results support the feasibility of the study and underscore the importance of a shared prospective dataset. Further international collaboration is strongly encouraged to strengthen data validity and help define evidence-based recommendations for bailout techniques in emergency surgery.

Keywords: Difficult cholecystectomy, Bailout procedures, Surgical decision-making, Laparoscopic cholecystectomy

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Acute Abdominal and Gastrointestinal Emergencies

OP-050

EVALUATION OF READMISSION AND CHOLECYSTECTOMY REQUIREMENT AFTER PERCUTANEOUS CHOLECYSTOSTOMY IN ACUTE CHOLECYSTITIS

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Objective: This study aimed to evaluate the necessity of cholecystectomy by examining the readmission rates after catheter removal and the complication rates among patients who underwent surgery following percutaneous cholecystostomy (PC) for acute cholecystitis. Additionally, predictive parameters for readmission were analyzed in the followed-up patients.

Methods: A retrospective analysis was conducted on 201 patients who underwent PC for acute calculous cholecystitis between January 2019 and January 2024 and were successfully followed after completion of PC treatment. Demographic characteristics, laboratory data, comorbidities, readmission status, surgical intervention, and postoperative complications were evaluated during a one-year follow-up period after catheter removal.

Results: The mean age of the patients was 71,8 ± 12,4 years. Within one year, 48 patients (23,9%) were readmitted. Fifty patients (24,8%) underwent cholecystectomy after PC, and 21 of them (42%) developed surgical complications. No statistically significant difference was found in complication rates between patients who underwent surgery after readmission and those who had surgery after the initial episode ($p > 0,05$). Multivariate analysis revealed that short-duration catheterization, along with elevated AST and GGT levels, was significantly associated with readmission ($p < 0,05$); GGT was identified as an independent risk factor ($p < 0,05$).

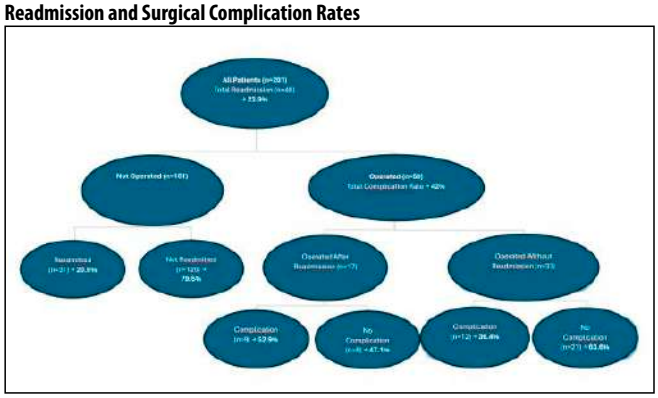
Conclusion: PC is a safe and effective treatment option for high-risk patients with acute cholecystitis. Given the current readmission and surgical complication rates, routine interval cholecystectomy is unnecessary in this patient population.

Keywords: Acute cholecystitis, percutaneous cholecystostomy, laparoscopic cholecystectomy

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Readmission and Surgical Complication Rates



Acute Abdominal and Gastrointestinal Emergencies

OP-051

NON-OPERATIVE MANAGEMENT IN PATIENTS WITH IATROGENIC COLORECTAL PERFORATIONS: A MULTICENTER STUDY

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Background: Surgical treatment and non-operative management of iatrogenic colorectal perforations (ICP) are not defined by the guidelines.

Objectives: To evaluate efficacy and safety of non-operative management in patients with ICP.

Methods: A retrospective analysis of medical records from patients with confirmed ICP occurring during diagnostic or therapeutic colonoscopy was conducted. Data were collected from three high-volume tertiary hospitals in Moscow, Russia between January 2021 and May 2025. Patients were divided into two groups based on whether they underwent non- operative management (NOM) or surgical intervention. The following parameters were assessed: incidence, clinical presentation, imaging findings, treatment strategies, and clinical outcomes, NOM success rate.

Results: From January 2021 to May 2025 80210 procedures records were identified a total of 26 patients were diagnosed with ICP (0.03%). Seventeen (65%) perforations occurred during the removal of colorectal lesions, and 9 (35%) were associated with diagnostic colonoscopy. In 16 patients (61.5%), perforation was identified during the procedure, and endoscopic closure was attempted in 10 of these cases. In the remaining 10 patients (38.5%), the perforation was diagnosed post-procedure. The most frequent site of perforation was the sigmoid colon (38.5%). Characteristics such as age, BMI, Charlson Comorbidity Index, perforation size, WBC count, or CRP levels did not significantly differ between the NOM and surgical groups.

Computer tomography (CT) was performed in 14 patients prior to treatment decision — 7 in each group. In the NOM group, free gas was detected in the abdominal cavity in 5 (71%) patients, in the surgical group in 4 (57%) cases.

Non-operative management was applied in 10 patients (38.5%), while 16 patients (61.5%) underwent surgical intervention. Tactics choice was on the decision of consultant surgeon. NOM tactics considered broad-spectrum antibiotics with nil per os and repeated visualization (ultrasound / CT) and laboratory tests evaluation. All patients managed non-operatively

recovered, without the need for further intervention. NOM group develop no complications. No additional percutaneous interventions were required. Among the surgical group, two patients underwent open procedures and 14 underwent laparoscopic surgery. Severe complications led to death in the surgical group occurred in one patient (6.25%).

The length of hospital stay did not significantly differ between the groups: 7.50 [5.50; 8.75] days in the NOM group vs. 6.00 [5.0; 8.00] days in the surgical group (p = 0.758). However, the incidence and duration of ICU stay differed significantly. In the NOM group, there were no ICU admissions, whereas in the surgical group, 8 patients (50%) required ICU care, with an average length of stay of 3 days (SD ±1.77).

Conclusion: ICP is rare but life-threatening complication. Non-operative management appears to be safe and effective strategy for selected patients with iatrogenic colorectal perforations. Patient selection criteria for NOM should be refined and standardized to avoid unnecessary surgeries and optimize outcomes.

Keywords: Colonoscopy, complication, Intraabdominal Infection

Abdominal Trauma

OP-052

MACHINE LEARNING-ASSISTED TREATMENT SELECTION IN ISOLATED BLUNT SPLENIC TRAUMA: A TERTIARY CENTER'S 145-PATIENT EXPERIENCE

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Splenic injuries resulting from blunt abdominal trauma are among the most common and most critical clinical scenarios requiring urgent decision-making. Treatment options range from non-operative management to emergency splenectomy. Today, treatment decisions are based on various factors, including the patient's hemodynamic status, imaging findings,

laboratory parameters, and trauma scores. The aim of this study is to develop a machine learning model capable of accurately predicting the need for surgical intervention at an early stage in patients with isolated blunt splenic trauma. In doing so, the goal is to provide clinicians with objective decision support and reduce the rate of unnecessar laparotomies.This study is based on a retrospective analysis of 145 patients with isolated blunt splenic trauma who were admitted between 2015 and 2025. Of these patients, 10.3% (n=15) were treated surgically, while 89.7% (n=130) were managed conservatively. Eighty percent of the cases were used for model training, and the remaining 20% were used for testing. Fourteen clinical and laboratory parameters were evaluated, including age, gender, heart rate, systolic blood pressure, Glasgow Coma Scale (GCS), Injury

Severity Score (ISS), AAST grade, hemoglobin level, and transfusion requirement. Data imbalance was handled using SMOTE and class weighting techniques. Random Forest, XGBoost, Logistic Regression, and Support Vector Machine (SVM) algorithms were compared. Model optimization was performed using GridSearchCV, and performance evaluation was conducted through 5-fold cross-validation.The Random Forest algorithm demonstrated the highest performance, with an accuracy of 91.4%, an F1 score of 0.90, and an AUC value of 0.93. For the prediction of surgical cases, the model achieved a sensitivity of 88.0% and a specificity of 92.5%. Feature importance analysis identified the most significant predictors as elevated heart rate (>110 bpm), low minimum hemoglobin level (<8 g/dL), AAST Spleen Injury Scale grade (≥III), and the presence of transfusion requirement. The model's negative predictive value was calculated as 96.2%. This model was able to predict patients requiring surgical intervention with high accuracy and sensitivity, notably identifying all cases that necessitated invasive procedures. With 100% sensitivity and 92.3% specificity in the test set, it demonstrates strong potential as a decision support tool in clinical practice. Additionally, SHAP analyses rendered the model's decision-making process transparent and interpretable, thereby facilitating collaboration between clinicians and the model. When simulated in an emergency department setting, the model was projected to significantly accelerate the decision-making process and improve operational efficiency.However, a key methodological limitation of this study is that the model was trained based on historical clinical decisions. Therefore, while the model performs well in predicting current decision-making practices, it does not necessarily represent the most accurate or ideal treatment approach. This model is capable of predicting surgical indications in isolated blunt splenic trauma with 91.4% accuracy. It is expected to enhance patient safety and optimize resource utilization by providing real-time decision support in emergency departments. Validation through prospective multicenter studies and integration into digital health systems should be prioritized in future research.

Keywords: Blunt Splenic Trauma, Machine Learning, Clinical Prediction Model, Non- operative Management, Splenectomy, Random Forest, XGBoost

Abdominal Trauma

OP-053

NONOPERATIVE MANAGEMENT OF COMPLEX THORACO-ABDOMINAL TRAUMA: A CASE REPORT

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Introduction: Thoraco-abdominal trauma resulting from a high-energy mechanism is characteristically seen with more than a single organ system injury, thereby resulting in complicated management issues with a high possibility of morbidity and mortality. Though surgical treatment is generally planned for multi-organ injury, nonoperative management can also be attempted. This approach, as evidenced by our case report, requires judicious patient selection, with an emphasis on hemodynamic stability and the potential for an optimal result.

Case Presentation: A 66-year-old male suffered severe thoraco-abdominal trauma during a high-speed motorcycle collision and presented five hours post- injury. He was hemodynamically stable but complained of severe chest and abdominal pain. On initial CT, he presented with bilateral hemothorax, multiple rib fractures on the left, hepatic contusions of segments IV–V, splenic Grade I injury, non-visualization of the right kidney, and moderate intraperitoneal fluid. Laboratory findings revealed hepatocellular injury, characterized by highly elevated transaminases (ALT 1120 U/L, AST 542 U/L), and mild anemia (hemoglobin 11.9 g/dL). Progressive fall in hemoglobin to 10.8 g/dL on day two, accompanied by elevated pancreatic enzymes (amylase 225 U/L, lipase 160 U/L) and thrombocytopenia (platelets 120 × $10^3/\mu$L), suggested early pancreatic injury. Repeated imaging on day three confirmed uncinate process pancreatic edema with the resulting retroperitoneal fluid collection.

Management and Outcome: The patient was successfully treated nonoperatively through vigorous monitoring protocols, including serial clinical exams, laboratory surveillance, and interval imaging. This constant monitoring, which enabled the timely intervention and adjustments, was instrumental in the patient's persistent clinical and biochemical recovery throughout his hospital course. There was no need for invasive procedures or blood transfusions, and the patient was discharged uneventfully with complete resolution of his injury.

Conclusion: The case shows that nonoperative management in hemodynamically stable patients with complex thoraco-abdominal trauma involving multiple organ systems is feasible. Success occurs only when stringent patient selection criteria are adhered to, such as the absence of active bleeding, peritonitis, and other life-threatening injuries. Proper monitoring protocols and well-coordinated multidisciplinary care, involving emergency medicine, trauma surgery, and radiology services, are also critical. Serial re- evaluation remains necessary to identify those patients who require conversion into surgical management.

Keywords: thoraco-abdominal trauma, nonoperative treatment, blunt abdominal trauma, hepatic injury, pancreatic injury, multidisciplinary treatment, conservative treatment

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Abdominal Wall Emergencies

OP-054

THE EFFECT OF SYMPTOM DURATION AND LABORATORY PARAMETERS ON BOWEL RESECTION IN INCARCERATED ABDOMINAL WALL HERNIA CASES

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Introduction: Delayed diagnosis and surgical intervention in incarcerated hernia cases may result in bowel ischemia. It has been reported that surgical interventions performed within the first 72 hours from the onset of symptoms reduce the likelihood of bowel resection. In this study, the relationship between the time from symptom onset to surgery and laboratory parameters with bowel resection was evaluated in incarcerated hernia cases operated on in our clinic.

Methods: In this study, 60 incarcerated hernia cases operated on between May 2024 and May 2025 at Istanbul Medeniyet University Göztepe Prof. Dr. Süleyman Yalçın City Hospital were retrospectively analyzed. Of these patients, 22 were operated on for inguinal hernia (37%), 15 for incisional hernia (25%), 11 for femoral hernia (18%), 10 for umbilical hernia (17%), and 2 for Spigelian hernia (3%). Age, gender, time from symptom onset to surgery, laboratory values [white blood cell count (WBC), neutrophil count (NEU), neutrophil-to-lymphocyte ratio (NLR), C-reactive protein (CRP), venous blood gas lactate], comorbidity, and whether bowel resection was performed during surgery were evaluated. The data were compared between the groups with and without resection.

Results: As the symptom duration increased, the resection rate increased significantly. It was observed that in patients whose time from symptom onset to surgery exceeded especially the first 3 days, the resection rate increased up to 25%. In patients operated on on the 1st day, the resection rate was 4% (1/22); on the 2nd day, it was 15% (3/20); and on the 3rd day, it was 16% (1/6) (p=0.469). It was observed that especially the mean NLR and CRP values were higher in patients who underwent resection. The mean NLR of patients who underwent resection was 11.5, while it was 7 in patients who did not undergo bowel resection (p=0.117). The mean CRP of patients who underwent resection was 54 mg/L, while those who did not undergo bowel resection was 33 mg/L (p=0.351). CRP was higher in the resected group, indicating a clinical tendency, but the sample size was insufficient. Regarding lactate levels measured with VBG, the mean lactate level was found to be 2.33 mmol/L in patients who underwent bowel resection and 1.88 mmol/L in those who did not (p=0.085). The resection rate was calculated as 10.9% in patients with comorbidities and 7.1% in those without comorbidities (p=1.0).

Conclusion: Although the evaluated data did not reach statistical significance, NLR, CRP, lactate, comorbidity, and the time from symptom onset to surgery were higher in the group who underwent bowel resection.

Keywords: Incarcerated hernia, bowel resection, symptom duration, NLR, CRP, venous blood gas lactate

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Abdominal Trauma

OP-060

NON-OPERATIVE MANAGEMENT OF BLUNT LIVER İNJURY; ÇAM AND SAKURA CITY HOSPITAL EXPERIENCE

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Introduction: The liver is the most commonly injured organ in blunt abdominal trauma. Mechanisms of injury typically include motor vehicle collisions, pedestrian accidents, falls, and other high- impact events. Surgery was once the standard treatment for blunt hepatic injuries, but this approach has gradually evolved over the past three decades. In hemodynamically stable patients, non-operative management (NOM) is considered the standard of care1,2.

Method: This retrospective study was conducted between January 2023 and January 2025 at a major tertiary medical center in Istanbul, Türkiye. This study included 15 consecutive patients who were admitted to the General Surgery Department of Çam and Sakura City Hospital with a diagnosis of blunt liver injury. The diagnosis of liver injury was based on abdominal computed tomography (CT) scans. Patients who presented with hemodynamic instability, associated injuries and severe (World Society of Emergency Surgery (WSES) grade Ⅲ and AAST grade Ⅳ-Ⅴ) liver injuries underwent emergency laparotomy. The remaining hemodynamically stable patients with varying grades of liver injury were managed nonoperatively.

Results: Most of the patients were male (73%). The mean age was 31 years. Among the patients with blunt liver injury, four sustained their injuries from falls from height, while the remaining cases resulted from motor vehicle collisions. Of the 15 patients, 6 underwent emergency laparotomy, while the remaining 9 were managed nonoperatively. Among the patients who underwent emergency laparotomy: two had splenectomy with bleeding control; one had splenectomy and colon resection with bleeding control; one had splenectomy combined with liver resection; and two required a two-stage operation with initial abdominal

packing.The characteristics and outcomes of patients are shown in Table 1.

The Injury Severity Score, reflecting the extent of associated injuries, was higher in patients who underwent emergency laparotomy. While no deaths were observed in either group, complication rates were lower and length of hospital stay were shorter among patients treated nonoperatively.

Discussion: Hepatic injury is the primary cause of death after severe abdominal trauma, with related mortality of 10% to 15%. In blunt hepatic trauma, particularly after high-grade injury, complications occur in 12–14% of patients1,2. Considering the low mortality and morbidity rates observed in our study, non-operative management is recommended as the treatment of choice for all hemodynamically stable patients, regardless of the severity of liver injuries.

Conclusion: Management of liver trauma is multidisciplinary; if feasible, non-operative management should always be considered the first option in adults

Keywords: Liver İnjury, Blunt Abdominal Trauma, Non-operative Management

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Table 1. Characteristics and Overcome of Patients with Blunt Liver İnjury

	Total (n=15)	*Non-Operative Management (n=9)*	*Operative Management (n=6)*	*p Value*
Age (years)	31±12,3	28,8±6,92	34,4±18,1	
Gender (Male)	73%	88%	50%	
AAST Grade		II (7)	II (-)	
		III (2)	III (2)	
			IV (4)	
İSS	21,8±12,9	14,6±6,78	32,8±12,1	0,001*
Comorbidity	1	-	1	
Complication	4	-	4	<0,001*
Length of Hospital Stay (days)	22,4±38,1	5,56±4,13	47,7±52,6	0,015*
Mortality	-	-	-	

Acute Abdominal and Gastrointestinal Emergencies

OP-062

GASTROENTEROSTOMY DEHISCENCE DUE TO INCARCERATED INCISIONAL HERNIA FOLLOWING WHIPPLE PROCEDURE: A CASE REPORT WITH SUCCESSFUL ROUX-EN-Y RECONSTRUCTION

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Background: Pancreaticoduodenectomy (Whipple procedure) is a complex surgical intervention commonly performed for periampullary malignancies. While early complications such as anastomotic leakage, pancreatic fistula, and delayed gastric emptying are frequently observed, late complications are relatively rare (1). Incisional hernia may lead to mechanical bowel obstruction, but gastroenterostomy dehiscence due to hernia incarceration is exceedingly rare. We present a unique case of gastroenterostomy dehiscence occurring two years post- Whipple procedure, successfully treated with emergency Roux-en-Y reconstruction.

Case Presentation: A 79-year-old male, with a history of Whipple procedure for pancreatic head cancer two years prior, presented with acute abdominal pain and fever. He had bilateral subcostal surgical scars and a known left-sided incisional hernia. CT imaging revealed free air within the hernia sac and subdiaphragmatic space (Figure 1). Laboratory values indicated elevated inflammatory markers (CRP: 205 mg/L; WBC: 17,000/mm^3). Emergency laparotomy showed >50% dehiscence of the gastroenterostomy within the hernia sac, filled with gastric contents but without diffuse contamination (Figure 2). In patient with a prior Billroth II gastroenterostomy and Braun anastomosis, the inflamed distal stomach along with a 5 cm segment distal to the Braun anastomosis was resected en bloc. A Roux-en-Y side-to-end gastroenterostomy and jejunojejunostomy were then performed. The hernia sac was excised, but fascial repair was deferred due to inflammation. The patient had an uneventful recovery and was discharged on postoperative day 5.

Discussion and Conclusion: Incisional hernia is a relatively common late complication following the Whipple procedure (2); however, gastroenterostomy dehiscence within an incarcerated hernia sac is exceedingly rare. This case demonstrates that gastrointestinal anastomoses may fail in the long term due to hernia incarceration. Similar cases are scarcely reported in the literature. In such scenarios, prompt surgical intervention can lead to favorable outcomes. Therefore, we suggest that patients with a history of the Whipple procedure should be closely monitored for abdominal wall hernias, and early surgical planning should be considered when complications arise.

Keywords: Pancreaticoduodenectomy, Incisional hernia, Gastroenterostomy

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Figure 1. Axial abdominal CT image showing an incarcerated incisional hernia (white arrow) with free air suggestive of gastrointestinal dehiscence.

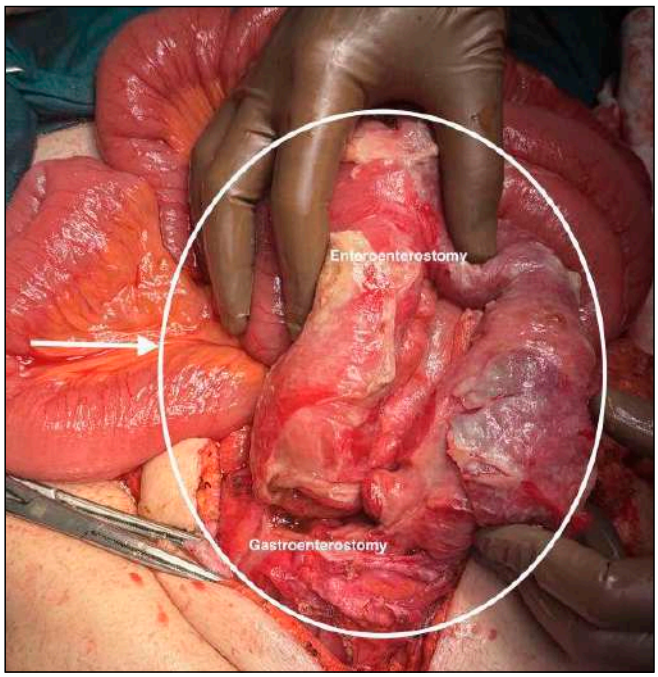


Figure 2. Intraoperative image demonstrating the dehisced gastroenterostomy and Braun anastomosis (white arrow) after reduction from the hernia sac.

Abdominal Trauma

OP-063

CLINICAL FOLLOW-UP CHALLENGE IN A TRAUMA PATIENT WITH IMPAIRED CONSCIOUSNESS: A CASE OF DELAYED ILEAL PERFORATION

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Background: Delayed small bowel perforation following blunt abdominal trauma is rare but potentially fatal, especially when clinical assessment is hindered by impaired consciousness.

Radiologically occult injuries may lead to diagnostic delays, significantly increasing morbidity and mortality. We present a case of delayed ileal perforation in a patient with multiple extremity and thoracic injuries following a motorcycle accident, emphasizing the critical importance of serial abdominal examinations and structured follow-up in trauma management.

Case Presentation: A 44-year-old male without prior comorbidities was admitted to our emergency department following a high-energy motorcycle accident. Initial assessment revealed multiple long bone fractures (bilateral patella, right femur, right radius, left tibia and fibula) and bilateral rib fractures, along with a Grade II splenic injury and intra-abdominal free fluid on abdominal CT. No radiologic signs of perforation were observed. The patient was admitted for non- operative management and monitored closely with daily abdominal examinations and lab assessments. On day 2, he required intubation due to respiratory distress and was transferred to the ICU. On day 21, progressive abdominal distension, signs of ileus, and rising inflammatory markers prompted a repeat contrast-enhanced CT, which revealed intraabdominal abscess and pelvic collections. Emergency laparotomy revealed a 180° antimesenteric perforation of the ileum 20 cm proximal to the ileocecal valve, with surrounding ischemic segments. A 20 cm ileal resection with end ileostomy was performed. The patient was transferred to orthopedics on postoperative day 9.

Discussion: Isolated ileal perforations post-blunt trauma are uncommon and often elude early diagnosis. As illustrated in our case, normal initial imaging does not exclude evolving hollow viscus injury (HVI). Literature highlights that mortality reaches up to 30% in delayed diagnoses and is markedly higher when diagnosis exceeds 24 hours post-injury. In our patient, impaired consciousness limited physical examination accuracy, delaying clinical recognition. Despite advanced imaging modalities, physical examination and clinical vigilance remain irreplaceable, especially in sedated or ventilated patients. Our findings align with recent reports emphasizing that trauma follow-up should be viewed as a dynamic process rather than a single snapshot.

Conclusion: This case underscores the life-saving role of serial abdominal examinations and structured clinical follow-up in trauma patients, particularly when cognitive impairment hampers bedside assessment. Even in the presence of low-grade solid organ injuries, continued surveillance is imperative. Adopting a dynamic and protocolized approach can reduce the risk of delayed intervention and significantly improve patient outcomes in similar settings.

Keywords: Blunt Abdominal Trauma; Ileal Perforation; Delayed Diagnosis; Serial Abdominal Examination;

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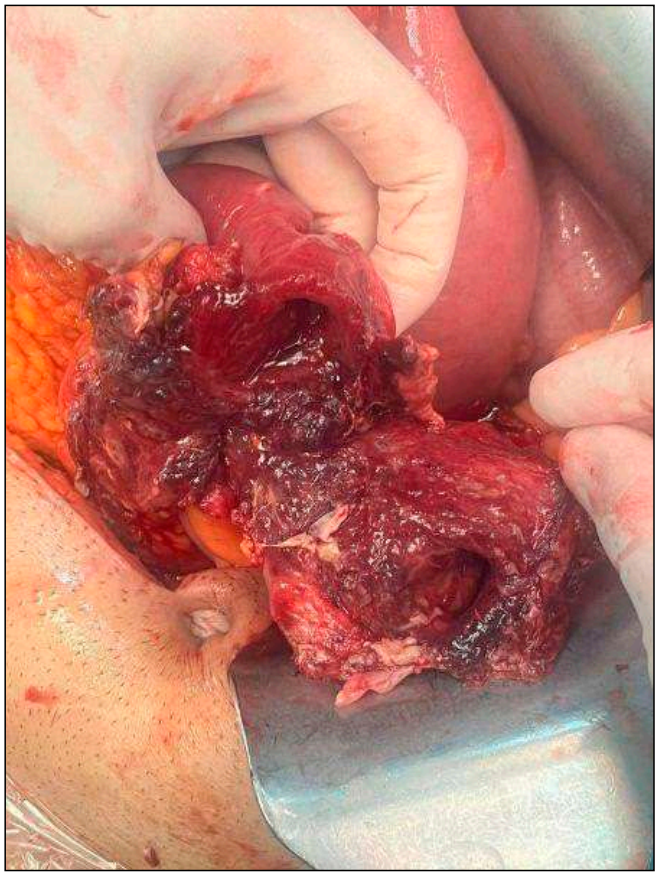


Figure 1. Perforated Ileum

Abdominal Trauma

OP-064

CONTRAST-ENHANCED TRACTOGRAPHY FOR PENETRATING ABDOMINAL TRAUMA: A HIGH-FIDELITY IMAGING STRATEGY TO ENHANCE SELECTIVE NON-OPERATIVE MANAGEMENT

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Ankara Etlik City Hospital

Background: Accurate and timely identification of intra-abdominal injuries in hemodynamically stable patients with penetrating trauma remains a critical challenge in emergency surgery. While physical examination and standard imaging guide clinical decisions, unnecessary laparotomies still cause significant morbidity, increase healthcare costs, and prolong recovery. This study evaluates the diagnostic performance of contrast-enhanced tractography—a minimally invasive technique using catheter-directed contrast instillation combined with CT imaging—to detect clinically significant intra-abdominal injuries and support selective non-operative management.

Methods: We retrospectively reviewed adult patients presenting with anterior abdominal or flank stab wounds at a tertiary trauma center between November 2023 and June 2025. Patients with bowel evisceration, thoracic or extremity trauma, or hemodynamic instability were excluded to ensure a stable cohort suitable for non-operative evaluation. Contrast-enhanced tractography was performed by inserting a urinary catheter into the wound tract, instilling diluted contrast, and acquiring CT images to detect peritoneal or retroperitoneal contrast extravasation. Diagnostic accuracy was compared against operative findings or clinical observation, with radiologic readings done independently by blinded reviewers.

Results: Among 129 patients with penetrating abdominal trauma, 108 stable patients underwent tractography. The median age was 33 years; males represented 89.9%. Positive tractography—contrast leakage into peritoneal/retroperitoneal spaces—occurred in 45 patients (41.7%). Of these, 26 required surgery (true positives), 17 had no significant pathology (false positives), and 2 were managed non-operatively without issues. Among 63 patients with negative tractography, 57 were observed successfully (true negatives), while 6 underwent delayed surgery due to clinical decline; 3 had injuries missed initially (false negatives), and 3 had no pathology (true negatives). Tractography showed sensitivity 89.7%, specificity 77.0%, positive predictive value 60.5%, and negative predictive value 95.0%. Overall accuracy was 80.6%, F1 score 72.2%. Positive and negative likelihood ratios were 3.90 and 0.13. Diagnostic odds ratio was 29.1, and ROC AUC was 0.89, indicating excellent diagnostic performance.

Conclusion: Contrast-enhanced tractography offers high sensitivity and negative predictive value, making it a reliable imaging tool to exclude significant intra-abdominal injury in penetrating trauma. Its incorporation into trauma protocols can guide safe selective non-operative management, minimizing unnecessary laparotomies and related morbidity. Moderate specificity calls for clinical correlation to avoid overtreatment. This study supports tractography as a valuable adjunct in trauma evaluation, advocating for wider adoption, with further prospective validation and technique standardization needed to optimize global application.

Keywords: Abdominal trauma, tractography, penetrating injury, diagnostic accuracy, emergency surgery, ROC curve, negative predictive value, trauma imaging

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M Ewedah, M Bassiony, M Asal, 226 CT Tractography as a Last Option for Penetrating Abdominal Wall Injurieswith Equivocal Contrast CT findings, BJS, Volume 111, Issue Supplement_6, July 2024, znae163.407, https://doi.org/10.1093/bjs/znae163.407

Plot the ROC curve showing sensitivity vs. 1-specificity. Mark the Area Under Curve (AUC) = 0.89 prominently. Show the optimal cutoff point if applicable.

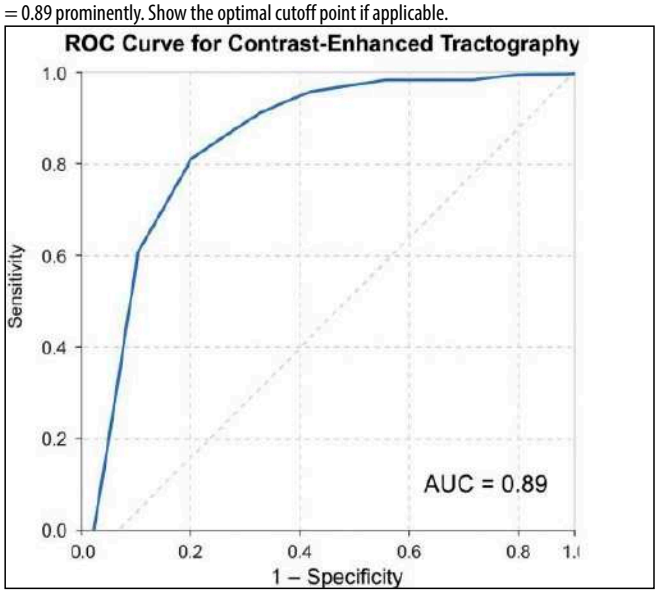


Table 1: Patient Demographics and Clinical Characteristics

Variable	Value
Total patients	129
Patients included in study	108
Median age (years)	33 (range: 18–65)
Male sex	97 (89.9%)
Female sex	11 (10.1%)
Mechanism: Stab wounds	100%
Excluded due to instability or evisceration	21 (16.3%)

Patient demographcis: Starting with 129 patients presenting with penetrating trauma. Exclude 21 due to instability/evisceration. 108 underwent tractography → split into positive (45) and negative (63). Show breakdown of true/false positives and negatives with numbers. Visual flow illustrating subsequent surgery or observation.

Table 2: Diagnostic Performance Metrics of Contrast-Enhanced Tractography

Metric	Value (%) / Ratio
Sensitivity	89.7
Specificity	77.0
Positive Predictive Value (PPV)	60.5
Negative Predictive Value (NPV)	95.0
Overall Accuracy	80.6
F1 Score	72.2
Positive Likelihood Ratio (LR+)	3.90
Negative Likelihood Ratio (LR–)	0.13
Diagnostic Odds Ratio (DOR)	29.1
Area Under ROC Curve (AUC)	0.89

Diagnostic performance of contrast-enhanced tractography. The method showed high sensitivity (89.7%) and NPV (95.0%), with an overall accuracy of 80.6% and AUC of 0.89. Specificity was 77.0%, PPV 60.5%, and F1 score 72.2%. Likelihood ratios (LR^+: 3.90, LR^-: 0.13) and DOR (29.1) indicate strong diagnostic utility.

Sepsis and Septic Shock

OP-065

DELAYED DIAGNOSIS OF SUBDURAL AMPYEMA IN A PEDIATRIC PATIENT FOLLOWING A MINOR HEAD TRAUMA: A CASE REPORT

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Istanbul University Faculty of Medicine

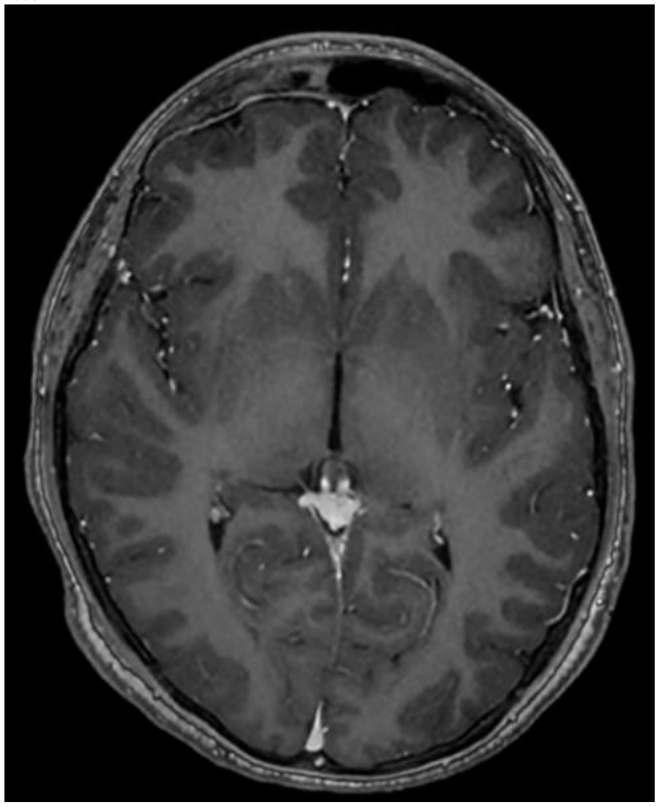
Introduction and Aims of the Study: Subdural empyema (SDE) in the pediatric population constitutes a neurosurgical emergency with potentially devastating outcomes. It generally develops as a complication of sinusitis or otitis media; however, it may arise following minor head trauma or in conjunction with undiagnosed pre-existing infections. Regardless of the underlying cause, timely diagnosis and prompt management are essential to prevent permanent neurological damage and death. In this report, we present an unusual case of delayed diagnosis of fronto-interhemispheric SDE, underlining the crucial role of repeated clinical evaluation, even when initial imagings demonstrate no additional pathologies.

Methods: A 15-year-old male with no prior medical history was initially evaluated at an external hospital following a minor head injury. Neurological examination and neuroradiological imagings were normal. The patient was discharged without further intervention. On the following day, he developed left-sided hemiparesis and re-admitted to the same hospital. He was re-evaluated based on previous imaging and discharged with symptomatic treatment. Later that day, upon admission to our center due to worsening symptoms, a contrast-enhanced MRI revealed a significant subdural empyema extending across the frontal and interhemispheric regions. Emergency craniotomy was undertaken without delay. Despite the initial surgical drainage, the empyema recurred, and two additional neurosurgical procedures were required, especially after the patient experienced status epilepticus. Although no skull base defect or cerebrospinal fluid leakage was found, imaging confirmed active paranasal sinusitis. The patient received prolonged intravenous antibiotic therapy in the intensive care unit. After weeks of antibiotic therapy, he made a full recovery and was discharged without residual neurological deficits.

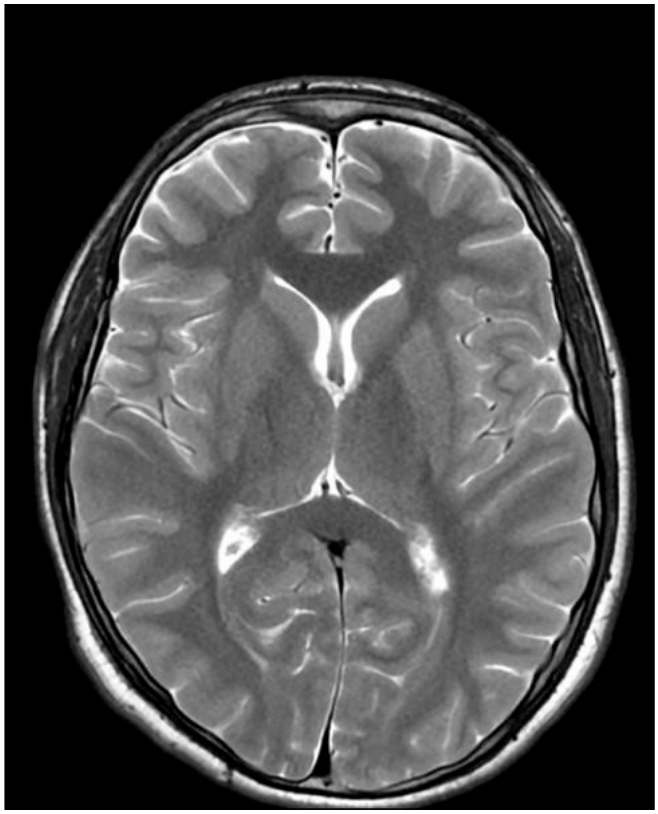
Conclusion: Intracranial infections such as subdural empyema can progress very rapidly and can be fatal in a short time, especially if not treated early. This case highlights a critical clinical point: in pediatric patients presenting with new or evolving neurological symptoms, prior normal imaging should never be considered definitive. Early diagnosis allows the empyema to be drained before it progresses; this prevents not only the mortality but also prevents the development of life-threatening complications such as status epilepticus and repeated surgeries due to empyema recurrence.

Keywords: Head trauma, Hemiparesis, Subdural ampyema

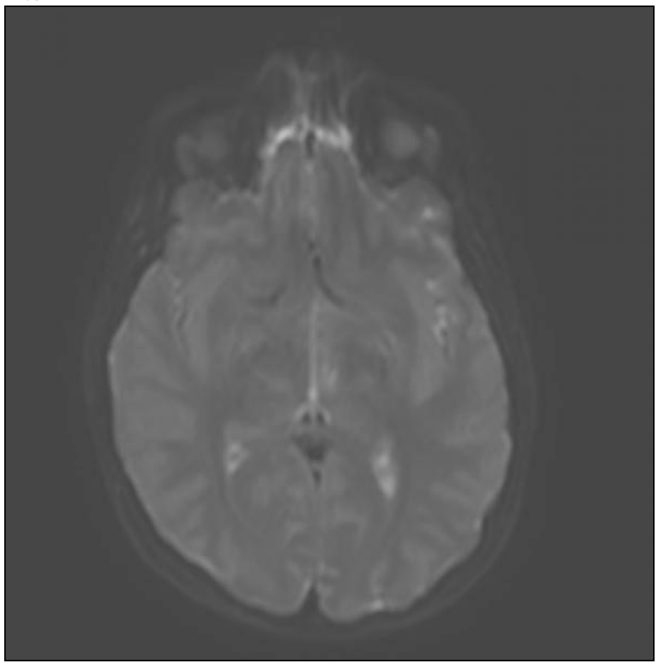
Last MRI 2



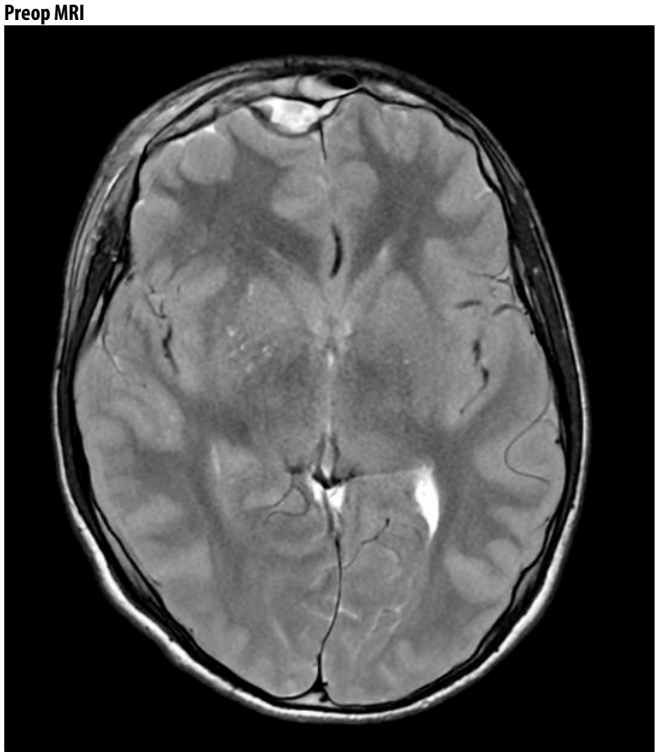
Last MRI T2



First MRI



Preop MRI



Acute Abdominal and Gastrointestinal Emergencies

OP-066

SIGMOID DIVERTICULAR STRICTURE TO LARGE BOWEL OBSTRUCTION WITH HEPATIC FLEXURE PERFORATION AND EXTENSIVE NECROTIZING FASCIITIS: A SURGICAL CASE STUDY

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Peterborough City Hospital

Background: While sigmoid diverticular disease is common, progression to stricture causing large bowel obstruction with upstream perforation and necrotizing fasciitis (NF) represents an extraordinary clinical scenario. We present a unique case where these complications occurred simultaneously with NF extending to the cervical region, an exceptionally rare and potentially fatal progression.

Case Presentation: A previously healthy 61-year-old male presented with three weeks of progressive right abdominal pain and weight loss, followed by acute abdominal distension. Physical examination revealed significant right lower quadrant tenderness without palpable masses. Diagnostic findings include elevated CRP (379 mg/L), CT imaging demonstrating Pneumo peritoneumwith retroperitoneal extension, 73mm sigmoid stricture with transition point and Extensive surgical emphysema tracking to the neck

Intervention: Patient underwent emergency laparotomy findings were Hepatic flexure perforation with fecal peritonitis, Extensivenecrotic tissue in right paracolic gutter and grossly dilated proximal colon. Total colectomy with end ileostomy andRadical debridement of necrotic tissues was done. Negative pressure wound therapy was applied. Postoperative course required two additional laparotomies for ongoing debridement. Despite the extensive infection, the patient achieved full recovery after prolonged ICU care.

Discussion: This case demonstrates three remarkable features, Upstream perforation distant from the obstructive stricture. Uncommon retroperitoneal NF progression and Survival despite cervical extension - a typically fatal complication. The successful outcome highlights the importance of Early CT diagnosis of atypical gas patterns, Aggressive, staged surgical management and Multidisciplinary critical care support

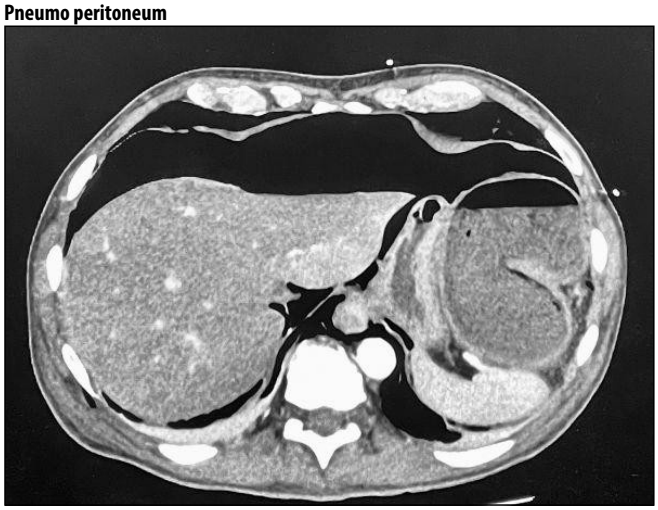
Conclusion: This extraordinary case underscores that sigmoid diverticular strictures can initiate catastrophic multi-compartment infections. Cervical subcutaneous emphysema in bowel obstruction should prompt immediate investigation for NF. Survival requires rapid diagnosis, radical surgical intervention, and meticulous postoperative care.

Keywords: Diverticular stricture, Necrotizing fasciitis, Retroperitoneal infection, Bowel perforation, Surgical emphysema

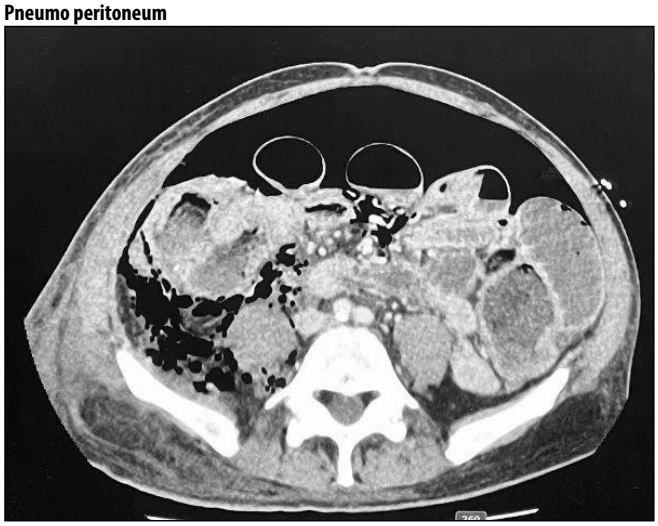
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Pneumo peritoneum

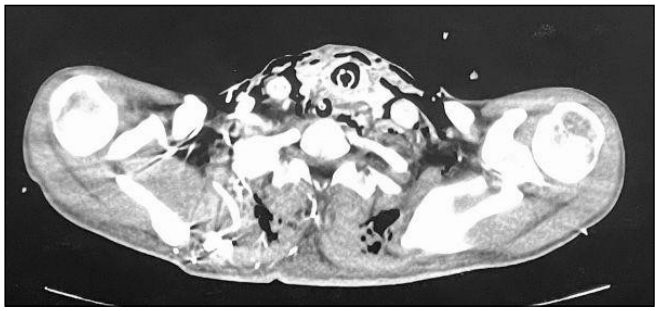


Pneumo peritoneum



Sigmoid stricture





Acute Abdominal and Gastrointestinal Emergencies

OP-068

6-YEAR RESULTS OF OPEN SURGERY, LAPAROSCOPIC ADHESIOLYSIS, AND NON-OPERATIVE MANAGEMENT IN 366 PATIENTS WITH ADHESIVE SMALL BOWEL OBSTRUCTION

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Background: Patients who have undergone adhesive small bowel obstruction (ASBO) may require repeated hospitalizations and surgeries due to recurrent obstruction. Open surgery (OS), laparoscopic surgery (LS), and non-operative management (NOM) are used for ABO treatment.

Objective: To study mortality, recurrence rates, and the need for surgical treatment of ASBO during 6 years following LS, OS, and NOM.

Materials and Methods: This retrospective study included 366 patients with ASBO who were hospitalized in 7 hospitals in Moscow from January 1, 2017, to December 31, 2019 (primary hospitalization). Using the EMIAS program (Russian Federation), surgical and non-operative treatment outcomes were tracked. NOM was successful during primary hospitalization in 228 patients (68%). Surgery was performed in 138 patients (32%): OS in 87 (63%) patients, LS in 51 (37%) patients.

Results: Over the 6-year period, overall mortality was 27.8%, repeat hospitalization rate was 20.6%, and repeat surgery rate was 4.9%. Six-year overall survival (OS) in the NOM, LS, and OS groups was 77.6% (95% CI 71.9-83.8), 72.1% (95% CI 58.1-89.4), and 58.6% (95% CI 48.3- 71.0), respectively. Mortality was significantly higher after OS than after NOM - the hazard ratio (HR) comparing OS with NOM was 2.27 (95% CI 1.32-3.88; $p<0.001$), with differences established during primary hospitalization and the first year thereafter. Mortality between the other groups did not differ significantly. Calculation of restricted mean survival time (RMST) over 6 years from the beginning of primary hospitalization showed that NOM compared to OS preserves 12.7 months of life (95% CI: 4.2-21.2; $p<0.001$), while LS preserves 13.8 months (95% CI: 3.7-23.8; $p=0.003$). The difference in RMST between LS and NOM was 1.0 month (95% CI: -6.1-8.2; $p>0.999$). Compared to LS, the risk of repeat hospitalization in the NOM group was 5.26 times higher (95% CI: 1.54-16.7; $p = 0.004$), and in the OS group was 3.76 times higher (95% CI: 1.01-13.97; $p = 0.046$). By 6 years from the date of primary discharge, cumulative probability of surgery for ABO recurrence did not differ statistically significantly between groups ($p=0.229$).

Conclusion: Compared to OS, significantly lower overall mortality was observed after NOM. Mean expected survival time of patients after LS and NOM was comparable and significantly greater than after OS. LS was associated with lower risk of repeat hospitalizations compared to OS and NOM. The rate of repeat surgeries for recurrence did not differ significantly between all groups.

Keywords: Adhesive small bowel obstruction, laparoscopic adhesiolysis

Acute Abdominal and Gastrointestinal Emergencies

OP-069

NONOPERATIVE MANAGEMENT OF PERFORATED DIVERTICULITIS WITH EXTRALUMINAL AIR

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Background: Colonic diverticulosis is a common condition, with diverticula present in approximately one- third of individuals aged 45, and its prevalence increasing with age. Acute diverticulitis occurs in about 5% of these patients, and up to 15% develop free intraperitoneal air visible on CT. Current clinical guidelines lack an evidence-based algorithm for the emergency

management of diverticulitis complicated by extraluminal gas, resulting in a substantial number of

Hartmann's procedures that may be avoidable. Previous studies have reported success rates of conservative treatment for perforated diverticulitis with extraluminal gas ranging from 43% to 99%. Identifying predictors of conservative treatment failure is crucial for improving patient selection and outcomes.

Methods: A retrospective cohort observational study was conducted at Pirogov City Clinical Hospital, Moscow, including patients hospitalized between January 1, 2018, and June 1, 2025, with CT- confirmed diverticulitis classified as WSES Grade 1A or higher. Initial non-operative management (NOM) was initiated in all patients without clinical signs of peritonitis. Minimally invasive procedures, such as ultrasound-guided drainage, were not considered treatment failures. Clinical, laboratory, and imaging data were collected and analyzed. Univariate logistic regression was performed to identify predictors of NOM failure.

Results: Out of 497 hospitalized patients, 96 (19.3%) were diagnosed with perforated diverticulitis— 86 with extraluminal gas (WSES Grades 1A–4) and 10 with abscesses (WSES Grades 1B, 2A). Forty-one patients were male, and the median age was 63 years (IQR: 54–69). Twenty-seven patients (28.1%) with signs of peritonitis underwent urgent surgery within 24 hours and were excluded from NOM analysis. Among them, 15 (55.6%) underwent Hartmann's procedure and 11 (40.7%) laparoscopy with drainage. Ten patients with abscesses and 59 with extraluminal gas were managed conservatively. NOM was successful in all 10 patients with abscesses (100%) and in 52 of 59 patients (88.1%) with extraluminal gas. Specifically, success rates were 90.6% (48/53) for patients with pericolic air (WSES Grades 1A, 1B, 2A) and 66.7% (4/6) for those with distant air (WSES Grades 2B, 4). Mortality rate was 5,8%. Univariate regression identified diabetes mellitus as a significant predictor of NOM failure (OR 0.09; 95% CI: 0.015–0.56; p = 0.01). Other variables, including age, sex, BMI, other comorbidities, laboratory markers (leukocyte count, CRP, total protein, albumin), and CT findings (extraluminal air, free fluid), were not significantly associated with treatment failure.

Conclusion: Non-operative management of perforated diverticulitis is effective in the majority (88.1%) of patients with extraluminal gas. Diabetes mellitus is a significant risk factor for treatment failure. The absence of standardized selection criteria underscores the need for predictive model development and further prospective studies to optimize management strategies.

Keywords: Diverticulitis, pneumoperitoneum, conservative treatment

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Acute Abdominal and Gastrointestinal Emergencies

OP-070

MULTIDISCIPLINARY MANAGEMENT OF A COMPLICATED BOERHAAVE SYNDROME: CASE REPORT AND SYSTEMATIC REVIEW OF THE LITERATURE.

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Introduction: Boerhaave syndrome (BS) is a spontaneous, full-thickness esophageal rupture caused by a sudden rise in intraesophageal pressure, often from forceful vomiting. It is a rare but life- threatening condition with high morbidity and mortality. Clinical signs are often nonspecific, leading to diagnostic delays. Management remains debated and may involve surgery, endoscopy, interventional radiology or conservative care.

Case Presentation: A 59-year-old man presented with acute chest pain after forceful vomiting. CT revealed pneumomediastinum, bilateral effusions, and contrast leakage, suggesting spontaneous esophageal perforation (Fig.1). Endoscopy confirmed a posterior transmural tear. The patient was treated with emergency stenting, laparoscopic esophageal repair, mediastinal debridement, gastrostomy, and jejunostomy. Postoperatively, the patient developed bilateral pneumonia, septic shock, mediastinitis, a pleural empyema (Fig.2), a peri-esophageal abscess and a left esophago-pleural fistula requiring VATS, percutaneous drainage and embolization. Cultures isolated S. cerevisiae, prompting antifungal therapy. The patient recovered fully and was discharged in stable condition.

Methods: A comprehensive literature search was conducted using the Scopus, PubMed, and Web of Science databases up to May 1st, 2025, without time restrictions. Two reviewers (GD, RF) independently conducted the search and screening process. A total of 305 articles were identified. After duplicate removal, 300 records were screened. Disagreements were resolved by senior reviewers (LA, SF). Fifty-four articles underwent full-text assessment, and 12 met the inclusion criteria for meta-analysis (PRISMA flowchart, Fig. 3).

Risk of bias for individual studies was assessed using the ROBINS-I tool. Data extraction followed Higgins' methodology. Results of the risk of bias analysis were presented through bar and traffic light plots.

Primary endpoint was mortality. Secondary endpoints included morbidity, reoperation rate, treatment conversion, infection rate, need for antimicrobial therapy, length of hospital stay, and readmission.

Results: Early diagnosis (<24h) was associated with lower mortality (10–25%), while delayed diagnosis (>48h) correlated with rates up to 60%. Surgical management remained the mainstay of treatment, particularly when performed early. Minimally invasive techniques (laparoscopy, VATS) showed high technical success (91%) and low mortality (8.3%) in selected cases.

Endoscopic SEMS achieved leak closure in up to 80% but was less effective in delayed or septic presentations. Conservative treatment was limited to stable patients. Several studies highlighted the importance of coordinated interdisciplinary care. Fungal superinfections (e.g., Candida, Saccharomyces) were document-

ed, supporting early empirical antifungal therapy in critically ill patients.

Discussion: This case illustrates the complexity of BS with severe complications. Recovery was achieved through integrated care involving surgery, endoscopy, interventional radiology and infectious disease management. Early, multidisciplinary and minimally invasive approaches improve outcomes, especially in complex scenarios.

Conclusion: BS requires prompt diagnosis and individualized, multidisciplinary management. Minimally invasive strategies like laparoscopy, VATS, and SEMS are effective when integrated into team- based care. An interdisciplinary approach ensures optimal outcomes in complex esophageal perforations.

Keywords: "Boerhaave Syndrome", "spontaneous esophageal rupture", "esophageal perforation", "multidisciplinary treatment", "team-based care", "combined modality therapy", "integrated care", "treatment outcome", "length of stay", and "survival rate"

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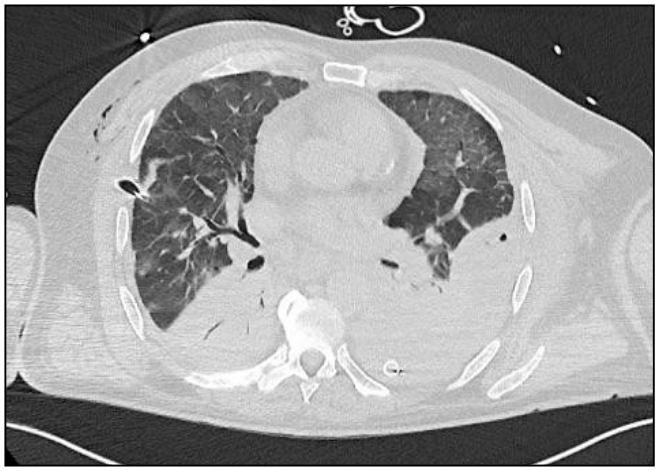


Figure 1

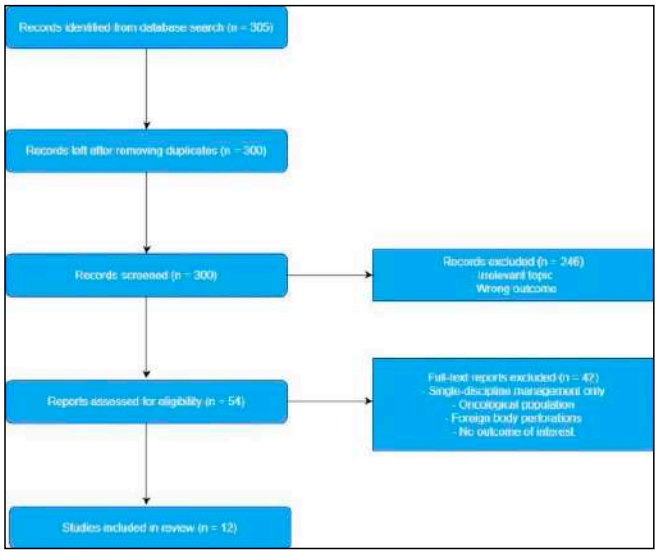


Figure 3



Figure 2

Acute Abdominal and Gastrointestinal Emergencies

OP-071

ONGOING SPONTANEOUS SOFT TISSUE BLEEDING IN PATIENTS WITH COVID-19. THE ADVANTAGE OF ENDOVASCULAR TREATMENT HAS NOT BEEN PROVEN.

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Introduction: Spontaneous bleeding (hematomas) in the anterior abdominal wall, retroperitoneal space and other soft tissues, as a complication of anticoagulant therapy, occur in 3% of patients and are accompanied by mortality reaching 27-50%. During the COVID-19 pandemic, the administration of therapeutic doses of anticoagulants to patients led to an increase in spontaneous soft tissue bleeding. Surgical treatment (OL), non-operative treatment (NOL) and angiography (AG), including transcatheter arterial embolization (TAE), are used as a method of treating hematomas.

Objective: to study the outcomes of spontaneous soft tissue bleeding in patients with COVID-19, depending on the treatment method.

Materials and methods: in the period from 03.2020 to 02.2022, 256 patients with COVID-19 complicated by clinically significant spontaneous soft tissue bleeding (hematomas) were treated at the MMCC Kommunarka DZM. According to computed tomography (CT) data, 129 (56.8%) patients had extravasation of the contrast agent into the hematoma, which was considered as a sign of ongoing bleeding.

What was investigated. A comparison of clinical groups (NOM, AG/AG+TAE, open surgery) was carried out in terms of the volume and localization of hematomas, the timing and severity of COVID-19. A 30-day cumulative mortality rate was assessed depending on the type of treatment.

Results: The majority of patients were women n=113 (88%), the average age of patients was 72.9±11.3 years. 56 (44%) patients were in the ICU and required vasopressor support. NOL was used in 51 (39.5%) patients, OL with direct access to the bleeding area (hematoma) – in 18 (14%), angiography (AG) – in 60 (46.5%) patients. According to the results of AG, 46 (35.6%) patients underwent TAE. Within 30 days, death occurred in 66 (51%) patients. Of these, 27 (53%) patients died after NOL, 13 (72%) patients died after OL, and 26 (43%) patients died after AG/AG+TAE. The 30-day mortality of OL, AG/AG+TAE and NOL did not differ (p=0.094). An increase in the probability of 30-day mortality was associated with the patient's age — OR 1.1 (95% CI: 1.05-1.15) times (p <0.001), CT 4 viral pneumonia or ARDS — OR 15.34 (95% CI: 3.89-75.75) (p <0.001), the need for vasopressor support at the time of detection hematomas were 6.87 (95% CI: 2.37-22.25) (p <0.001).

Conclusion: Although AG/AG+TAE is considered a life-saving procedure, but the current study has not revealed a clear benefit in patients with ongoing spontaneous soft tissue bleeding. Open surgery for spontaneous bleeding in patients with COVID-19 was accompanied by the highest mortality rate. The age of the patient, the volume of lung damage, and the need for vasopressor support at the time of hematoma detection were identified as factors of death.

Keywords: Spontaneous bleeding, hematomas, COVID-19 , angiography, transcatheter arterial embolization

Abdominal Trauma

OP-072

A RETROSPECTIVE ANALYSIS OF CLINICAL, LABORATORY AND RADIOLOGICAL FEATURES OF PATIENTS MONITORED IN THE GENERAL SURGERY SERVICE DUE TO STAB INJURIES

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Introduction: Stab injuries are among the most common types of penetrating abdominal trauma. Several variables such as the anatomical location of the injury, vital signs, and radiological findings directly influence treatment strategies. Computed tomography (CT) plays an increasingly central role in evaluating intra-abdominal organ damage. As highlighted in the literature, although CT findings are crucial in guiding surgical decision-making, they are not always definitive. This study aimed to analyze the clinical, laboratory, and radiological characteristics of patients admitted to the general surgery service due to stab injuries and to identify factors associated with surgical decision-making and prognosis.

Methods: A retrospective analysis was conducted on 52 patients admitted to the general surgery service with stab injuries between 2023 and 2025. Data collected included age, sex, time to hospital admission, referral status, vital signs (blood pressure, pulse), laboratory values (hemogram, CRP), and CT findings. CT reports were categorized as "positive" if hematoma, free fluid, or organ injury was documented, and "negative" otherwise. Statistical analyses included Student's t-test and Pearson correlation.

Results: Of the patients, 86.5% were male. The mean age was 34.2 years, mean time to hospital admission was 3.7 hours, and mean hospital stay was 4.2 days. A total of 30 patients underwent surgery, and 22 were managed conservatively. Patients who underwent surgery had significantly longer hospital stays.

Patients with abdominal injuries had lower systolic blood pressure and higher pulse rates, reflecting early signs of hypovolemic shock. This finding supports the emphasis in the literature on early identification of hemodynamic instability and the role of "damage control surgery."

There was a negative correlation between time to admission and lymphocyte count, suggesting that delayed presentations may be associated with immunosuppression. Referred patients had significantly longer admission delays and showed higher neutrophil counts and lower lymphocyte counts, aligning with findings in the literature that delayed presentation can worsen clinical outcomes.

While 73.3% of patients with positive CT findings underwent surgery, some patients were managed non-operatively despite positive findings. This underlines that CT imaging alone may not always be decisive in determining the need for surgery.

Conclusion: In managing stab wound cases, vital signs, laboratory markers, and CT findings should be considered collectively. Delayed admissions may negatively impact immune response.

Although CT is valuable in assessing internal injuries, it should not be the sole criterion for surgical decision-making. Signs of hypovolemic shock, especially in abdominal trauma, must be promptly recognized to improve patient outcomes.

Keywords: Stab İnjury, Penetrating Abdominal Trauma, Emergency Surgery, Vital Signs

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Stab and incised wounds



Stab and incised wounds



Stab and incised wounds



Disaster and Mass Casualty

OP-073

DEPLOYMENT SURGICAL TRAINING IN THE CONTEXT OF EMT 2030: PRELIMINARY FINDINGS FROM A SCOPING REVIEW

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Introduction: The WHO Emergency Medical Teams (EMT) Initiative necessitates that EMT members receive suitable training to prepare for deployment. The WHO EMT 2030 document aims to establish training curricula to build capacity. This study aims to investigate disaster deployment surgical training to date and map training courses available. Methods: The PCC framework was used, and the eligibility criteria were set. The Royal College of Surgeons of Edinburgh Library Service was used to conduct

searches of: Allied and Complementary Medicine; Cochrane; EMBASE; Health Management Information Consortium; Medline; no date or language limits were applied. Search results were imported to Rayyan and then underwent screening by two independent reviewers. Data were then extracted.

Results: A total of 915 references were returned, 74 papers were included, and 48 directly discussed disaster surgery training courses. Overall, 65 courses were mentioned, the most frequently: Advanced Trauma Life Support: 14%, Terror and Disaster Surgical Care: 14%, Definitive

Surgical Trauma Care: 12%, Disaster Response Course: 8%, Advanced Surgical Skills Exposure in Trauma: 8%, Major Incident Medical Management and Support: 6%, Surgical Training for Austere Environments: 6%, Advanced Course for Deployment Surgery (Cours Avancé de CHIRurgie en Mission EXtérieure): 5%, the remaining 27% accounted for other courses. These publications originated from only 19 countries; authors had affiliations with the USA in 17 cases, Germany in 11, France in 4, Australia in 3, South Africa in 3, Sweden in 3, Canada in 2, the Netherlands in 2, Switzerland in 2, the UK in 2 cases.

Conclusion: This scoping review highlights a growing but still fragmented landscape of disaster deployment surgical training, with a number of frequently cited courses and a concentration of publications from high-income countries. Despite the WHO EMT 2030 emphasis on standardized, assessable, and globally accessible training frameworks, the current literature reveals variability in course offerings and geographic representation.

Keywords: Disaster Surgical Training, Deployment Surgical Training, WHO EMT, Disaster Medicine, Disaster Surgery, Emergency Medical Teams,

Sepsis and Septic Shock

OP-074

THE ROLE OF PLASMA IN THE MANAGEMENT OF SEPTIC SHOCK OF ABDOMINAL ORIGIN. COMPARATIVE ANALYSIS WITH CONVENTIONAL FLUID THERAPY.

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Sepsis is a serious public health threat with high mortality, and intra-abdominal infections represent the second most common cause. The abnormal inflammatory response, which defines sepsis, is known to cause vasodilation, and increased vascular permeability through endothelial damage. Indeed, endothelial glycocalyx shedding plays a key role in the pathophysiology of septic shock. Fluid resuscitation is a mainstay of management, but often insufficient due to the before mentioned increased permeability. Evidence from trauma patients states the potential of plasma to restore endothelial integrity and the glycocalyx layer, leading the way for its application in septic patients. This retrospective study assessed the 72-hour clinical course of 71 adult patients with abdominal-origin sepsis, managed with plasma (n=26) or with crystalloids only (n=45). Patients either needed surgical source control or developed shock postoperatively. Although baseline differences (lactates, ASA score, INR, aPTT) favoured the control group, no significant differences were found in most clinical outcomes. Mortality and SOFA score progression were initially significantly higher in the plasma group but lost significance after adjusting for confounders. Plasma-based fluid resuscitation in septic shock seems feasible, showing similar outcomes to standard therapy. While no superiority was evident, potential benefits based on comparable results in varying disease severity warrant further investigation to define its optimal role in septic patients.

Keywords: SOFA score_sepsis_shock_mortality_intra- abdominal_ infections_inflammatory_response_vasodilation_endothelial damage_ glycocalyx_fluid_resuscitation_management_trauma_plasma_ crystalloids

Abdominal Trauma

OP-076

OUR CLINICAL SURGICAL EXPERIENCES IN LIVER TRAUMAS

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Purpose: Liver injuries cause 4.8 million deaths per year. The dilemma between operation and follow-up continues. Since hepatorrhaphy was described in 1897, approaches to liver trauma have changed until today. 80% of liver traumas have treatment protocols ranging from non-operative treatment, angiography, laparoscopy, primary repair, parenchymal repair, vascular repair, veno venous By Pass, Atrio Caval Shunt, liver transplantation. While follow-up is performed in grade I, II, III cases, surgery is recommended in grade IV-V cases. In cases where surgery is performed, mortality is high due to high blood supply to the liver, lack of hepatobiliary surgery experience, and proximity to the inferior vena cava. In this presentation, we wanted to share the grade 3-5 liver lacerations that we operated on in our center.

Methods and Materials: Diagnostic lacerations operated in our center were included in the study. Age, gender, etiology, whether the surgery was performed in an external center without trauma, time until surgery in our center, lubrication of the disease, postoperative changes, biliary fistula, length of stay in intensive care and ward, operating room, additional organ injury, blood transfusion during surgery and death were examined.

Results: 9 patients were included in the study (6 M-3 F). Injury to the inferior vena cava was detected in two patients, and to the portal vein and right and left middle hepatic vein in three patients. Mortality was detected in only 1 case in this series. (There was 60% fatty liver, he died from pneumonia on the 3rd postoperative day)

Conclusion: It is difficult to reach the subhepatic vena cava and hepatic veins, the portal vein is deeper than the hepatic artery, and liver lacerations make the intervention difficult. Mortality decreases in grade 4-5 injuries in cases of liver laceration in experienced hepatobiliary or liver transplant centers.

Discussion: If the Hb value drops more than 2mg/dl within 6 hours despite hemoglobin (Hb) support, if more than 5 units of blood are transfused within two hours, and if hemodynamics deteriorate, surgery should be planned. Mortality in Grade 4-5 KC lacerations is between 40-80%.

The operation should be terminated before the patient develops acidosis, hypothermia and coagulopathy (death triad). Liver cells with normal blood flow and no active bleeding should not be removed, even if there is tissue loss, and major hepatectomies should be avoided.

Mortality increases by 50% in unnecessary hepatectomies. Compartment syndrome should be taken into consideration during packaging.

Keywords: Grade 4-5 Liver trauma, death triad, packing,

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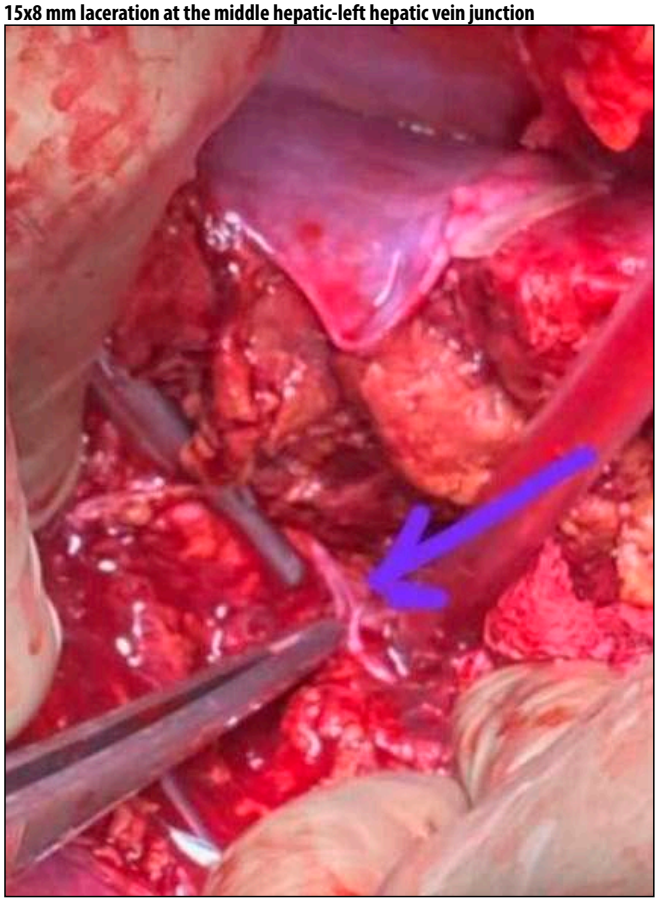
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Segment 5-6, 60x50x70 mm parenchymal loss



15x8 mm laceration at the middle hepatic-left hepatic vein junction



Abdominal Trauma

OP-077

DIAPHRAGMATIC RUPTURES FOLLOWING BLUNT TRAUMA: A SINGLE CENTER EXPERIENCE

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Background: Traumatic diaphragmatic rupture is a rare but serious consequence of blunt thoracoabdominal trauma, often accompanied by other major injuries. Left-sided ruptures are more common due to the protective role of the liver on the right. Diagnosis is frequently delayed, increasing the risk of complications. Computed tomography (CT) plays a key role in early detection.

Methods: We retrospectively analyzed 11 patients surgically treated for blunt trauma–related diaphragmatic rupture between January 2015 and June 2025. Patients were classified according to timing of surgery: early (<24 h), early-intermediate (24 h–2 weeks), and late (6– 12 months). Demographic features, trauma mechanism, rupture characteristics, surgical approach, and postoperative outcomes were recorded.

Results: Eight patients were male and three were female. Ten had left-sided and one had right-sided ruptures.

- Early group (n=4): Mean defect size 7.5 cm; associated injuries included splenic and gastric lacerations; all underwent urgent repair.

- Early-intermediate group (n=3): Mean defect size 5.5 cm; organ herniation in all; two laparoscopic and one thoracoscopic repair performed.
- Late group (n=4): Mean defect size 5 cm; three left-sided and one right-sided rupture; three cases with organ herniation; two mesh repairs.

Laparoscopy was performed in six patients, laparotomy in four, and VATS in one.

Postoperative complications occurred in three patients, mainly in late cases, which also had longer hospital stays.

Conclusion: Blunt trauma–related diaphragmatic rupture should be suspected in high-energy injuries. CT facilitates early diagnosis. Minimally invasive approaches are safe and effective, while delayed cases require individualized surgical planning to manage adhesions and reduce complication risks.

Keywords: blunt trauma, Diaphragmatic Rupture

Abdominal Trauma

OP-081

BLUNT TRAUMATIC HOLLOW VISCUS AND MESENTERIC INJURIES: A COMPARISON OF THE CURRENTLY AVAILABLE SCORING SYSTEMS

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Background: Several CT-based scoring systems (Faget, BIPS, BBMI, RAPTOR, Bonomi) have been proposed to predict clinically relevant outcomes in abdominal trauma. We investigated whether the Niguarda Scoring Model, based on six routinely reported CT findings, could offer discrimination and calibration comparable to or better than established scores.

Methods: We retrospectively analyzed the data of all blunt trauma patients undergoing torso CT scan who were consecutively admitted to our Trauma Center from 2010 to 2018. Six radiological findings (free fluid without solid organ injury, free intraperitoneal air, gastrointestinal wall alteration, mesenteric alteration, intramesenteric fluid, and mesenteric blushing) were each coded as present or absent and summed to obtain the score (0–6). After building a logistic regression model with the total number of positive CT findings (Niguarda Score) as predictor, we assessed discrimination (Area Under the Curve - AUC) and apparent calibration. We compared the Niguarda Scoring model against Faget, BIPS, BBMI, and RAPTOR, using Receiver Operating Characteristic (ROC) analysis. The Z-score was not included due to the unavailability of a large number of clinical variables. The DeLong test was used to compare the AUC of two correlated ROC curves.

Results: Among 268 patients (13 surgically relevant THVMIs; 4.9 %), each additional point in the Niguarda Score was associated with a higher risk (OR 4.66 per point; 95 % CI 2.66–8.18). The Niguarda Score logistic model yielded excellent discrimination (AUC 0.930; 95 % CI 0.820– 0.995) and near-perfect apparent calibration (slope ≈ 1.00; intercept ≈ 0). AUCs of published scores were: Faget 0.730 (0.603–0.867), BIPS 0.681 (0.513–0.829), BBMI 0.771 (0.666–0.865), RAPTOR 0.704 (0.552–0.855). The Niguarda Scoring Model significantly outperformed all other HVMI scores (all $p < 0.05$, DeLong test). The largest performance gap was observed versus BIPS (ΔAUC = 0.249), while even the best-performing comparator, BBMI, remained significantly inferior (ΔAUC = 0.159).

Conclusion: In this single-center cohort, the Niguarda Scoring Model demonstrated excellent discrimination and calibration, outperforming four established HVMI/abdominal injury scores. Its simplicity and performance make it a promising tool for rapid CT-based risk stratification in abdominal trauma. Its simplicity and robust performance support its potential use for rapid CT-based risk stratification in abdominal trauma, and further prospective, multicentre evaluations are warranted to confirm its clinical utility.

Keywords: Trauma; hollow viscus injuries; mesenteric injuries: scoring systems

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THVMI scoring systems ROC comparison

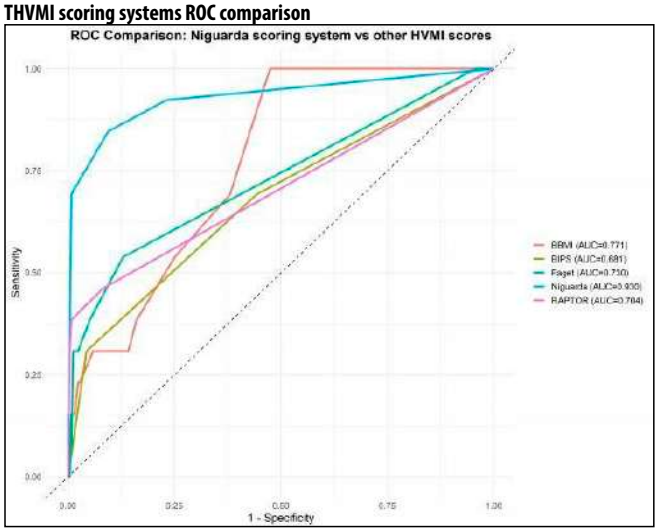


Table 1. AUCs with 95% CIs and p-values vs Niguarda Scoring Model

Model	*AUC*	*CI - lower bound*	*CI upper bound*	*p*
Niguarda	0.93	0.837	1	NA
Faget	0.73	0.585	0.875	0.008
BIPS	0.681	0.518	0.844	0.02
BBMI	0.771	0.671	0.872	0.013
RAPTOR	0.704	0.554	0.855	0.005

Abdominal Trauma

OP-082

DUODENAL INJURIES REMAIN MORBID: A CRITICAL REVIEW OF 114 PATIENTS AT A SOUTH AFRICAN TRAUMA CENTRE

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Background: Duodenal trauma is rare but presents significant diagnostic and therapeutic challenges due to the organ's retroperitoneal location and proximity to critical structures. This study aimed to review the clinical characteristics, management strategies, and outcomes of duodenal injuries over an 11-year period at a high-volume South African trauma center.

Methods: A retrospective review was conducted using a prospectively maintained trauma registry at the Pietermaritzburg Metropolitan Trauma Service. All patients with duodenal injuries between January 2012 and December 2022 were included. Demographics, injury severity, mechanism, management strategy, and outcomes were analyzed.

Results: A total of 114 patients were included in the study (83% male; mean age, 30.7 years). The median Injury Severity Score was 16. Grade I, II, III, and IV injuries were sustained by 31 (27.2%), 38 (33.3%), 44 (38.6%), and 1 (0.9%) patient, respectively. Most injuries were penetrating (66%), predominantly from gunshot wounds. Non-operative management (NOM) was successful in 12 patients with Grade I injuries identified on CT scan. One patient diagnosed with a Grade II injury was transferred to another center for surgical management. Of the 101 operative cases, 85 patients underwent primary repair, one patient underwent gastrojejunostomy during the initial surgery, and 15 patients received conservative management for Grade I injuries identified intraoperatively. The overall morbidity rate and mortality were 44.9% (50/114) and 21.9% (25/114), respectively. Postoperative duodenal leak occurring in 13.9% (14/101). Those who had leak had higher grade of injury and significantly higher morbidity and mortality. The odds of mortality in those developed duodenal leak was 7.63 (1.66 to 45.37, p=0.014).

Conclusion: Duodenal injuries, while rare, are predominantly the result of penetrating trauma and can often be managed with primary repair or non-operative strategies in select cases. However, postoperative duodenal leak remains a serious complication, significantly increasing the risk of mortality. Early recognition and appropriate management are essential to improving outcomes in this high-risk patient population.

Keywords: Duodenum/injuries, Abdominal Injuries/surgery, Treatment Outcome, Postoperative Complications, Anastomotic Leak, Mortality, Retrospective Studies, South Africa

Abdominal Wall Emergencies

OP-083

EVALUATION OF FOURNIER GANGRENE CASES TREATED IN GENERAL SURGERY AND UROLOGY CLINICS IN TERMS OF TREATMENT AND PROGNOSIS

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Objectives: Fournier gangrene (FG) is a disease that has been known for approximately 1,000 years. In this study, we aimed to compare Fournier gangrene patients admitted to the urology clinic due to genital organ involvement and to the general surgery clinic due to perianal region involvement in terms of hospitalization duration, interventions, morbidity, and mortality.

Study Design: Retrospective comparative study

Study Location and Period: The medical records of 242 patients diagnosed with Fournier gangrene between January 2015 and December 2025 in the General Surgery and Urology clinics were retrospectively reviewed.

Methodology: Patients' laboratory values and clinical findings were evaluated according to the Fournier Gangrene Severity Index (FGSI). Debridement and other surgical procedures such as colostomy and cystostomy performed on patients were evaluated. Additionally, wound healing support systems such as reconstruction, vacuum-assisted closure (VAC), hyperbaric oxygen, and honey, as well as hospital admission and mortality rates were examined.

Results: During this period, 57 patients were treated for Fournier gangrene in the urology clinic and 185 patients in the general surgery clinic. Colostomy was performed in 4 (7%) patients in the urology clinic, and mortality was observed in 4 (7%) patients. The average length of stay was 18.43 ± 20.26 (2–36) days. In the surgical clinic, 65 patients (35.7%) had diabetes, 39 patients (21%) underwent colostomy, and 53 patients (21.9%) had mortality. The average length of stay was 20.52 ± 22.58 (1-125) days.

Results: The length of hospital stay, mortality, and colostomy rates were significantly higher in the surgical clinic than in the urology clinic.

Keywords: Fournier gangrene, Colostomy, Necrotizing fasciitis

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Abdominal Trauma

OP-088

EMERGENCY LAPAROTOMY SURVIVAL: MECHANISM OF INJURY, ABDOMINAL TRAUMA OR ASSOCIATED INJURIES– LEVEL 1 TRAUMA CENTER BELGRADE EXPERIENCE

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Introduction: Major traffic accidents and firearm-related violence cause severe injuries and keep trauma care at the forefront of public health priorities. This study aims to present a one-year single- center experience in surgical managing abdominal trauma after blunt and penetrating injuries, highlighting the patterns of injury, treatment strategies and outcome in terms of different mechanisms of injury.

Patients and Methods: This retrospective study included 92 hemodynamically unstable patients who required emergency laparotomy for blunt or penetrating trauma, treated at the Level 1 University Trauma Center, Faculty of Medicine, Belgrade, between January and December 2023.The patients were divided into two groups: Group A (72 blunt trauma) and Group B (20 penetrating trauma). Patients with blunt trauma had associated injuries that did not require priority emergency surgical treatment. We analyzed clinical parameters in relation to the mechanism of injury and survival: hemoglobin values on admission, ASA score, massive blood transfusion (MBT), abdominal organ trauma. The surgical approach was an emergency exploration laparotomy or staged laparotomy (DCS). Statistical analysis was performed using Fisher's exact test or Chi-square test for categorical variables, and Mann–Whitney U test for continuous variables, with a significance level set at $p < 0.05$.

Results: Clinical parameters hemodynamic instability and ASA score did not show a significant difference between the groups ($p=0.9713$ and $p=0.2473$ respectively). CT scan was done on admission in 93,0% of Group A patients and 70.0 % in Group B ($p\geq0,05$). The incidence of liver and hollow organ injuries did not show a statistically significant difference between the groups ($p\geq0,05$). Significantly more spleen injuries followed blunt trauma ($p=0.0414$). There was no statistically significant difference between groups regarding the severity of liver, spleen and hollow viscus injury defined as mild (AAST 2-3 grade) and severe trauma (AAST 4- 5 grade) ($p=0.1305$, $p=0.3164$ and $p=0.2932$, respectively). There was a statistical significance between trauma type and mortality, the mortality rate in Group A was 25,0%, while all patients survived in group B ($p=0,010$).

Conclusion: Blunt abdominal trauma was associated with significantly higher mortality and significantly more spleen injuries compared to penetrating trauma. As other clinical parameters related to abdominal injury were not significant, the results suggest that associated injuries and response to multitrauma may contribute to higher mortality in blunt trauma. These findings may help to guide mechanisms involved in the response to blunt trauma, as well as better therapeutic strategies in trauma care.

Keywords: abdominal trauma, mortality, emergency laparotomy, blunt trauma, penetrating trauma

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Abdominal Trauma

OP-089

ANATOMICAL INJURY LOCATION AS A PREDICTOR OF OPERATIVE INTERVENTION IN ABDOMINAL STAB WOUNDS: A SINGLE-CENTER ANALYSIS

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Background: Stab wounds are a frequent cause of penetrating trauma, with management strategies ranging from selective nonoperative management to urgent laparotomy. While hemodynamic instability is an established surgical indication, the influence of anatomical injury location on operative decision-making in stable patients remains insufficiently studied. This study aimed to evaluate the relationship between injury location and operative rates, associated injuries, and outcomes in abdominal stab wounds.

Methods: We retrospectively reviewed patients aged ≥12 years presenting with abdominal stab wounds to a tertiary trauma center between January 2023 and June 2025. Patients were categorized into four anatomical regions: anterior abdomen, thoracoabdominal, flank, and multiple regions. Demographics, associated injuries, operative rates, morbidity, mortality, and length of stay were analyzed. Categorical variables were compared using Chi-square tests, and $p<0.05$ was considered statistically significant.

Results: A total of 72 patients were included (mean age 31.6±12.9 years; 68 males, 8 females). Operative rates varied markedly by location: thoracoabdominal injuries had the highest rate (81.8%), followed by anterior abdomen (23.9%). Thoracoabdominal injuries were also associated with the highest frequency of hollow viscus injury (31.8%), predominantly stomach (22.7%), and higher rates of thoracic injury (36.4%). Anterior abdominal injuries showed a lower rate of hollow viscus injury (15.2%) and minimal solid organ involvement (2.2%). Mean hospital stay was longest in multiple-region injuries (7.50 ± 7.05 days), followed by thoracoabdominal (5.18 ± 4.10 days), anterior abdomen (3.65 ± 4.57 days), and flank (2.00 ± 0.82 days). Clavien Dindo Grade II-IIIa complication rate was 9.1% in the thoracoabdominal group, while mortality occurred in 2 patients (2.8%)—one in the anterior abdomen group and one in the thoracoabdominal group.

Conclusion: In abdominal stab wound patients, anatomical location—classified according to the WSES anatomical zones—is a strong predictor of operative intervention. Thoracoabdominal injuries carry the highest surgical rate, more frequent hollow vis-

cus and thoracic injuries, and longer hospital stays compared to other regions. This study classifies abdominal stab wounds by WSES-defined anatomical location, clearly demonstrating differences in operative rates, organ injury patterns, and length of stay. It uniquely highlights the high surgical risk of thoracoabdominal injuries and the potential safety of nonoperative management in flank wounds, offering a novel perspective to current WSES recommendations for selective operative management.

Keywords: Wounds, Stab; Wounds, Penetrating; Thoracoabdominal Injuries; Surgical Procedures, Operative; Hospitalization

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Abdominal Wall Emergencies

OP-090

THE RELATIONSHIP BETWEEN LABORATORY PARAMETERS AND RESECTION AND POSTOPERATIVE COMPLICATIONS IN PATIENTS WITH INCARCERATED HERNIAS

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Introduction and Objective: Incarcerated anterior abdominal wall hernias are emergency surgical conditions that can increase mortality by causing intestinal ischemia and perforation in delayed surgical interventions. We aimed to evaluate the relationship between simple laboratory data that can be used in the preoperative period and the need for resection and the development of postoperative complications in these patients.

Materials and Methods: A total of 326 patients who were referred to the general surgery clinic of Istanbul Kanuni Sultan Süleyman Training and Research Hospital between 2020 and 2024 and underwent surgery were retrospectively evaluated. The patients' age, gender, white blood cell (WBC), C-reactive protein (CRP), hemoglobin (HGB), platelet (PLT), neutrophil (NEU), and lymphocyte (LYM) values were recorded. Two main groups were formed based on whether resection was performed and whether postoperative complications developed. Mann–Whitney U test and chi-square test were used in statistical analyses. The predictive power of CRP in resection was evaluated using ROC analysis.

Results: The mean age of the patients was 58.86±14.98 years, 48.8% (n=159) were male, and 51.2% (n=167) were female. The rate of patients requiring resection was 8.6% (n=28), while 91.4% (n=298) did not require resection. The rate of patients who developed complications was 5.5% (n=18), while 94.5% (n=308) did not develop complications. When patients who developed complications were examined according to type, the most common complication was wound site infection, which was observed in 3.4% (n=11) of cases. Leakage was observed in 0.9% (n=3), bleeding in 0.6% (n=2), and other complications in 0.6% (n=2) of cases.

Patients who underwent resection were significantly older than those who did not (64.46±12.35 vs. 58.37±15.00 years, p=0.039). Although CRP levels were higher in patients who underwent resection (103.70±121.10 mg/L vs. 39.46±53.63 mg/L), the difference was not statistically significant (p=0.066). No significant differences were found in terms of WBC, HGB, PLT, NEU, and LYM (p>0.05). There was a significant association between gender and resection (p=0.015); the resection rate was 4.4% in men and 12.6% in women.

Patients who developed complications were significantly older (71.11±10.70 vs. 58.18±14.79 years, p<0.001). In this group, the CRP level (116.46 ± 115.82 mg/L vs. 40.80 ± 57.94 mg/L, p = 0.006) was significantly higher. In addition, hemoglobin (11.68 ± 2.12 g/dL vs. 12.81 ± 1.91 g/dL, p = 0.019) and lymphocyte (1.32 ± 0.66 × $10^3/\mu L$ vs. 1.84±1.20 ×$10^3/\mu L$, p=0.037) levels were significantly lower. There was no difference in WBC, PLT, and NEU. There was a strong association between resection and complications (p<0.001); the resection rate was 5.2% in those without complications and 66.7% in those with complications.

ROC analysis showed that CRP had moderate discriminatory power in predicting the need for resection, with an AUC of 0.61. The optimal CRP cut-off value was determined to be 127 mg/L. Sensitivity was analyzed as 35.7% and specificity as 94.3%. Conclusion: Age and CRP levels are important in cases of incarcerated hernias in terms of the need for resection and the development of complications. In patients with incarcerated hernias, CRP levels above 127 mg/L may indicate the need for bowel resection with high specificity.

Keywords: Incarcerated anterior abdominal wall hernias, ischemia

Abdominal Trauma

OP-091

DIAPHRAGMATIC INJURIES: A SINGLE-CENTER RETROSPECTIVE ANALYSIS

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Background: Diaphragm injuries may occur as a result of penetrating and severe blunt trauma. Among all blunt thoracoabdominal traumas, the reported incidence of diaphragmatic injury is generally 1–5%, whereas in penetrating injuries, this rate is higher at 10–15%. This study aimed to determine the characteristics of diaphragmatic injuries in Hacettepe University Hospital and to compare the findings with the literature.

Method: To conduct analysis, demographical and clinical data of patients who were presented to the emergency department of Hacettepe University Hospital with thoracoabdominal trauma between January 2020 and August 2025 and were referred to the General Surgery Department were obtained retrospectively from the hospital system. Trauma etiologies were classified as penetrating or blunt, and further subtypes were identified.

Statistical Analysis: Data were analysed using SPSS v26.0 (IBM Corp., Armonk, NY). Continuous variables were expressed as mean ± standard deviation, while categorical variables were expressed as counts and percentages. Categorical variables between groups were compared using the Chi- square test, and continuous variables using the Student's t-test. A p-value <0.05 was considered statistically significant. Findings: A total of 289

patients were included in the study. Overall, trauma-related diaphragmatic injury was recorded in 11 patients (3.8%). The incidence of diaphragmatic injury was found to be significantly higher in penetrating trauma cases (p = 0.004). Among the 11 patients with diaphragmatic injury, 2 (18.2%) died, both of whom had sustained penetrating trauma. In these 2 cases (25%), diaphragmatic injury was secondary to penetrating trauma (n = 8).

Discussion: In this study, the overall incidence of diaphragmatic injury was found to be 3.8%. The rate of diaphragmatic injury was significantly higher in penetrating trauma compared to blunt trauma (9.7% vs. 1.44%). The slightly higher mortality in penetrating trauma (6.1% vs. 5.3%) may be related to the severity of the injury mechanism. Although mortality was somewhat higher in penetrating trauma, this difference was not statistically significant (p=0.72). In blunt trauma cases, all diaphragmatic injuries were observed on the left hemidiaphragm, supporting the protective effect of the liver on the right diaphragm. The findings are consistent with the rates reported in the literature.

Conclusion: Diaphragmatic injuries may be associated with mortality. Our institutional data are consistent with the literature.

Keywords: Blunt trauma, diaphragmatic rupture; Penetrating trauma, diaphragmatic injury

CT image of strangulated bowel



Extensive scar tissue



Abdominal Wall Emergencies

OP-092

DIAGNOSTIC CHALLENGE IN A STRANGULATED FEMORAL HERNIA MASKED BY CHILDHOOD BURN SEQUELAE: A CASE REPORT

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Background: Strangulated femoral hernias are usually diagnosed through a combination of clinical history and physical examination. However, altered anatomy or extensive scar tissue from previous injuries may obscure typical signs.

Case Presentation: A 76-year-old woman with a history of extensive burn injury at age 4 presented with a 15-day history of inability to pass flatus and stool. Physical examination did not reveal a palpable groin mass or localized tenderness, likely due to scarring and tissue changes from her childhood burns. Laboratory tests showed leukocytosis (15,520/μL) and elevated C-reactive protein (330 mg/L). CT revealed small bowel loops and mesentery herniated through the right inguinal canal, with signs of strangulation and perforation. The patient underwent emergency laparoscopic exploration, converted to open surgery upon identification of full-thickness bowel damage. A 20 cm ileal segment containing the perforation was resected, followed by functional end-to-end anastomosis. Recovery was uneventful, and she was discharged on postoperative day 7.

Conclusion: This case emphasizes that in patients with altered local anatomy, physical examination may be inconclusive, and reliance on advanced imaging is critical for timely diagnosis of strangulated hernia.

Keywords: burn, strangulation, femoral hernia

Abdominal Trauma

OP-093

RETROSPECTIVE ANALYSIS AND OUTCOMES OF PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT WITH SPLENIC LACERATION

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L0university of Health Sciences Gülhane Training and Research Hospital

Objective: Splenic rupture is a life-threatening condition that typically arises following blunt abdominal trauma resulting in damage to the splenic capsule or parenchyma. Due to its fragile structure and rich vascular supply, the spleen is the most commonly injured intra-abdominal organ in such cases. Early diagnosis and timely surgical decision-making are critical for patient survival. In this study, we aimed to share our clinical experiences regarding splenic lacerations over the past year, in light of current literature.

Methods: This retrospective study included all patients diagnosed with splenic laceration who presented to the General Surgery Department of Gülhane Training and Research Hospital between January 2024 and July 2025. All clinical data of the patients were reviewed and analyzed.

Results: A total of 13 patients, with a mean age of 42.1 years, were retrospectively analyzed. On initial assessment in the emergency department, FAST (Focused Assessment with Sonography for Trauma) was positive in 12 patients and negative in 1. All patients underwent abdominal computed tomography (CT), and treatment plans were determined based on clinical and laboratory findings. The mean Injury Severity Score (ISS) was calculated as 35.8. According to the American Association for the Surgery of Trauma (AAST) classification, 5 patients (35.7%) had Grade II, 7 patients (50%) had Grade III, and 2 patients (14.3%) had

Grade IV injuries. Seven patients underwent surgical intervention. Among the non-operative group, 3 were monitored in the general ward. Ten patients required intensive care unit (ICU) follow-up. The average hospital stay was 6 days. All patients were discharged in good health.

Conclusion: Both non-operative and surgical management of splenic lacerations can be safely implemented based on hemodynamic stability and the severity of the injury. With appropriate patient selection, non-operative management offers high success rates and allows for effective patient care without increasing the risk of complications.

Keywords: Splenic laceration, Blunt abdominal trauma, Splenic injury,Injury Severity Score (ISS)

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Abdominal Trauma

OP-094

RENAL INJURY AND ITS MANAGEMENT IN BLUNT ABDOMINAL TRAUMA: A 10-YEAR SINGLE-CENTER RETROSPECTIVE REVIEW

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Ümraniye Training Reasurch Hospital

This study retrospectively analyzed 10 years of data from patients who presented to the Emergency Department of Ümraniye Training and Research Hospital due to blunt trauma. The management and outcomes of patients with isolated renal injury and those with concomitant injuries were evaluated.

A total of 1,149 patients presented with blunt trauma, of whom 50 had either isolated renal injury or renal injury accompanied by other trauma. The gender distribution of these 50 patients was 16% female (n=8) and 84% male (n=42), with ages ranging from 19 to 77 years.

The mechanisms of injury were most commonly falls (34%, n=17), motorcycle accidents (24%, n=12), motor vehicle traffic accidents (22%, n=11), pedestrian-vehicle collisions (12%, n=6), and crush injuries (8%, n=4; including cases of falling concrete blocks, being run over by heavy machinery, foreign body impact to the chest, and burial under soil).

Eighteen percent of these patients died secondary to their trauma.

Emergency abdominal surgery was required in 14 of the 50 patients with renal or associated injuries secondary to blunt trauma. Six underwent isolated diagnostic laparotomy and packing, with retroperitoneal hematoma noted in three cases; however, no surgical intervention was performed for these hematomas. Procedures from other surgical specialties were excluded from these counts. Documented interventions included one primary diaphragmatic repair, one nephrectomy, two splenectomies, five colectomies (predominantly right hemicolectomies), two ileorrhaphies, one distal pancreatectomy, one subtotal gastrectomy, and one repair of an external iliac artery injury.

The distribution of renal injuries was as follows: Grade 1 – 40% (n=20), Grade 2 – 18% (n=9), Grade 3 – 6% (n=3), Grade 4 – 16% (n=8), and Grade 5 – 20% (n=10).

Transfusion was required in 19 of the 50 patients.

Isolated renal injuries were observed only in cases of low-energy trauma with low-grade renal injury. In injuries of Grade 2 or higher, concomitant osseous, thoracic, or central nervous system pathologies were present. Retroperitoneal hematoma was associated with high-energy trauma in three patients, all of whom died. Notably, high-grade renal injuries did not result in mortality when caused by lower-energy trauma.

Conclusion: In blunt abdominal trauma, when the kidney is not the primary site of hemorrhage, and in the absence of concomitant intraperitoneal solid organ injury or pelvic instability, nonoperative management yielded favorable mortality outcomes. In high-grade renal injuries, the potential for hematoma infection and sepsis necessitates close urological follow- up. Falls from height and suicide attempts, which often cause high-energy trauma, require thorough evaluation. Radiologic findings of contamination in the splenorenal or hepatorenal recesses should prompt consideration of a renal source.

Additionally, patients presenting to the emergency department with low Glasgow Coma Scale (GCS) scores, unstable vital signs, and hemodynamic instability were observed to have poorer outcomes in terms of mortality and morbidity during their follow-up.

Elevated WBC counts during hospitalization were also associated with more severe clinical courses.

Keywords: blunt trauma kidney injury

Acute Abdominal and Gastrointestinal Emergencies

OP-097

TEXTBOOK OUTCOME IN ACUTE APPENDICITIS: INCIDENCE AND RISK FACTORS AFTER URGENT LAPAROSCOPIC APPENDECTOMY

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Introduction and Aims: Laparoscopic appendectomy for acute appendicitis is the most frequently performed emergency procedure. Although often perceived as a minor surgical intervention, its high incidence has a significant impact on patient care and healthcare.

Textbook Outcome (TO) is a composite quality metric reflecting an ideal perioperative course and is increasingly used to benchmark surgical performance. Its application has not been explored in acute appendicitis so far. This study aimed to propose a specific textbook outcome after urgent laparoscopic appendectomy (TO-ULA), assess the incidence of its achievement and identify potential limiting factors.

Methods: We retrospectively reviewed consecutive patients (n=915) undergoing urgent laparoscopic appendectomy for acute appendicitis at Hospital del Mar, Barcelona, between January 2022 and December 2024. Patients with age <18 years, incomplete records, interval appendectomy or concomitant procedures were excluded. We included the following criteria to define TO-ULA: surgery within 24 hours of diagnosis, no conversion to open surgery or primary open approach, length of stay ≤5 days, no postoperative complications ≥ Clavien-Dindo II, and no 30-day readmission or reoperation. Patients meeting all criteria were classified as having achieved TO-ULA. ClinicalTrials.gov Identifier NCT06765044.

Results: 820 patients were included in the study (median age 36 years [IQR 20.8], 54.8% male). TO-ULA was achieved in 65.4% of patients. The most frequent factor limiting the achievement of TO-ULA was surgical delay beyond 24 hours from diagnosis (15.4%), followed by hospital stay >5 days (11.5%) and complications ≥ Clavien-Dindo II (10.7%). Compared to the TO group, non-TO patients had slightly higher CRP levels (median value 3.54 vs. 2.77 mg/dL, p = 0.059).

Conclusions: This is the first application of the Textbook Outcome concept to acute appendicitis. In our cohort, 65.4% of patients achieved TO-ULA. Further analyses are warranted to refine the TO-ULA definition and identify modifiable factors that could improve care in this high-volume emergency procedure.

Keywords: Acute appendicitis, urgent laparoscopic appendectomy, textbook outcome, quality metrics, emergency surgery

Education for Emergency Surgery

OP-099

ONLINE EFAST COURSE ENHANCED KNOWLEDGE AND PERCEIVED CONFIDENCE AMONG MEDICAL TRAINEES DURING THE COVID-19 PANDEMIC

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Background: The COVID-19 pandemic disrupted medical education worldwide, prompting the need for innovative e-learning solutions [1, 2].

Objectives: This study evaluated the effectiveness of an online extended Focused Assessment with Sonography in Trauma (EFAST) course, delivered via the International Emergency Medicine Education Project's platform, to improve participants' knowledge and perceived confidence in EFAST procedure.

Methods: A prospective observational study was conducted between May 17, 2020, and December 20, 2023. Pre- and post-course quizzes and surveys were used to assess participants' knowledge and confidence. Participant demographics, quiz scores, and survey responses were collected. Quantitative data were analysed using the Wilcoxon Signed-Rank test and Cohen's d to evaluate knowledge improvement and confidence changes. Thematic analysis of qualitative feedback was performed with the assistance of large language model AI tools for emerging themes.

Results: 1758 participants enrolled in the course. From 111 countries, 1515 started the course, and 1190 (78.6%) reached the final exam stage, with 96.1% achieving a passing score. 66.4% indicated they had never attended a prior ultrasound course. Most (81.1%) were medical students, interns, or residents. 36.5% of participants were from low- or lower- middle-income countries. 1175 (77.6%) participants completed both the pre- and post- course formative knowledge quizzes. The median (IQR) scores were 53.3 (40.0–66.7) pre- course and 86.7 (73.3–93.3) post-course ($p < 0.001$, effect size: -0.958). 771 participants completed both pre- and post-course surveys. Participants' median (IQR) confidence in EFAST increased from 5 (3–7) to 8 (7–10) ($p < 0.001$, effect size: -0.844). Qualitative feedback showed that participants found the course practical, well-structured, and effective. They suggested improving video quality and simplifying content for clarity and engagement.

Conclusion: The online EFAST course enhanced participants' knowledge and perceived confidence, demonstrating the potential of online clinical education during global crises.

Keywords: EFAST, ultrasound education, clinical training, e-learning, remote education, COVID-19

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Education for Emergency Surgery

OP-101

A NOVEL TRAUMA TRAINING COURSE FOR SURGEONS IN CHINA WITH ANIMAL MODEL

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Introduction: A novel animal trauma training course was created in December 2020 in China. This study will assess its value using participants' feedback and investigate its future development.

Materials & Methods: The two-day course includes lectures, dry lab workshops, and porcine model integrated operative sessions. Ten operating tables are fully equipped and participants perform all surgical procedures on a live porcine model under general anesthesia. The surgical procedures are composed of penetrating trauma to the spleen, liver, small bowel, large bowel, diaphragm, lung, heart, kidney, inferior vena cava, iliac vessels, and aorta. Pelvic packing and temporary abdominal closure are taught. All procedures are ethical and a questionnaire is sent to participants after completion of the course.

Results: Eleven courses have been organized since 2020. Data were collected from 308 participants who came across the country. Nearly all participants (308/319) reported they were satisfied with the course environment, structure, procedure, and content, and wanted to attend this course next time. Splenectomy, cardiac, and aorta repair were the top three procedures they liked. 97.14% of participants stated the course significantly increased their confidence and ability to handle critically injured patients. 98% of participants would pass on the information and key materials they learned to colleagues and students at the home institutions. All 308 participants recommended the course be propagated to all regions in the country.

Conclusion: It is valuable and necessary to obtain further funding to provide this structured animal trauma training course on a larger scale for specialized surgeons in China.

Keywords: Trauma course; Trauma training; Animal models; Trauma education; Trauma

Damage Control Resusitation

OP-102

WHOLE-BODY VS. SELECTIVE CT IN MAJOR BLUNT TRAUMA: UNRAVELING THE CLINICAL IMPACT ON PATIENT OUTCOMES

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Background: The introduction of damage control resuscitation provides the benefit of stabilizing the patient while allowing for a thorough assessment of injury details. If stable conditions allow, a computed tomography scan may also be performed. This facilitates the creation of a specific plan or the identification of any injuries, including non-survivable injuries. This study compares the clinical impact on patients with major blunt trauma assessed with whole-body CT (WB-CT) scans versus those who underwent selective CT (S-CT) scans.

Methods: A retrospective chart review was conducted on patients with blunt torso injuries in the trauma resuscitation room from January 2011 to February 2025. Collaboration between the trauma and emergency radiology units initiated the code "Trauma CT" to activate comprehensive CT evaluation for unstable cases. The primary outcome was in-hospital mortality, while secondary outcomes included the clinical impact of treatment and radiologic aspects. Statistical analysis was performed using the Student's t-test for continuous data with a normal distribution, the Mann-Whitney U test for continuous data with an abnormal distribution, and the Pearson chi-square test for categorical data.

Results: A total of 665 major trauma patients assessed were matched with 528 WB-CT patients and 131 S-CT patients. The median ISS and in-hospital mortality rate revealed no significant difference. No CI-AKI was observed in either group. WB-CT patients showed a more favorable clinical impact concerning emergency surgeries (17.4% vs. 10.2%, p = 0.029); abdominal (3.5% vs. 3.6%, p=0.326), thoracic (0.7% vs. 0.7%, p=0.326), pelvis and hip (2.6% vs. 1.4%, p=0.326), neurosurgeries (7.8% vs. 4.3%, p=0.326), and peripheral vascular surgeries (1.9% vs. 0%, p=0.326). Emergency intervention rates were not significantly different (8.5% vs. 8.0%, p = 0.867); TEVAR (1.70% vs. 1.45%, p = 0.86) and abdominopelvic angioembolization (6.81% vs. 6.56%, p = 0.92). The results also detected injuries that resulted in unplanned operations (1.9% vs 5.1%, p = 0.029); abdominal operations (0.4% vs 2.2%, p = 0.030), neurosurgery (1.5% vs 2.2%, p = 0.030), and endoscopy (0.0% vs 0.7%, p = 0.030). Unplanned operations/interventions (1.3% vs 4.4%, p=0.033); abdominal (0.4% vs 2.9%, p=0.017), thoracic (0.2% vs 1.5%, p=0.017), pelvic (0.4% vs 0.0%, p=0.017), and maxillofacial procedures (0.4% vs 0.0%, p=0.017). The mean number of total scans in the first 24 hours was 1.15, compared to 1.47 (p < 0.001). The scans conducted after 24 hours were not significantly different (0.42 [1-3] vs 0.50 [1-3], p = 0.603). The median total CT costs were 11,000 Thai baht compared to 17,050 Thai baht (p < 0.001). WB-CT patients received significantly higher median radiation dosages, at 32.63 mSv versus 28.07 mSv (p < 0.001).

Conclusions: Whole-body CT scans significantly influence patients with major blunt trauma by enabling early detection and steering appropriate treatment strategies. However, the context of the technique for radiation assessment should focus on minimizing radiation exposure. Overall, WB-CT scans provide advantages over S-CT scans, including reduced investigative costs that improve effective resource allocation.

Keywords: trauma, damage control resuscitation, trauma resuscitation, whole-body CT scan, resource management

Damage Control Resusitation

OP-106

AN UNEXPECTED JOURNEY FROM GASTRIC BALLOON TO GASTROCUTANEOUS FISTULA: COMPLEX MANAGEMENT OF A RARE COMPLICATION

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Intragastric 300 cc gastric balloon application was performed on a 36-year-old female obesity patient with BMI 40 in a private center. Intragastric balloon removal was performed 5 months and 20 days later in the same center. She applied to the emergency room 18 hours after this procedure due to abdominal pain. Free air was observed in the contrast abdominal tomography performed upon her symptoms of acute abdomen. In the patient who was taken to surgery, a perforation line of up to 1 cm in diameter was observed near the antrum in the greater curvature inferior of the stomach and a primary two-layer repair was performed. The patient, who was given methylene blue for 3 days after the surgery, underwent surgery a second time due to the intense methylene blue coming out of the drains. Graham raphe repair was applied to the same localization in the second operation. In the postoperative 4- day control, it was observed that methylene blue came out of both of the patient's pelvic drains. Thereupon, the patient was referred to our hospital, Istanbul Education and Research Hospital General Surgery Clinic.

In our clinic, the patient's general condition was good, vital signs were stable, and wbc: 13 thousand were monitored. After drain culture was taken, the patient was started on meropenem and fluconazole. Oral intake was stopped and total parenteral nutrition was started.

On the oral IV abdomen and thorax tomography taken on the 1st day of treatment, there was 4 cm of fluid in bilateral lungs. A 15*4 mm suture line was observed in the anterior section of the greater crura of the stomach. There is fistulization to the skin from the neighborhood of this line. There is 15 cm loculated fluid in the posterior stomach.

A bilateral drainage catheter was applied to the patient's lungs. An abscess drainage catheter was placed in the loculated area posterior to the stomach by interventional radiology. On the control tomography on the 3rd day of treatment, an abscess drainage catheter was placed in the bilateral kidney lodge by interventional radiology upon observation of an abscess in the bilateral kidney lodge.

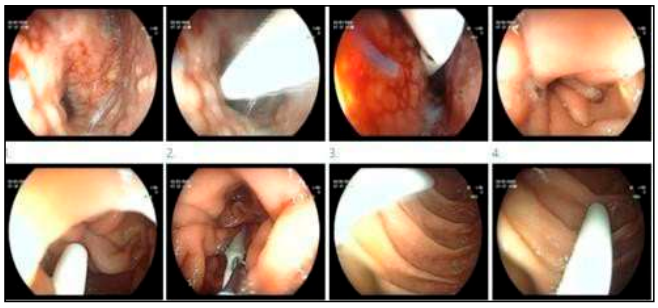
On the 4th day of the treatment, the pelvic drain was removed because there was no drainage. On the 5th day of the treatment, bilateral pulmonary catheters were removed.On the 7th day of the treatment, the renal catheter was removed because there was no drainage and the patient was followed up

On the 9th day of the treatment, a control tomography was performed on the patient, and loculated fluid was observed in the abdomen and lungs, and the drainage catheter in the posterior stomach was removed. In the tomography, a control fistula line was observed between the antrum and the skin. A gastroscopy was planned for the patient, and a drain and PEG set were placed in the 2 cm wide gastrocutaneous fistula line in the prepyloric antrum with endoscopy

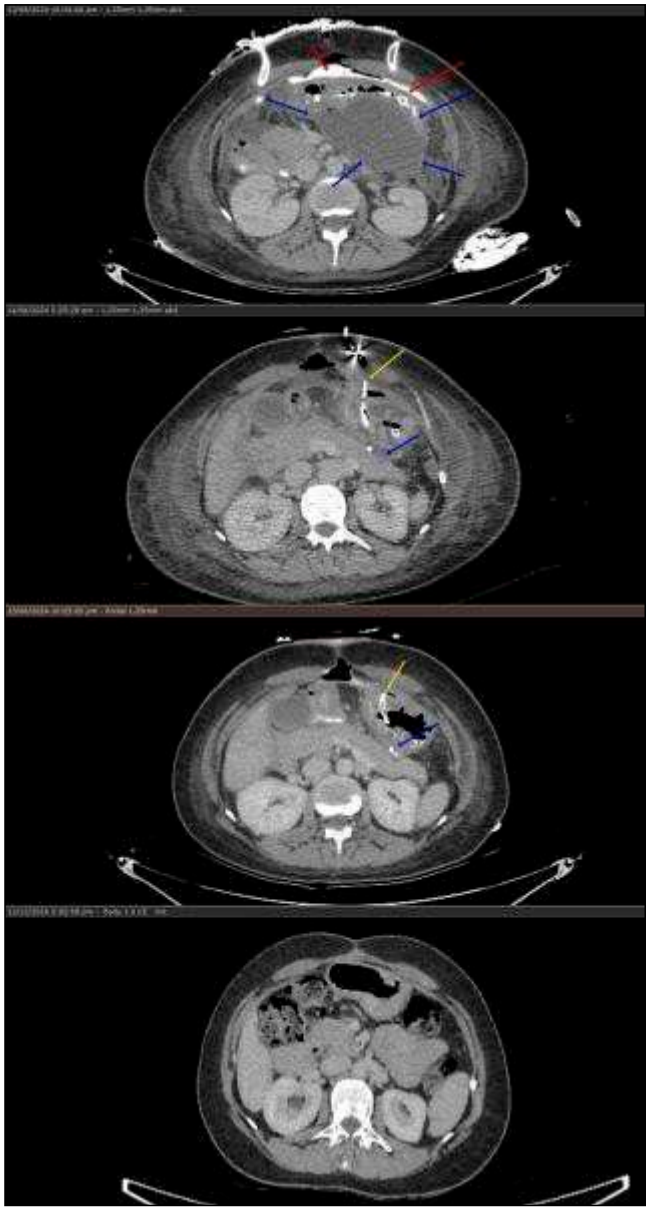
On the 3rd day after the procedure, the peg was removed and a feeding catheter was applied to the localization instead, and feeding was started.After the feeding catheter application, water was started on the 1st day and an oral regimen was started on the 3rd day

The patient was followed up for another 5 days as he tolerated it, and the feeding catheter was removed. The patient, whose fistula line was observed to have closed during follow-up and controls, was discharged to be followed up as an outpatient. In the gastroscopy performed 1 month later, it was observed that the antral fistula line had closed

Keywords: gastric balloon, Obesity, Perforation,gastrocutaneous fistula



Picture 1. Gastrocutaneous fistula line in the prepyloric antrum, feeding tube



Picture 3. axial CT images. Red arrow: extravasated contrast material, Blue arrow: Abscess formed in the posterior stomach, Yellow Arrow: External drainage catheter extending to the abscess



Picture 2. In reformatted sagittal, coronal and axial CT sections, green arrows: catheters belonging to PEG, black arrow, belonging to nasogastric tube, blue arrow, stomach incision abscess warning is shown

Burn Management

OP-107

POLYLACTIC ACID AND AUTOLOGOUS SKIN CELL SUSPENSION FOR THE MANAGEMENT OF PARTIAL THICKNESS FACIAL BURNS

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Introduction: A skin burn to the face may be a devastating and disfiguring injury leading to significant social issues, identity crisis, psychological, and emotional distress. Hypertrophic scarring and dyspigmentation are common with operative and nonoperative management. Hydrosurgery technology uses the Bernoulli's principle with a razor thin saline jet that may allow a more precise, smooth, and superficial tangential excision of nonviable tissue. Autologous skin cell suspension (ASCS) includes fibroblasts, keratinocytes, and melanocytes and may be applied as an epidermal autograft at the point of care. Polylactic acid dermal matrix reported to act as a dermal substitute favoring healing. This combination technique may constitute an alternative for facial burn wounds resurfacing with possible better aesthetic and functional outcomes.

Method: Ten patients with deep partial thickness facial skin burns were included. They underwent tangential excision using the hydro-scalpel. A small partial thickness donor sample was harvested at 0.008 inch and the ASCS was prepared through enzymatic and mechanical disaggregation. ASCS was subsequently evenly sprayed on the prepared bed wound on the face. A polylactic acid membrane was applied. Outer dressings were removed on POD#3 and the contact dressing was removed by POD#7.

Results: Early epithelialization and pigmentation were observed in all cases upon takedown of the dressings. No evidence of hypertrophic scarring and enhanced pigmentation was observed upon 14-, 30-, and 60-days follow-up. The patients experienced no complications and were very pleased with the final outcome.

Conclusion: Application of autologous skin cell suspension and polylactic acid membrane is a safe alternative with possible improved functional and aesthetic outcomes for the management of deep partial thickness skin burns to the face. Long term follow-up of this patients may be required to confirm improved results.

Keywords: Polylactic acid skin substitute, autologous cell transplantation

Compartment Syndrome

OP-108

NECROTIZING FASCIITIS: A MULTIDISCIPLINARY CHALLENGE

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Necrotizing fasciitis (NF) is one of the most common and dangerous necrotic soft tissue infections (NSTIs) with a high risk of major amputation and a mortality ranging from 6 to

33%. Described as far back as Hippocrates, NSTIs continue to be associated with significant mortality. Prompt recognition of signs and symptoms, targeted diagnostic testing and timely treatment are crucial. In NF an early and aggressive surgical tratment with decompressing incisions and resection of necrotic tissue, as well as and adeguate antibiotic therapy, are the key points to prevent sepsis and compartimental syndrome.

We present the case of a 51 year old man treated in our centre for necrotizing fasciitis of the gluteus and thigh after an intramuscular injection with not confirmed history of drugs abuse. He was treated with extensive incisions and debridment and with wide spectrum antibiotic therapy, with multiple second looks until resolution of the infection and with VAC therapy to optimize the healing of the wounds.

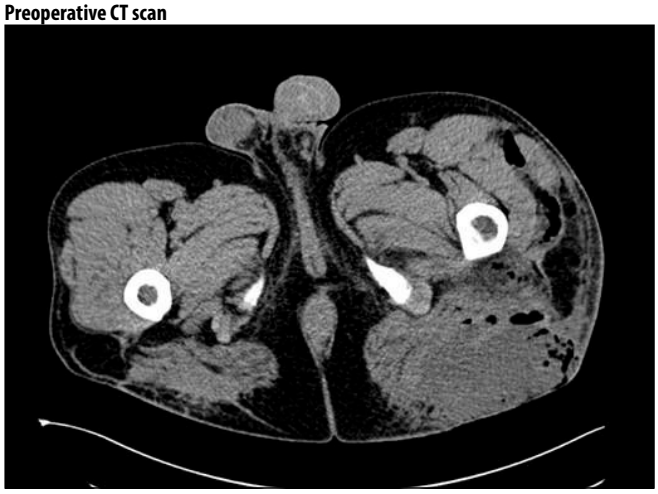
This case is paradigmatic about the necessity to be on alert in sof tissue infections than can evolve to necrotizing fasciitis, about the necessity to be aggressive in managing this condition and about the utility of VAC therapy in the treatment of complex wounds and infective collections.

Keywords: Fasciitis, Necrotizing, Compartment Syndromes

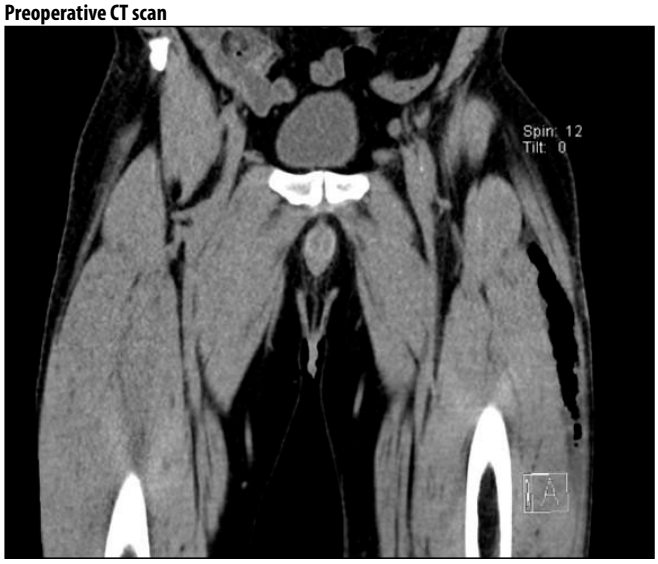
Clinical presentation



Preoperative CT scan



Preoperative CT scan



Description of the Figure



Description of the Figure



Compartment Syndrome

OP-109

METHOD FOR THE PREVENTION OF ABDOMINAL COMPARTMENT SYNDROME IN NEWBORNS AND INFANTS

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Background: Abdominal compartment syndrome (ACS) remains a life-threatening condition in neonates, with mortality rates ranging from 40% to 60%. Despite its profound impact on multiple organ systems, ACS remains under-recognized in pediatric practice, and prospective studies with adequate sample sizes are scarce. Mechanical decompression of the bowel is a key element in prevention and management, yet the optimal method remains debated.

Objective: To evaluate the efficacy of gastrojejunal intubation via gastrostomy in reducing intra-abdominal pressure (IAP) in neonates with abdominal wall defects such as gastroschisis (GS)

Methods: We conducted a comparative analysis between two clinical cohorts:

Group 1 (retrospective): a retrospective control group employing traditional decompression methods (e.g., nasogastric intubation, intraoperative puncture).

Group 2 (prospective): a prospective study group utilizing our innovative approach — intestinal intubation through a gastrostomy performed during abdominal wall reconstruction.

Clinical parameters assessed included IAP, hourly urine output, respiratory volume, oxygen saturation, intestinal motility restoration, heart rate, central venous pressure (CVP), total peripheral vascular resistance (TPVR), end-tidal CO_2, and the early kidney injury marker NGAL.

Results: Preliminary data from 20 patients indicated that gastrojejunal intubation effectively reduces IAP from an initial postoperative level of 14-18 mmHg to 6-8 mmHg within 7-10 days post-operation. Notably, no significant increase in renal impairment marker cystatin C was observed, and elevations in NGAL resolved within six days postoperatively.

Conclusion: Gastrojejunal intubation via gastrostomy may represent a safe and effective strategy for bowel decompression in neonates with ACS. This technique offers potential for broader application in pediatric surgery and warrants further investigation.

Keywords: Abdominal compartment syndrome (ACS), intra-abdominal pressure (IAP) gastroschisis (GS), central venous pressure (CVP), total peripheral vascular resistance (TPVR), early kidney injury marker NGAL.

Education for Emergency Surgery

OP-110

CONSENT IN EMERGENCY SURGERY: A CALL FOR STANDARDISATION & TARGETED TRAINING

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Wirral University Teaching Hospital Nhs Trust

Background: Informed consent ensures patients understand the nature, risks, benefits, and alternatives of proposed surgical procedures. Emergency settings often compromise documentation quality due to time constraints and varying clinician experience. This study evaluated surgical consent documentation quality across the five commonest general surgical emergency procedures: appendicectomy, non-anorectal abscess, anorectal abscess, hernia repair and laparotomy.

Methods: Six month retrospective review of 370 consent forms from a single centre was conducted. Forms were assessed against Royal College of Surgeons (RCS) Good Surgical Practice guidelines1 covering general requirements, and NHS England/ GIRFT resources for general surgical risks, and procedure-specific risks. An inclusion criterion of consent form 1 utilisation. After exclusions for ineligible or incomplete forms, 194 valid cases were analysed. Statistical analyses included the Mann-Whitney U test for non-normally distributed data and ANOVA for comparisons among clinician grades.

Results: Of 370 consent forms, 194 were reviewed as 176 failed legibility requirements. Documentation quality varied significantly across procedures and clinician grades. Pan- procedural analysis showed consistent deficiencies: some core components, such as clinician grade (88%) and bleeding risks (86%), were frequently documented, while alternatives to surgery (7%) and risk of non-resolution (16%) were often omitted. Mean documentation scores varied significantly between procedures; general criteria ranged from 4.42/9 in hernia repairs to 6.77/10 in appendicectomy, general risks ranged from 3.00/7 (abscess drainage) to 5.70/8 (appendicectomy), and specific risks ranged from 0.80/2 to 2.22/6 (Figure 1).

Structured proformas for appendicectomy cases (n=23) significantly improved documentation of general criteria (8.30 vs. 5.74), general risks (6.83 vs. 4.94), and specific risks (1.52 vs. 1.00) compared to standard forms (n=34; all $p<0.05$) (Figure 4).

Analysis by clinician grade revealed significant variation (ANOVA: general criteria $p=0.002$, general risks $p=0.004$, specific risks $p<0.001$). Specialist Registrars (SpR) documented fewer general criteria (mean ±SD 5.85 ±1.77) compared to Core Surgical Trainees (CST, 6.94 ±1.32), Senior House Officers (SHO, 7.22 ±1.77), and Consultants (6.75 ±0.96) (Figure 2). Significant differences between clinician grades were only observed in appendicectomy cases, where SHOs documented significantly more general criteria than SpRs (mean difference=1.80, $p=0.015$), and CSTs documented significantly more specific risks than SpRs (mean difference=0.77, $p=0.014$) (Figure 5). Frequently omitted points across all grades included alternatives to surgery (56–81%), patient details completion (39–65%), risk of non-resolution (94–100%), normal appendix finding (94–100%), and blood products consent (33–50%) (Figure 3).

Conclusion: Significant deficiencies exist in consent documentation for emergency surgical procedures. Structured proformas significantly improve documentation compliance and

completeness. Considering variations identified among clinician grades, targeted training and broader implementation of structured consent tools are strongly recommended to enhance documentation quality and patient safety. Electronic forms would improve concerns of legibility and lack of completeness with national or international forms providing standardisation.

Keywords: Consent Emergency Surgery Education Training Risks Documentation Quality Appendix Hernia Abscess Laparotomy

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Figure 1. Mean Documentation Scores by Procedure

Procedure	N	General Req. (mean/max)	General Risks (mean/max)	Specific Risks (mean/max)
Appendicectomy	67	6.77 / 10	5.70 / 8	1.21 / 3
Abscess (anywhere)	36	5.35 / 9	3.00 / 7	0.86 / 2
Anorectal Abscess	39	4.53 / 9	3.60 / 7	1.72 / 5
Hernia	14	4.42 / 9	3.42 / 8	1.79 / 7
Laparotomy	44	5.96 / 10	4.96 / 8	2.22 / 6

Figure 1. Mean Documentation Scores by Procedure

Figure 2. Mean General Criteria Met by Grade (All Procedures)

Grade	N	General Criteria (mean ± SD)	General Risks (mean ± SD)	Specific Risks (mean ± SD)
SpR	113	5.65 ± 1.77	4.68 ± 1.56	1.27 ± 0.93
CST	17	6.94 ± 1.32	5.65 ± 1.36	1.76 ± 0.56
SHO	18	7.22 ± 1.77	5.61 ± 1.49	1.78 ± 0.76
Consultant	4	6.75 ± 0.96	6.25 ± 1.26	3.25 ± 1.26

Figure 2. Mean General Criteria Met by Grade (All Procedures)

Figure 3. Frequently Missed Documentation Elements (All Grades, All Procedures)

Documentation Element	% Missed (All Grades)
Alternatives Documented	77%
Details on All Pages	61%
Non-resolution of symptoms	93%
Normal Appendix	96%
Blood Products consent	44%

Figure 3. Frequently Missed Documentation Elements (All Grades, All Procedures)

Figure 4. Documentation Scores in Appendicectomy: Proforma vs Standard Consent

	N	Gen. Req. (mean/max)	Gen. Risks (mean/max)	Spec. Risks (mean/max)	All Criteria Met
Proforma	23	8.30 / 10	6.83 / 8	1.52 / 3	3
Standard Consent	34	5.74 / 10	4.94 / 8	1.00 / 3	1
p-value (MWU)	—	<0.05	<0.05	<0.05	—

Figure 4. Documentation Scores in Appendicectomy: Proforma vs Standard Consent

Figure 5. Pairwise Grade Comparisons in Appendicectomy (Tukey HSD)

Domain	Comparison	Mean Difference	p-value	Significant?
General Criteria	SHO vs SpR	+1.86	0.015	Yes
General Criteria	CST vs SpR	+0.71	0.39	No
General Criteria	SHO vs CST	+1.09	0.32	No
Specific Risks	CST vs SpR	+0.77	0.014	Yes
Specific Risks	SHO vs SpR	+0.59	0.072	No
Specific Risks	CST vs SHO	-0.09	0.97	No

Figure 5. Pairwise Grade Comparisons in Appendicectomy (Tukey HSD)

Acute Abdominal and Gastrointestinal Emergencies

OP-113

M53 MOTORWAY: A GEOGRAPHIC PREDICTOR IN APPENDICITIS

Jagjit Gill, **Sheheryaar Ahmed**, **Cameron Lang**, **Robyn Dean**, **Conor Magee**, **Antonio Gallucci**

Wirral University Teaching Hospital Nhs Trust

Background: Management and outcomes in appendicitis remain variable due to inconsistent imaging, debate over surgical drains and patient or population-level variation in risk and presentation. Socioeconomic status and demographics may influence outcomes and healthcare use justifying local level evaluation[1].

Methods: Prospective cohort study included appendicectomy cases at a single hospital over four months, where patients are divided geographically by the M53 motorway in Wirral, UK. Variables evaluated against WSES guidelines; included ASA, imaging modality/findings, drains, surgical approach, timing of intervention, and socioeconomic group. Primary outcomes were length of stay (LoS) and 30-day complication rate.

Results: Of 83 patients, 84.3% had histologically proven appendicitis with an acceptable 12% negative appendicectomy rate[2]. Two cases of appendiceal carcinoma were not identified on imaging or macroscopically, supporting excision when the appendix appears normal. Intervals from symptom onset to assessment, assessment to surgery, and overall symptom duration were not associated with increased LoS or complications. Ultrasound (US) was underused[3]; in 14.5% (n=12), mainly in females (n=10) and males under 16 (n=2), with a positive diagnostic yield of 25%, negative in 16.7%; thus considered useful in 41.7% overall; none proceeded to CT (Figure 1). CT was performed in 55.4% (n=46), mostly in females (n=28), and all were reported as abnormal but 6.5% had normal histology. Imaging detected under half of all perforations; when detected, these patients had increased LoS (p = 0.016), likely due to greater contamination. Imaging delayed surgery[3]: of those imaged, 6 had surgery within 24 hours, 17 between 24–48 hours, and 32 after 48 hours. Higher surgeon grade was associated with increased LoS (Consultant 138.4 hours, SpR 73.0, SHO 38.8), likely reflecting more complex cases, but did not influence complication rates. Laparoscopic approach preferred (96.4%, Figure 2)[3], and significantly reduced 30-day complications and LoS versus open surgery (p = 0.0077). Drains placed in 33.7% (n=28), of which 25% had simple appendicitis, contrary to recommendations[3] (Figure 3). In perforated cases, LoS was shorter without a drain (100 vs 124.75 hours), but with increased 30-day complication rates (66.6% vs 21%). Gangrenous cases showed a reduced LoS (46.67 vs 72.17 hours) with comparable complication rates (33.3% vs 25%). Female patients had higher 30-day complication rates (22.2% vs 6.8%, p = 0.025) with no difference in LoS; age had no impact. Socioeconomic analysis showed the less afluent east had a higher ASA, higher incidence and longer symptom duration before presentation (58.1 vs 35.2 hours), with the more proactive help- seeking in the afluent west, likely the cause for higher documented complication rates (25% vs 10%) (Figure 4).

Conclusion: Outcomes in appendicitis are affected by imaging accuracy, use of drains, surgical approach, and socioeconomic context. US provided limited value than expected4, with imaging in general, leading to a delay to surgery. Avoiding drains in simple appendicitis reduces LoS, whilst reducing complications in perforation when utilised. Laparoscopy improves

outcomes. Female patients had increased risk of complications. Socioeconomic disparities within a geographical region shape comorbidity and presentation patterns. These results support evidence-based, tailored management.

Keywords: Appendicitis Emergency Surgery Prediction Outcomes Complications Management Imaging Risk Socioeconomic Demographic Length of Stay

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Modality	Patients (%)	Female (%)	Yield (Usefulness)
Ultrasound	12 (14.5%)	10 (83.3%)	5/12 (41.7%)
CT	46 (55.4%)	28 (61%)	43/46 (93.5%)*

*All CTs reported as abnormal but 3/46 had normal histology.

Figure 1. Imaging Modalities and Diagnostic Yield

Approach	30-day Complications (n)	Nil Complications (n)	Mean Length of Stay (hrs)
Laparoscopic	8	66	48.0
Open	2	1	312.0
Converted	1	1	240.0

Figure 2. Surgical Approach and Outcomes

Diagnosis Type	Drains Used (%)	LoS (No Drain)	LoS (Drain)	30d Comp (No Drain)	30d Comp (Drain)
Perforated	14 (18.9%)	100 hrs	124.8 hrs	66.6%	21%
Gangrenous	4 (4.8%)	46.7 hrs	72.2 hrs	33.3%	25%

Figure 3. Drain Use and Outcomes

Group	Patients	ASA score (n = II/III/IV)	Mean Symptom Duration (hrs)	30d Complication	Clavien-Dindo (I:II:III:IV:V)
West	20 (25%)	5/1/0	35.2	5 (25%)	0:3:2:0:0
East	60 (75%)	23/5/1	58.1	6 (10%)	1:4:1:0:0

Figure 4. Socioeconomic (M53 motorway) Divide

Acute Abdominal and Gastrointestinal Emergencies

OP-115

SYNCHRONOUS PERFORATED DUODENAL DIVERTICULUM AND JEJUNAL DIVERTICULITIS: A RARE DUAL COMPLICATION REQUIRING EMERGENCY SURGICAL MANAGEMENT

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Background: Duodenal and jejunal diverticula are individually uncommon and often asymptomatic. However, when complicated by inflammation or perforation, they demand urgent intervention. Simultaneous perforated duodenal diverticulum and jejunal diverticulitis is exceedingly rare, with only sporadic case reports in the literature. This case offers unique insights into the diagnosis and surgical management of such synchronous pathology in the setting of acute abdomen.

Case Presentation: A 54-year-old woman presented with persistent abdominal pain and systemic inflammatory signs. Contrast-enhanced CT revealed a 35 mm perforated diverticulum on the superior wall of the third portion of the duodenum with peridiverticular free air and inflammation. Emergency laparotomy was performed. A wedge resection and primary repair of the duodenal perforation were carried out. Intraoperative exploration identified a second inflamed jejunal diverticulum 40 cm distal to the ligament of Treitz, which was also resected via wedge technique. There was no fecal contamination. A Jackson-Pratt drain was placed.

Outcome: Postoperative recovery was uneventful. The patient resumed oral intake on postoperative day five, and the drain was removed on day eight. She was discharged in stable condition without complications.

Discussion: Perforated duodenal diverticula, while rare, necessitate prompt diagnosis and operative management due to high morbidity if untreated. The synchronous jejunal involvement underscores the possibility of extensive diverticulosis and the critical role of meticulous intraoperative assessment. This case reinforces the surgical principle of thoroughly exploring the entire small bowel in cases of localized diverticular perforation.

Conclusion: This case exemplifies the importance of early imaging, timely surgical intervention, and comprehensive intraoperative evaluation in managing acute complicated small bowel diverticulosis. The rare co-occurrence of duodenal and jejunal involvement enriches the literature and highlights a diagnostic and therapeutic challenge in emergency surgery.

Keywords: Duodenal diverticulum, Jejunal diverticulitis, Small bowel perforation, Emergency surgery, Synchronous diverticulosis, Acute abdomen

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Damage Control Resusitation

OP-116

A NETWORK META-ANALYSIS OF BLOOD TRANSFUSION STRATEGIES IN HAEMORRHAGE

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Introduction: Haemorrhage coupled with coagulopathy remains a primary cause of preventable in-hospital mortality among trauma patients. Historically, transfusions of whole blood were the principal method of volume resuscitation in these patients. Advances in blood banking prompted a shift toward component therapy, where patients are administered a mixture of red blood cells (RBCs), plasma, and platelets. Further innovations in the field have introduced such approaches as Damage Control Resuscitation (DCR), point-of-care coagulation assessments, and the administration of predefined 1:1:1 component ratios. The aim of each of these is to aid effective resuscitation and reduce complications. Despite the variety of approaches that exist, their relative merits and efficacy are notably under-studied in the existing literature.

Methods: A systematic search of PubMed, OVID Medline, Embase and Emcare was conducted on 14/06/2025. The papers found were screened for eligibility by two independent reviewers. Four were included in the analysis for 28-day mortality and three for mortality at 24 hours. The treatments compared were a standard ratio of 1RBC:1Plt:1FFP, this ratio with the inclusion of 2g of cryoprecipitate, 2RBC:1Plt:1FFP and two strategies guided by either formal laboratory testing or viscoelastic haemostatic assays. After data extraction by two independent reviewers, a frequentist network meta-analysis using the netmeta package in R 4.3.0 "Already Tomorrow" was performed; inconsistency, heterogeneity, model assumptions were checked; p-scores and pairwise comparisons generated. Publication bias amongst the included papers was assessed visually using funnel plots. Conventional thresholds for significance were used.

Results: There were 2680 patients and four interventions and 2755 patients and five interventions included in the analysis of mortality at 24 hours and 28 days respectively. The majority of patients included in these analyses were male (24 hours - 2148, 80.15%, 28 day – 2446, 88.78%). The results showed no significant differences in mortality between any of the interventions studied; they are tabulated in tables 1 and 2 below and displayed graphically as Forest Plots 1 and 2. Heterogeneity was assessed as non-significant within the analyses using Cochran's Q. Pairwise comparisons for inconsistency are shown as Forest Plots 3 and 4 and these showed no inconsistency within the network. There was clustering of the papers around the average detected effect, indicating a lack of publication bias amongst the included papers.

Conclusions: On the results of these analyses, none of the alternative transfusion strategies are superior to the current standard of care in major haemorrhage, which is a balanced transfusion of component therapy. Accordingly, continuing use of a balanced transfusion as the standard of care represents the most likely best treatment option, until further evidence emerges to affect the current equipoise. The results of ongoing trials in this area are awaited for inclusion in these analyses.

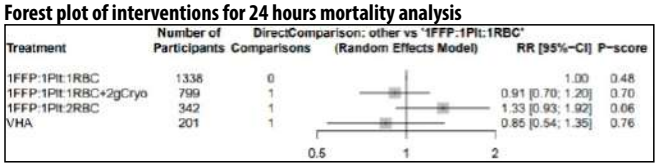
Keywords: Blood transfusion, major haemorrhage, plasma products, coagulopathy, pre- hospital, resuscitation

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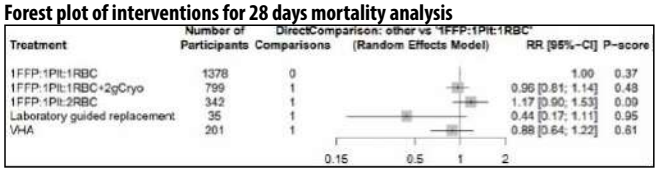
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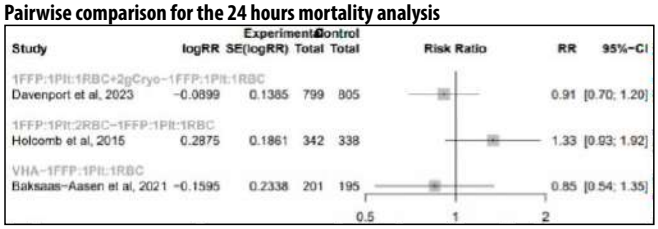
Forest plot of interventions for 24 hours mortality analysis



Forest plot of interventions for 28 days mortality analysis



Pairwise comparison for the 24 hours mortality analysis



Pairwise comparison for the 28 days mortality analysis

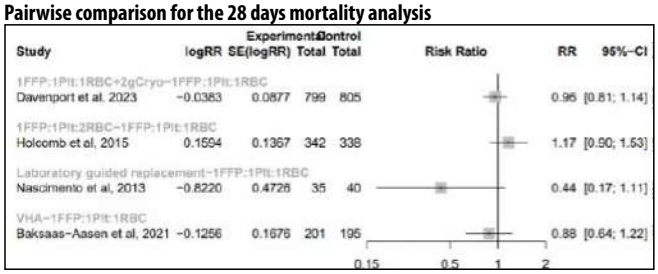


Table 1. Results for mortality at 24 hours analysis

Intervention	*Relative risk of death VS 1FFP:1plt:1RBC at 24 hours*	*p-socre*
1FFP:1plt:1RBC+ 2gCryo	0.91(95%CI 0.70, 1.20)	0.70
1FFP:1plt:2RBC	1.33(95%CI 0.93, 1.93)	0.06
VHA	0.85(95%CI 0.54, 1.35)	0.76

Table 2. Results for mortality at 28 days analysis

Intervention	*Relative risk of death VS 1FFP:1plt:1RBC at 28 days*	*p- score*
1FFP:1plt:1RBC+ 2gCryo	0.91(95%CI 0.70, 1.20)	0.48
1FFP:1plt:2RBC	1.33(95%CI 0.93, 1.93)	0.09
VHA	0.85(95%CI 0.54, 1.35)	0.61
Laboratory guided replacement	0.44(95%CI 0.17, 1.11)	0.95

Catastrophic Wound Management

OP-117

UFGSI REVISITED: VALIDATION & QUFGSI DEVELOPMENT FOR FOURNIER'S GANGRENE MORTALITY IN LARGE SINGLE-CENTER COHORT (280 CASES).

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[2]Acibadem University Faculty of Medicine, İstanbul Türkiye
[3]Medicana Private Hospital, Bursa Türkiye

Background: Fournier's gangrene (FG) is a life-threatening, rapidly progressive necrotizing soft tissue infection of the perineal regions, with reported mortality rates ranging to 40%. To aid clinical decision-making and risk stratification, the Fournier's Gangrene Severity Index (FGSI) was introduced by Laor et al., integrating vital signs and laboratory markers for prognosis estimation. Subsequently, Yilmazlar et al. proposed the Uludağ FGSI (UFGSI), an expanded version incorporating age and disease extent, based on an 80-patient series. Despite numerous studies suggesting UFGSI's superiority over FGSI in predicting mortality, some investigations have failed to confirm this advantage, underscoring the critical need for further validation in large-scale cohorts.

Methods: A retrospective analysis was conducted on 280 consecutive patients treated for FG at Uludağ University, representing the largest single-center cohort in the literature. After excluding three patients with ongoing treatment, 277 patients were included in the final analysis. The cohort was stratified into survivor and non-survivor groups. The predictive performances of FGSI, UFGSI, and a newly developed quick scoring system (qUFGSI) were evaluated using ROC curve analysis. Bootstrap comparisons assessed statistical differences. Multivariate associations between demographic and clinical parameters and mortality were explored. A simplified quick version of UFGSI (qUFGSI) was developed based on statistically significant mortality predictors for practical bedside application.

Results: The overall mortality was 22.55% (62/277 patients). UFGSI demonstrated superior discriminative power over FGSI (AUC 0.863 vs 0.800 p=0.043). Independent predictors of mortality were age ≥65 years (OR:3.26, p=0.00038) and female sex (OR:3.06, p=0.00077). Age was significantly different between groups (p=0.0000935), with an optimal cutoff of 67 years (AUC 0.68). Adjusting the UFGSI age threshold from ≥60 to ≥65 years in qUFGSI maintained age as a significant predictor. Female patients had a threefold higher mortality risk. This was further supported by significantly higher involvement scores in females (p = 0.0097), suggesting pathophysiological reasons. Both anatomical extent (p=0.00016) and UFGSI involvement score (p=0.00012) were significantly associated with mortality. Non-significant variables included serum potassium, creatinine, hematocrit, WBC count, diabetes mellitus, and infection etiology.

A simplified qUFGSI was constructed: Age<65 years=0 points, ≥65 years=3 points; Male sex=0 points, Female sex=3 points; Disease extent (Grade 1=1 point, Grade 2=2 points, Grade 3=6 points) . qUFGSI showed an AUC of 0.833. It was not statistically superior to UFGSI (p=0.762) but remained non-inferior to FGSI (p=0.29). UFGSI continues to demonstrate superior overall predictive performance and remains the reference standard.

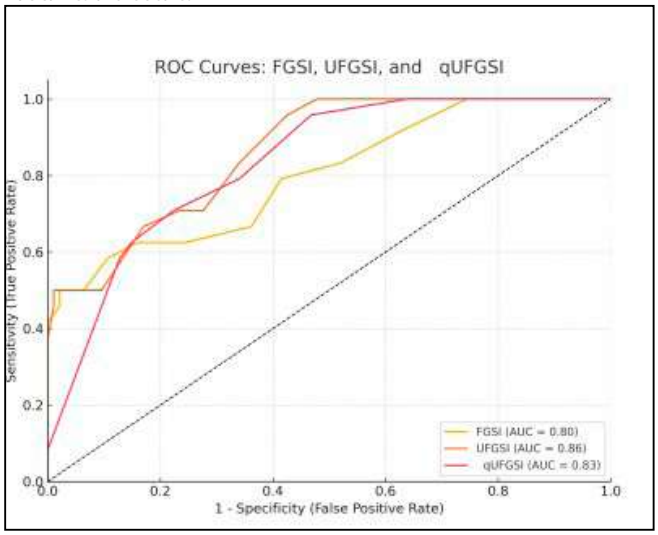
Conclusion: This study reaffirms UFGSI as the most reliable scoring system for predicting mortality in FG, due to its superior sensitivity, specificity. While qUFGSI offers a simplified, practical bedside tool with comparable accuracy, it should be considered complementary rather than substitutive, especially in resource-limited or time-critical settings. This validation on the largest single-center cohort to date reinforces UFGSI's clinical utility in emergency surgical decision-making and underscores its continued relevance in contemporary surgical practice.

Keywords: Fournier Gangrene, Risk Assessment, Validation Studies

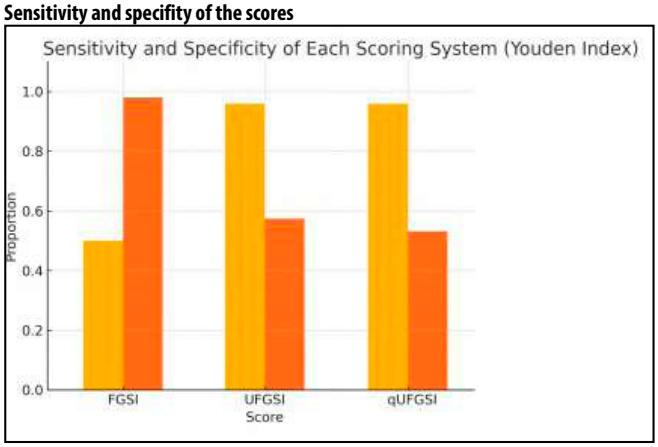
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ROC Curves of the Scores



Sensitivity and specifity of the scores



Acute Abdominal and Gastrointestinal Emergencies

OP-118

HUMAN VERSUS ARTIFICIAL INTELLIGENCE: DECISION-MAKING IN DIVERTICULITIS TREATMENT

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[2]Bagcilar Egitim Arastirma Hastanesi

Objectives: This study aimed to compare decision-making in sigmoid colon diverticulitis treatment between human clinicians and various large language models (LLMs), specifically evaluating how LLMs integrate patient data, including physical examination findings, blood work, ultrasound, and computed tomography scan reports. We hypothesized that LLM treatment decisions would differ significantly from human clinical judgments, with performance influenced by data completeness and LLM architecture.

Methods: A comparative design was employed using 80 anonymized patient cases collected between January 2024 and March 2025. Patients with diverticulitis and relevant clinical data were included. Standardized prompts were developed requesting treatment recommendations based on Hinchey classification and WSES guidelines. Each patient case was presented with progressive data disclosure: initial presentation with basic demographics and symptoms, followed by laboratory results, then imaging findings including CT measurements and classifications., and decisions were analyzed for internal consistency and agreement with human clinical decisions.

Results: The best-performing model, Gemini 2.5 Pro, achieved Cohen's Kappa of κ=0.487 (95% CI: 0.312-0.661) representing moderate agreement with human decisions, with disagreements in 29 patients (36.25%, 95% CI: 25.7-47.6%). Mean internal consistency across all LLMs was 87.05% (SD: 7.22%, range: 72.1-96.3%). Overlap with human decisions increased proportionally with the number of input parameters, exceeding 71% when all data were provided. Input incorporating Hinchey Stage and WSES classification alone yielded 49- 53% agreement. Medically fine-tuned models generally demonstrated higher Cohen's Kappa (mean κ=0.320) compared to general-purpose LLMs (mean κ=0.288), although top proprietary general LLMs sometimes outperformed some medically fine-tuned open-source models. Chi-squared tests of independence revealed significant differences between human and LLM decisions across all evaluated models (all p-values < 0.05).

Conclusion: Significant differences exist between human and LLM treatment decisions for colon diverticulitis, with LLMs tending towards more conservative interventions. While medically fine-tuned models generally show better alignment with human judgment, the completeness of input data and the specific LLM architecture critically influence AI performance. This highlights the potential of LLMs as decision support tools, but also underscores the need for further refinement and careful integration into clinical practice with continued human oversight, addressing challenges related to real-world data applicability, cost, and the inherent variability in human clinical practice.

Keywords: artificial intelligence, large language models, diverticulitis, decision, ai, llm

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Application Graphical Interface

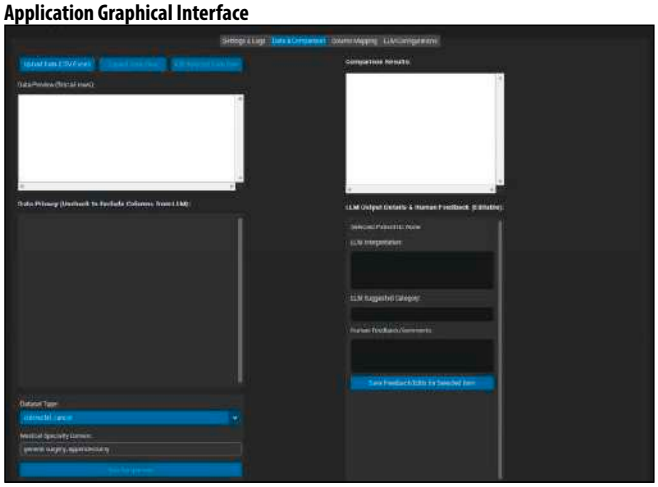


Table 1. Per LLM Performance

LLM Model	*Cohen's Kappa (κ)*	*LLM Internal Consistency (%)*	*Per-LLM Consistency Robustness (Decisions)*	*Patient Disagreements (N)*	*Patient Disagreements (%)*
General Purpose LLMs					
Gemini 2.5 Pro	0.487	78.25%	313/400	29	36.25%
Gemini 2.5 Flash	0.352	75.00%	300/400	39	48.75%
OpenAI's 03	0.391	79.25%	317/400	37	46.25%
Gemini 2.5 Flash Lite Preview 06-17	0.293	70.75%	283/400	47	58.75%
Microsoft's Phi-4 Reasoning Plus	0.373	77.75%	311/400	39	48.75%
Phi-4 Reasoning	0.311	72.75%	291/400	46	57.50%
Gemma 3 27B	0.281	90.50%	362/400	58	72.50%
Gemma 3 12B	0.181	98.25%	393/400	55	68.75%
Llama 3.3 70B Instruct	0.301	85.25%	341/400	51	63.75%
DeepSeek R1 671B	0.332	83.75%	335/400	47	58.75%
Llama 3.3 8B Instruct	0.151	92.00%	368/400	60	75.00%
Magistral Medium 2506	0.271	80.50%	322/400	53	66.25%
Mistral Small 3.2 24B Instruct	0.221	88.00%	352/400	50	62.50%
Llama 4 Maverick 17B 128E	0.252	86.50%	346/400	53	66.25%
Llama 4 Scout 17B 16E	0.201	89.25%	357/400	54	67.50%
Medical Fine- tuned Models					
MedGemma 27B Text IT	0.422	95.75%	383/400	36	45.00%
MedGemma 4B IT	0.397	97.25%	389/400	38	47.50%
Meditron 70B	0.381	91.75%	367/400	43	53.75%
Meditron 7B	0.312	93.25%	373/400	49	61.25%
JSL-Med-Mistral- 24B-V1-Slerp-i1	0.377	90.75%	363/400	41	51.25%
JSL-Med-Phi-3.5- Mini-v3-i1	0.297	94.00%	376/400	47	58.75%
Llama 3.1 8B UltraMedical-i1	0.242	96.50%	386/400	54	67.50%
JSL-MedQwen- 14B-reasoning-i1	0.342	89.75%	359/400	46	57.50%
MedLLaMA 13B	0.287	91.25%	365/400	51	63.75%
PMC_LLAMA_7B	0.212	93.75%	375/400	57	71.25%
HuatuoGPT-o1- 72B	0.362	88.75%	355/400	44	55.00%
HuatuoGPT-o1-8B	0.277	90.00%	360/400	52	65.00%
HuatuoGPT-o1-7B	0.202	92.50%	370/400	59	73.75%

Acute Abdominal and Gastrointestinal Emergencies

OP-119

POSTOPERATIVE OUTCOMES IN GERIATRIC PATIENTS UNDERGOING EMERGENCY COLORECTAL SURGERY: A 23-YEAR RETROSPECTIVE ANALYSIS FROM A HIGH-VOLUME CENTER

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Intra-abdominal infections (IAIs) are one of the leading causes of non-traumatic death in emergency surgery units, with an overall estimated mortality rate of 9.2%. Treatment involves the early star of empirical antibiotic therapy, source control of the infectious focus, and appropriate resuscitation. Antibiotic therapy is initially empirical and based on the local epidemiology of antibiotic resistance patterns.

Although still high, mortality from intra-abdominal infections has significantly decreased over the past 15 years due to advancements in diagnostic and therapeutic tools. Many patients who previously would not have survived now develop a clinical picture of chronic disease, characterized by persistent organ dysfunction, prolonged hospital stays, high resource utilization, and elevated short-term morbidity and mortality.

This study evaluated a cohort of patients undergoing emergency surgery with diagnoses of complicated acute diverticulitis, perforation due to colorectal carcinoma, or colonic ischemia. The aim is to describe the antibiotic resistance patterns of bacteria isolated in these patients and to assess the presence of a correlation between patient outcomes, immune status at diagnosis, and infection/antibiotic resistance status based on collected cultures.

Documented intra-abdominal infections in the examined patients were found to correlate with longer postoperative hospital stays but not directly with patient mortality. Specifically, prolonged hospital stay and postoperative courses were more commonly observed in patients with polymicrobial infections or infections caused by MDR organisms. This study confirms that the progressive increase in antibiotic resistance, combined with improved knowledge in the surgical and resuscitative management of sepsis of abdominal origin, has led to a reduction in mortality from these conditions over the years, albeit with a concurrent chronicization of these clinical scenarios.

Keywords: colorectal surgery, elderly, post-operative outcomes

Sepsis and Septic Shock

OP-121

EPIDEMIOLOGICAL ANALYSIS OF INTRA-ABDOMINAL INFECTIONS IN ITALY FROM THE ITALIAN REGISTER OF COMPLICATED INTRA-ABDOMINAL INFECTIONS-THE IRIS STUDY

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Intra-abdominal infections (IAIs) are common and severe surgical emergencies associated with high morbidity and mortality. In recent years, there has been a worldwide increase in antimicrobial resistance associated with intra-abdominal infections, responsible for a significant increase in mortality rates. To improve the quality of treatment, it is crucial to understand the underlying local epidemiology, clinical implications, and proper management of antimicrobial resistance, for both community- and hospital-acquired infections. The IRIS study (Italian Register of Complicated Intra-abdominal Infections) aims to investigate the epidemiology and initial management of complicated IAIs (cIAIs) in Italy. This is a prospective, observational, nationwide (Italy), multicentre study. Approved by the coordinating centre ethic committee (Local Research Ethics Committee of Pisa). All consecutively hospitalized patients (older than 16 years of age) with diagnosis of cIAIs undergoing surgery, interventional drainage or conservative treatment have been included. In total 4530 patients were included from 23 different Italian hospitals. Community acquired infection represented the 70.9% of all the cases. Among appendicitis, we found that 98.2% of the cases were community acquired (CA) and 1.8% Healthcare-associated (HA) infections. We observed that CA represented the 94.2% and HA 5.8% of Gastroduodenal perforation cases. The majority of HA infections were represented by colonic perforation and diverticulitis (28.3%) followed by small bowel occlusion (19%) and intestinal ischemia (18%). 27.8% of patients presented in septic shock. Microbiological Samples were collected from 3208 (70.8%) patients. Among 3041 intrabdominal sample 48.8% resulted positive. The major pathogens involved in intra- abdominal infections were found to be E.coli (45.6%). During hospital stay, empiric antimicrobial therapy was administered in 78.4% of patients. Amoxicillin/clavulanate was the most common antibiotic used (in 30.1% appendicitis, 30% bowel occlusion, 30.5% of cholecystitis, 51% complicated abdominal wall hernia, 55% small bowel perforation) followed by piperacillin/tazobactam (13.3% colonic perforation and diverticulitis, 22.6% cholecystitis, 24.2% intestinal ischemia, 28.6% pancreatitis). Empiric antifungal therapy was administered in 2.6% of patients with no sign of sepsis, 3.1% of patients with clinical sign of sepsis and 4.1% of patients with septic shock. Azoles was administered in 49.2% of patients that received empiric antifungal therapy. The overall mortality rate was 5.13% (235/4350). 16.5% of patients required ICU (748/4350). In accordance with mortality, it is important to highlight that 35.7% of small bowel perforation, 27.6% of colonic perforation and diverticulitis, 25.6% of intestinal ischemia and 24.6% of gastroduodenal complications required ICU. In

Conclusion: Antibiotic stewardship programs and correct antimicrobial and antimycotic prescription campaigns are nec-

essary to ulteriorly improve the adequacy of drug usage and reduce the resistances burden. This will help in improving the care and the cure of the next generations.

Keywords: intrabdominal infections, sepsis

Acute Abdominal and Gastrointestinal Emergencies

OP-123

EVALUATING ARTIFICIAL INTELLIGENCE PERFORMANCE AGAINST HUMAN CLINICIANS IN VOLVULUS MANAGEMENT

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Objectives: This study aimed to evaluate the diagnostic accuracy and treatment recommendation capabilities of Large Language Models (LLMs) compared to human clinical decisions in sigmoid volvulus management, hypothesizing that while AI could provide valuable decision support, it would not fully replicate experienced clinician judgment in complex cases.

Methods: A retrospective analysis of 36 patients with confirmed sigmoid volvulus treated at a tertiary hospital between January 2019 and December 2023. Patient data including demographics, comorbidities, laboratory parameters (white blood cell count, C-reactive protein, creatinine, albumin), imaging findings, and clinical outcomes were anonymized and presented to 28 distinct LLMs comprising both general-purpose and medically fine-tuned models. Each LLM received standardized prompts requesting diagnostic assessment and treatment recommendations. Internal consistency was evaluated through five identical queries per case. Performance was measured by agreement with actual human clinical decisions and inter-query consistency.

Results: Gemini 2.5 Pro demonstrated optimal performance with 77.8% agreement with human decisions (95% CI: 62.9-88.8%) and 94.8% internal consistency. Overall LLM accuracy ranged from 52.8% to 77.8%, with consistency between 80.3% and 94.8%. LLMs exhibited conservative bias, frequently recommending additional diagnostic workup when disagreeing with human management decisions. Medical fine-tuned models showed superior performance compared to general-purpose models (mean accuracy 71.2% vs 63.4%, p=0.032).

Conclusion: Large Language Models demonstrate promising capabilities in volvulus management decision support, though current performance remains inferior to experienced clinical judgment. The observed conservative bias suggests potential utility as safety-net decision support tools, particularly for less experienced clinicians, while highlighting the continued necessity of human oversight in complex surgical decision-making.

Keywords: Artificial Intelligence, Large Language Models, Sigmoid Volvulus, Clinical Judgment, Human Comparison, Decision Support, Accuracy,

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Acute Abdominal and Gastrointestinal Emergencies

OP-124

AI VS HUMAN: DECISION MAKING IN ACUTE CHOLECYSTITIS

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Objectives: This study aimed to evaluate the performance of various Large Language Models (LLMs) in clinical decision-making for acute cholecystitis patients managed conservatively, comparing their recommendations against those of human experts. The central hypothesis posited that LLMs would exhibit varying degrees of agreement with human clinical decisions, with some advanced models demonstrating performance comparable to human experts in this specific context.

Methods: This retrospective study involved a cohort of 50 unique patients diagnosed with acute cholecystitis who underwent conservative management at a single tertiary academic medical center between January 2025 and June 2025. Data fed to the LLMs included physical examination findings, blood test results, ultrasound, and CT and MRCP reports. The LLMs comprised both general-purpose and medically finetuned models. Internal consistency of each LLM was evaluated by posing five identical, programmatically generated queries with a clean context per patient. Decisions were then analyzed for agreement with human clinical decisions and for internal consistency.

Results: The LLMs demonstrated a wide range of performance in aligning with human expert decisions. The best-performing LLM, google/medgemma-27b-text-it, achieved an F1-score of 0.84 and a disagreement rate of 16.0% (8 disagreements) with human experts. Overall, the mean F1-score across all LLMs was 0.62, and the overall mean internal consistency across all LLMs was 87.63%. Chi-squared tests consistently yielded low p-values, such as $p=1.1\times10-4$ for google/medgemma-27b-text-it, indicating statistically significant differences in decision patterns between LLMs and human experts.

Conclusion: LLMs show considerable potential as decision support tools in the conservative management of acute cholecystitis, with some models achieving notable agreement with human experts. However, significant variability in performance across different LLMs underscores the critical need for rigorous validation and continued human oversight, particularly in nuanced therapeutic decisions involving antibiotic stewardship.

Keywords: Artificial Intelligence, Large Language Models, Acute Cholecystitis, Clinical Decision-Making, Human Expert Comparison

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Acute Abdominal and Gastrointestinal Emergencies

OP-126

PARADIGM OF THE HINCHEY CLASSIFICATION IN DIVERTICULITIS MANAGEMENT

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Diverticulitis is a common gastrointestinal condition, particularly in Western countries, and primarily affects the sigmoid colon. Although it traditionally affects older individuals, its incidence is increasing among younger populations due to low-fiber diets, sedentary lifestyles, and obesity. Early diagnosis and treatment are crucial to prevent complications such as abscess and peritonitis (1).

Material-Methods: In our study, 165 patients with CT-confirmed diverticulitis were retrospectively evaluated over a five-year period.

Results: Ages ranged from 20 to 85, with a mean of approximately 53. The male-to-female ratio was nearly equal (83 males, 82 females). Most patients had localized diverticulitis.

Laboratory results revealed elevated inflammatory markers, with a mean white blood cell (WBC) count of 13.54 $\times 10^9$/L and a C-reactive protein (CRP) level of 114.57 mg/L. Higher CRP levels were associated with more severe disease.

The majority of patients responded to conservative antibiotic and supportive therapy. However, 20 patients (12.1%) required surgical intervention, and 10 patients (6%) underwent CT-guided abscess drainage. These patients were classified according to the Hinchey classification. Among those who underwent surgery, 2 were classified as Hinchey 1b, 1 as Hinchey 3, 1 as Hinchey 4, and 16 as Hinchey 2. All patients who underwent percutaneous drainage were classified as Hinchey 2.

Discussion: Comparison with published literature shows that our data are generally consistent. Although our cohort had a slightly younger mean age (~50s), the gender distribution, disease location, and inflammatory parameters were in line with literature norms (Table 1) .Our surgical intervention rate (12.1%) was within the reported range (10–25%). The abscess drainage rate was slightly lower than literature averages (6% vs. 10–15%), which may be attributed to early diagnosis and the localized nature of disease (2).

Conclusion: Patients with Hinchey stage 2 and 3 diverticulitis, considered complicated cases, may be treated with antibiotics and conventional methods, but should be evaluated for surgery if there is no improvement. Most patients with Hinchey 1a and 1b diverticulitis can be managed successfully with antibiotic therapy alone.

Keywords: Diverticulitis, Hinchey classification

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Table 1.

Parameter	*Our Data*	*Literature Range*
Mean Age	~53s (Range: 20–85)	58–65 years
Gender Ratio	~50% Male (83/82)	Often slight female majority
Common Site	Sigmoid colon	Sigmoid colon (75–90%)
Mean CRP (mg/L)	114.57	50–150+
13.54	13.54	12–15
%12,1 (20/165)	%12,1 (20/165)	10–25%
%6 (10/165)	%6 (10/165)	~10–15% in complicated cases

Acute Abdominal and Gastrointestinal Emergencies

OP-127

ACUTE LEFT-SIDED COLONIC DIVERTICULITIS DURING THE COVID-19 PANDEMIC: COLITIS OR ISCHEMIA?

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Acute left-sided colonic diverticulitis (ALCD) continues to be a challenge in emergency surgery, with criteria for treatment selection that are not well defined. Additionally, the etiology of left colon perforation can sometimes be difficult to determine. During the recent pandemic, clinical guidelines from scientific communities focused on patients with ALCD infected with the SARS-CoV-2 virus, but there was a lack of sufficient evidence at that time to support these recommendations.

The aim of the study was to compare the epidemiology, severity, treatment methods, and outcomes of ALCD in patients infected with SARS-CoV-2 and patients with ALCD during the pandemic, compared to patients with ALCD outside of the pandemic period and without COVID-19.

Materials and methods: this retrospective study included patients from the Moscow Medical Clinical Center "Kommunarka", which functioned as a COVID hospital during the pandemic and later, until the present day, as a tertiary hospital. Between 2019 and May 1, 2022, 73 patients with ALCD were hospitalized during the COVID-19 pandemic. Between July 1, 2022 and May 31, 2025, 191 patients with ALCD were also hospitalized after the COVID-19 pandemic. A comparative analysis was conducted between both clinical groups based on the severity of ALCD, treatment received, outcomes, and results of histological examination.

Results: during the pandemic, there were very few patients with mild ALCD. Instead, there was a predominance of patients with CT signs of diffuse peritonitis (IIb - IV) (Table 1). After the pandemic, however, the situation changed, and most patients presented with mild forms of ALCD that did not require surgical intervention. Surgical treatment was used in almost 80% of patients during the pandemic, and only in 10% in the post-COVID period (Table 2). At the same time, operations in both groups had a very high mortality rate. However, the mortality during the pandemic was significantly higher - 38 patients (61.3%) died, compared to 7 (36.8%) in the post-COVID group. The role of ischemia in ALCD in patients with COVID-19 cannot be excluded.

Conclusion: the epidemiology, clinical manifestations, histological changes, and outcomes of ALCD during the Covid-19 pandemic were significantly different from those in the post-Covid period.

Keywords: acute left-sided colonic diverticulitis (ALCD), COVID-19, surgery, SARS-CoV-2

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Table 1. Distribution of patients by ALCD stage in groups.

Clinical group				*ALCD Stage (WSES 2020)*				
	0	Ia	Ib	IIa	IIb	III	IV	Total
Covid-19, n (%)	3 (3,8)	16 (20,5)	0 (0)	3 (3,8)	29 (37,2)	4 (5,1)	23 (29,5)	78
Post Covid-19, n (%)	79 (41,4)	64 (33,5)	14 (7,3)	13 (6,8)	12 (6,2)	1 (0,5)	8 (4,2)	191

Table 2. Frequency of surgical interventions in groups.

Stage	*Covid-19*	*Post Covid-19*
0, n (%)	1 (1,6)	0
Ia, n (%)	7 (11,3)	0
Ib, n (%)	0	1 (5,3)
IIa, n (%)	1 (1,6)	1 (5,3)
IIb, n (%)	28 (45,2)	8 (42,1)
III, n (%)	4 (6,5)	1 (5,3)
IV, n (%)	21 (33,9)	8 (42,1)
Total, n (%)	62 (79,5)	19 (9,9)

Acute Abdominal and Gastrointestinal Emergencies

OP-128

A RARE COMPLICATION THAT MAY BE ENCOUNTERED IN CASES PRESENTING WITH ACUTE CHOLECYSTITIS: CHOLECYSTODUODENAL FISTULA – A CASE REPORT

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Introduction: Cholecystoenteric fistulas are rare complications of chronic gallstone disease, occurring in less than 1% of cholecystectomy patients. Among them, cholecystoduodenal fistula (CDF) is the most common subtype, accounting for up to 76% of cases [3]. It usually results from chronic inflammation and pressure necrosis due to persistent gallstones eroding through the gallbladder wall into the duodenum [3]. Despite advances in imaging, CDF is often not diagnosed preoperatively due to its subtle clinical presentation and nonspecific imaging findings [2,3]. Pneumobilia, contracted gallbladder, and evidence of duodenal or biliary tract communication may suggest the diagnosis but are frequently overlooked or absent [1,3]. This report describes a case of CDF discovered intraoperatively during laparoscopic cholecystectomy in a patient with concomitant choledocholithiasis that was managed by ERCP.

Case Presentation: A 74-year-old female presented to the outpatient clinic with complaints of right upper quadrant abdominal pain and jaundice. On examination, there was tenderness in the right upper quadrant and icteric sclera. Laboratory results showed elevated ALT (320), AST (297), GGT (562), total bilirubin (7.61 mg/dL), direct bilirubin (6.13 mg/dL), WBC (17,000/mm^3), and CRP (92 mg/L).

Ultrasound revealed a contracted gallbladder with multiple stones and a dilated common hepatic duct (9 mm). MRCP confirmed multiple stones in a contracted gallbladder, choledocholithiasis (CBD up to 9.2 mm), and minimal intrahepatic biliary dilatation.

ERCP showed a periampullary diverticulum, multiple CBD stones (up to 10 mm), and a 12 mm dilated CBD. Sphincterotomy and balloon sweep were performed. No residual filling defects or bile leaks were observed. Liver function tests normalized post-ERCP.

Laparoscopic cholecystectomy was planned. Intraoperatively, a dense adhesion between the gallbladder and duodenum was found. A cholecystoduodenal fistula was identified and closed with a 45 mm stapler. A subtotal (fundus-first) cholecystectomy was performed due to severe inflammation. The postoperative period was uneventful, and the patient was discharged on postoperative day 5.

Discussion: Cholecystoduodenal fistula is a rare but clinically important entity, often diagnosed intraoperatively due to nonspecific signs. Imaging may miss the diagnosis, as seen in this case and others in the literature [1–3]. While traditionally managed with open surgery, laparoscopic techniques, when performed by experienced surgeons, are safe and effective [2,3].

Keywords: Cholecystoduodenal Fistula, Cholecystoenteric Fistula, Cholelithiasis, Choledocholithiasis, Endoscopic Retrograde Cholangiopancreatography (ERCP), Laparoscopy, Cholecystectomy, Biliary Tract Diseases, Acute Cholecystitis

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Acute Abdominal and Gastrointestinal Emergencies

OP-131

RECURRENT CHOLEDOCHOLITHIASIS AND ACUTE CHOLECYSTITIS DUE TO A REMNANT GALLBLADDER FOLLOWING LAPAROSCOPIC CHOLECYSTECTOMY: A CASE REPORT

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Introduction: Remnant gallbladder syndrome is a rare but clinically significant cause of recurrent biliary symptoms after cholecystectomy. It refers to the presence of residual gallbladder tissue capable of stone formation and inflammation. This condition often results from incomplete cholecystectomy due to technical difficulty or distorted anatomy [1,2]. We present a case of a 49-year-old male who developed recurrent choledocholithiasis and cholecystitis due to a remnant gallbladder approximately 18 months after undergoing laparoscopic cholecystectomy. Clinical Presentation

The patient initially presented to the emergency department in May 2025 with right upper quadrant pain, nausea, and vomiting. His medical history included a laparoscopic cholecystectomy performed in November 2023 at an another center. Laboratory results revealed elevated liver enzymes and hyperbilirubinemia, but normal white blood cell count and C-reactive protein. Abdominal ultrasonography showed a 37x17 mm structure in the gallbladder fossa consistent with remnant gallbladder, containing a 19 mm stone. Magnetic resonance cholangiopancreatography (MRCP) confirmed a 2x4 cm residual gallbladder with wall thickening and multiple intraluminal stones, along with two 4 mm stones in the distal common bile duct (CBD) and biliary duct dilation.

Intervention and Outcome: The patient underwent endoscopic retrograde cholangiopancreatography (ERCP). Following successful CBD cannulation and sphincterotomy, three stones were extracted from the distal CBD using a balloon catheter. No residual filling defects or contrast leakage were noted. The patient was discharged in stable condition with plans for elective surgery.

Fifteen days later, the patient returned with fever, chills, jaundice, and right upper quadrant pain. Laboratory studies showed a significant rise in CRP (111 mg/L) and elevated liver function tests. Repeat MRCP (Figure1) demonstrated a 20x12 mm remnant gallbladder containing millimetric stones without biliary dilation or CBD stones.

The patient was admitted and underwent laparoscopic completion cholecystectomy. Intraoperatively, dense adhesions were found in the previous gallbladder bed. A residual gallbladder was identified with proximal hemoclips. The remnant gallbladder was dissected to the cystic duct–CBD junction. The cystic artery was clipped and divided, followed by double clipping and division of the cystic duct near its insertion into the CBD. The gallbladder was extracted (Figure 2), and the patient was discharged without complications on postoperative day one.

Discussion: This case highlights the importance of recognizing remnant gallbladder as a potential cause of recurrent biliary symptoms post-cholecystectomy. Imaging with MRCP plays a crucial role in diagnosis, and ERCP may offer temporary relief in the setting of choledocholithiasis.

However, definitive treatment requires surgical excision of the remnant gallbladder to prevent further complications such as cholangitis, recurrent biliary colic, and pancreatitis [1,2,3].

While the overall incidence of symptomatic remnant gallbladder is low, clinicians must consider this entity when evaluating post-cholecystectomy patients with persistent or recurrent symptoms. As reported in recent literature, delayed diagnosis and treatment may lead to repeated hospitalizations and invasive interventions [4]. Early recognition and timely surgical management offer the best outcomes.

Keywords: Cholecystectomy Gallbladder Remnant Choledocholithiasis, Acute Cholecystitis, Postcholecystectomy Syndrome, Magnetic Resonance Cholangiopancreatography, Endoscopic Retrograde Cholangiopancreatography, Biliary Tract Diseases, Surgical Reoperation, Minimally Invasive Surgical Procedures

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Figure 1. Preoperative MRCP showing remnant gallbladder (red arrow). Axial MRCP image demonstrating a remnant gallbladder in the gallbladder fossa, containing millimetric stones. The red arrow highlights the residual gallbladder pouch, which was later confirmed intraoperatively.

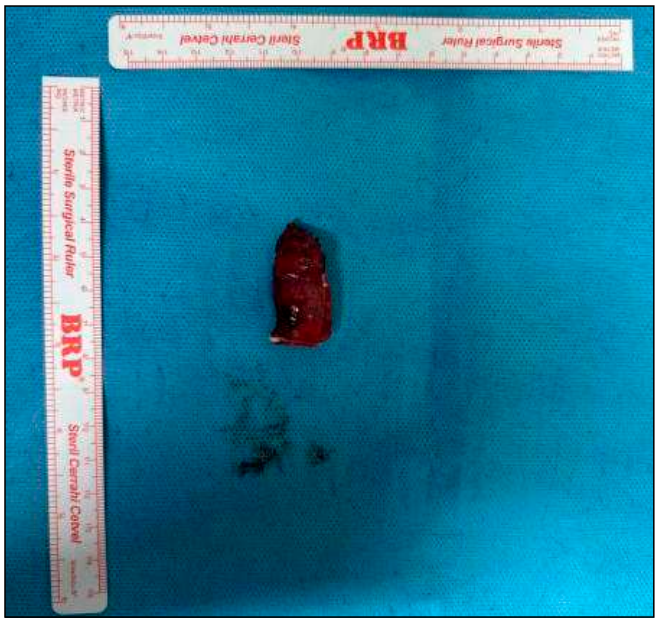


Figure 2. Gross specimen of the remnant gallbladder.

Surgical Infections

OP-133

EFFECT OF ANTIBIOTIC RESISTANCE IN PERIANAL ABSCESS CULTURES ON RECURRENCE

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Background: Perianal abscess is a common surgical condition, and the role of antibiotics in its management remains controversial. This study aims to evaluate whether antibiotic resistance influences recurrence rates in patients undergoing first-time surgical intervention for perianal abscess.

Methods: A retrospective review was conducted of patients who underwent surgery for perianal abscess at our institution's Trauma and Emergency Surgery Department between April 2017 and January 2025. Patients with recurrent or complicated perianal abscess were excluded. Demographic data, intraoperative culture results, and short-term follow-up outcomes were analyzed.

Results: Of 713 patients who underwent surgery for perianal abscess, 454 met the inclusion criteria. The cohort consisted of 106 women (23%) and 348 men (77%), with a median age of 41 years (range: 18–88). Intraoperative cultures were obtained in 283 cases (62%). All patients were empirically started on amoxicillin-clavulanic acid and discharged with oral therapy.

Culture results showed that 78 patients (37%) had amoxicillin-clavulanic acid-resistant organisms, 94 (44%) had sensitive strains, resistance status was not reported in 39 cases, and no growth was observed in 72 cultures. During follow-up, 150 patients (33%) experienced recurrence. Among the 85 patients from whom cultures were obtained at recurrence, 74 showed growth, and 35 of these (47%) had amoxicillin-clavulanic acid-resistant organisms.

Conclusion: Although the routine use of antibiotics after perianal abscess surgery is debated, our findings suggest that nearly half of the patients with recurrence harbored pathogens resistant to empirically administered amoxicillin-clavulanic acid. These results highlight the need for prospective studies to guide more targeted antibiotic use in perianal abscess management.

Keywords: abscess, recurrence

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Acute Abdominal and Gastrointestinal Emergencies

OP-134

ACUTE ABDOMEN WITH MASSIVE CHYLOUS ASCITES DUE TO MESENTERIC TORSION IN A POST-SUBTOTAL GASTRECTOMY PATIENT: A CASE REPORT

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Introduction: Mesenteric volvulus is a rare but potentially life-threatening cause of acute abdomen in adults. Although more commonly seen in pediatric patients, adult cases—particularly in those with prior abdominal surgeries—are increasingly recognized. Chylous ascites (CA), the accumulation of triglyceride-rich lymphatic fluid in the peritoneal cavity, is an even rarer presentation of acute abdomen, often associated with malignancy, trauma, cirrhosis, or surgical injury to lymphatics [2,3]. Here, we report a case of CA due to mesenteric torsion in a 57-year-old male with prior subtotal gastrectomy and Roux-en-Y reconstruction for gastric cancer.

Case Presentation: The patient presented with acute abdominal pain, nausea, and vomiting. He had undergone subtotal gastrectomy with D2 lymphadenectomy in 2019, followed by 15 courses of chemotherapy and radiotherapy. Examination revealed diffuse tenderness without guarding or rebound. Laboratory tests were normal. Contrast-enhanced abdominal CT showed twisting of mesenteric vessels at the root, consistent with volvulus [1] (Figure 1).

Surgical Findings and Procedure: Emergency laparotomy via reopening of the prior incision revealed ~2 liters of milky fluid (Figure 2), which was aspirated for analysis. Exploration showed massive CA and mesenteric congestion involving jejunal and ileal loops (Figure 3). Dense adhesions were found between the colon, diaphragm, and remnant stomach and were meticulously dissected.

Methylene blue was administered via nasogastric tube; no leak was observed. Intraoperative endoscopy showed an intact anastomosis without signs of recurrence and ulceration. The previous jejunojejunostomy was twisted and taken down using a stapler. The small bowel was fully detorsed. A new side-to-side isoperistaltic anastomosis was created ~10 cm distal to the original site. A drain was placed near the new anastomosis.

Postoperative Course: The postoperative course was uneventful. The patient tolerated oral intake. Drain was removed on postoperative day five, and he was discharged in stable condition. Culture of the ascitic fluid was negative.

Discussion and Conclusion: This case illustrates a rare cause of acute abdomen involving mesenteric volvulus and CA, especially in the context of prior gastrointestinal surgery. Though CA is commonly linked with malignancy or trauma, mechanical causes such as torsion can also result in lymphatic disruption [2,4]. While conservative treatment may suffice in chronic CA, surgical exploration is essential in acute settings [2,3,4]. Post-gastrectomy volvulus is rare but should be considered in similar clinical scenarios [1]. Early imaging and timely surgical intervention are critical to avoid ischemic complications and ensure full recovery.

Keywords: Mesenteric Volvulus, Chylous Ascites, Acute Abdomen, Subtotal Gastrectomy

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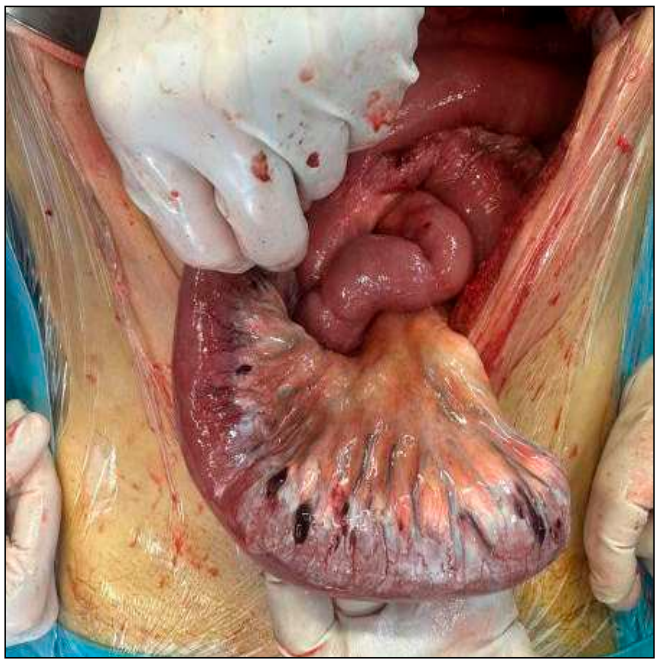


Figure 3. Small bowel segment showing chylous congestion secondary to mesenteric torsion.

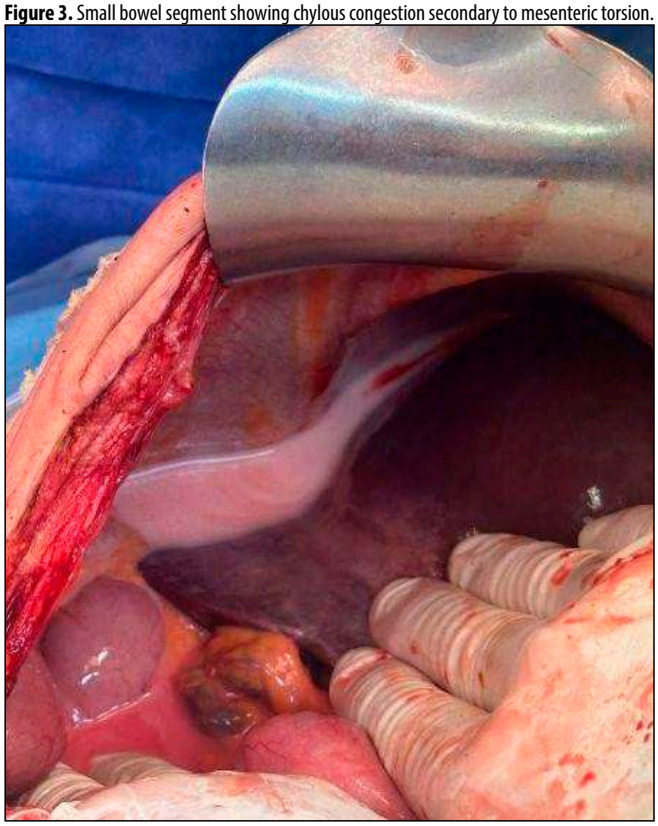


Figure 2. Intraoperative view showing massive chylous ascites in the peritoneal cavity.

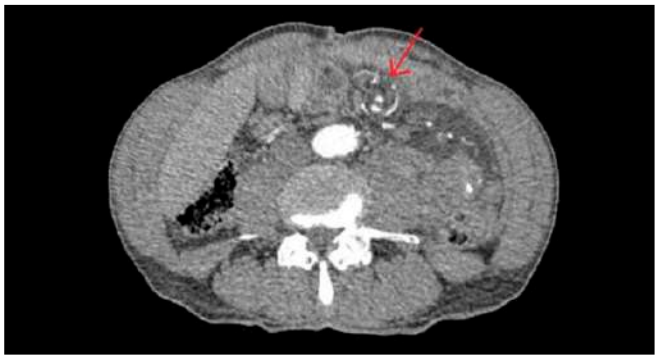


Figure 1. Axial CT image demonstrating the 'whirl sign' of twisted mesenteric vessels, indicated by the red arrow, consistent with mesenteric volvulus.

Burn Management

OP-135

MORTALITY OUTCOMES IN A TERTIARY BURN INTENSIVE CARE UNIT: A RETROSPECTIVE SINGLE-CENTER COHORT STUDY

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Background: Major burn injuries are traumatic events with high morbidity and mortality rates in all age groups. In this study, the mortality rates of patients treated in our center's burn intensive care unit and the clinical factors associated with mortality were analyzed in light of current literature data.

Materials and Methods: All patients hospitalized in a tertiary burn intensive care unit between January 2024 and January 2025 were evaluated retrospectively. The demographic characteristics of the patient's burn etiology, total burn percentage, and degree, laboratory findings, need for surgical intervention, and clinical data were analyzed.

Result: A total of 235 patients were included in the study. Mortality occurred in 6 patients (2.5%) during the follow-up period. The median age of patients with mortality was 64.5 years (38- 81), and 66.6% were male. All these cases had 3rd degree burns in the 40%-80% total body surface area. The etiology of the burn was flame burn in all patients, and 83.3% of the cases were burns caused by chemical explosions. The common characteristics of patients with mortality were advanced age, high total body surface area, 3rd degree deep burns, sepsis, and long intensive care unit stay. Causes of death were mostly recorded as sepsis and multiple organ failure.

Conclusion: In our study, the mortality rate in major burn patients was 2.5%. Elderly patients, high total body surface area, deep burns, and sepsis were the determining factors in cases with mortality. Early diagnosis, effective infection control, and intensive care management are critical in reducing mortality.

Keywords: Burn, Intensive Care, Mortality

Acute Abdominal and Gastrointestinal Emergencies

OP-136

IS ROUTINE CHOLANGIOGRAPHY A SAFE AND RELIABLE APPROACH?

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Bagcilar Traning and Research Hospital

Background: This study aims to investigate the impact of routine cholangiography on asymptomatic patients who underwent percutaneous cholecystostomy (PCC) due to acute cholecystitis (AC).

Introduction: Acute cholecystitis (AC) is observed in 3–10% of patients presenting to the emergency department with abdominal pain. Gallstones are present in approximately 60% of patients with acute abdominal pain; however, AC develops in fewer than 50% of these cases. About 90–95% of AC cases are calculous, while 5–10% are acalculous. Its incidence increases with age. The female-to-male ratio is 3:1 before age 50 and decreases to 1.5:1 after age 50. The mortality rate in AC ranges from 0% to 10% (1–6).

Methods: The study included 190 patients who were treated with PCC for AC in our clinic between 2020 and 2024. Patients who underwent routine cholangiography within 30 days after discharge while asymptomatic were compared with those who were only followed clinically.

Results: The cholangiography group (n = 125) and the control group (n = 65) were similar in terms of age, comorbidities, and clinical presentation. Over an average follow-up period of 12 months, the rate of readmission due to biliary disease was lower in the cholangiography group compared to the control group (24.3% vs. approximately 43.7%, p = 0.05). Mortality was slightly higher in the group without cholangiography, but the difference was not statistically significant.

There was no significant difference between the groups regarding time to drain removal, cholecystectomy rate, or time to surgery.

Conclusion: In asymptomatic patients undergoing PCC for AC, routine cholangiography may help reduce biliary disease-related readmissions and complications without delaying further treatment.

Keywords: cholangiography, percutaneous cholecystostomy, acute cholecystitis

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Acute Abdominal and Gastrointestinal Emergencies

OP-137

CHOLANGITIS AND ERCP: A COMBINED DIAGNOSTIC AND THERAPEUTIC PERSPECTIVE

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Bagcilar Traninig and Research Hospital

Objective: The aim of this analysis is to evaluate the effectiveness of urgent endoscopic retrograde cholangiopancreatography (ERCP) based on the severity of acute cholangitis and to highlight its potential benefits for patients in terms of morbidity and mortality.

Introduction: Acute cholangitis is an inflammatory disease of the biliary tract. While it may present mildly, it can also manifest as a severe clinical picture leading to sepsis, systemic inflammatory response syndrome (SIRS), and consequent multiple organ failure (1). The most common cause is cholestasis due to bile duct stones (2). Other causes include obstructive benign or malignant diseases (10–30%), sclerosing cholangitis, prior biliary interventions, and reflux following sphincterotomy (3).

Before the 1980s, the mortality rate of acute cholangitis was over 50%; however, with advances in diagnostic and therapeutic methods and increased accessibility, the mortality rate now ranges between 5% and 30%, depending on disease severity and accompanying comorbidities (4, 5).

Although Charcot described acute cholangitis long ago, there is still no gold standard diagnostic method (6). Traditionally, the diagnosis is based on Charcot's triad, which includes fever, jaundice, and right upper quadrant (RUQ) abdominal pain. More severe cases also include hypotension and altered mental status, completing Reynolds' pentad (7). However, both sets of criteria have low sensitivity (8).

Tokyo Guidelines (TG18) Diagnostic Criteria for Acute Cholangitis

A. Systemic Inflammation
1. Fever and/or shaking chills
2. Laboratory data: Evidence of inflammatory response
B. Cholestasis
1. Jaundice
2. Laboratory data: Abnormal liver function tests
C. Imaging
1. Biliary dilatation
2. Evidence of the etiology on imaging (stricture, stone, or stent)

· Suspected diagnosis: One item from A + one item from either B or C

· Definite diagnosis: One item from A, one item from B, and one item from C

According to the Tokyo Guidelines, antibiotic therapy is sufficient in mild cases of cholangitis, and biliary drainage is not required. However, in patients who do not respond to initial treatment, endoscopic drainage should be considered. In moderate cholangitis, early endoscopic intervention should accompany antibiotic therapy. In severe cases with organ failure, emergency endoscopic procedures and antibiotics are required along with respiratory and circulatory support. If etiological treatment is necessary, it should be performed after the patient's condition is stabilized (11, 12).

Method: Data such as age, gender, race, presence of fever, RUQ pain, altered mental status, white blood cell count, C-reactive protein, total bilirubin, alkaline phosphatase, aspartate transaminase, alanine transaminase, abdominal imaging

findings, ERCP timing and findings were collected from the hospital's electronic medical record system.

Results: In our study, urgent endoscopic intervention (within 24 hours) in patients with acute cholangitis, particularly in severe cases, was associated with shorter hospital stays and lower rates of mortality and morbidity.

Conclusions: Individualizing the endoscopic drainage technique based on the severity and etiology of cholangitis, the patient's overall condition, comorbidities, and concurrent medical treatments will contribute to reducing morbidity and mortality rates.

Keywords: ERCP, Cholangitis

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Acute Abdominal and Gastrointestinal Emergencies

OP-138

OBSTRUCTIVE COLORECTAL CANCERS: NOT A CONTRAINDICATION FOR ONCOLOGIC RESECTION

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Bagcilar Traning and Research Hospitall

Background: While most colorectal cancer patients present for elective surgical management, a substantial proportion require urgent intervention, most commonly due to obstruction or perforation. The impact of emergency surgery on oncologic adequacy remains debated (1).

Objective: To compare surgical and oncologic outcomes between patients undergoing emergency surgery for obstructive colorectal cancer and those undergoing elective resection.

Material - Methods: A retrospective analysis was conducted on patients treated at our institution between 2018 and 2024. This study was approved by the ethics committee of our hospital. Two cohorts were compared: 200 patients who underwent emergency surgery for obstructive colorectal cancer and 394 patients who underwent elective colorectal cancer surgery. Demographics, intraoperative findings, postoperative outcomes, lymph node harvest, and mortality rates were evaluated.

Results: Emergency surgeries accounted for 33.7% of all colorectal cancer resections. Mean age was similar between emergency and elective groups (65.4 vs. 62.6 years), as were mean BMI values (26.47 vs. 27.7 kg/m^2) and gender distribution (male predominance: 67% vs. 64.5%).

The mean number of lymph nodes retrieved did not differ significantly between groups (23.7 vs. 23.9). However, the mean number of metastatic lymph nodes was significantly higher in the emergency cohort (3.5 vs. 1.78; $p < 0.05$). Early postoperative mortality was 9.5% in the emergency group versus approximately 6% in the elective group.

On univariate analysis, ASA score III–IV, tumor perforation, and occurrence of multiple postoperative complications were significant predictors of early postoperative mortality.

Multivariate analysis identified only tumor perforation and multiple postoperative complications as independent risk factors.

Discussion: Our emergency surgery rate exceeded that reported in the literature, likely reflecting the sociocultural and economic circumstances of our patient population (2). Perforation was present in 20% of emergency presentations. Despite the high acuity, postoperative mortality rates were comparable to international series. Importantly, lymph node yield—a key determinant of oncologic adequacy—was similar between emergency and elective resections.

Conclusion: Emergency surgery for obstructive colorectal cancer, when performed in accordance with oncologic principles, does not compromise oncologic adequacy. Surgeons in colorectal units can achieve comparable lymph node harvests and maintain acceptable mortality rates, even in the emergency setting.

Keywords: Colorectal cancer, obstruction, emergency surgery, oncologic resection, lymph node harvest, mortality.

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https://doi.org/10.3390/jcm14010126

Acute Abdominal and Gastrointestinal Emergencies

OP-139

NON-OPERATIVE MANAGEMENT FAILURE PREDICTION IN ADHESIVE SMALL BOWEL OBSTRUCTION – A DEEP LEARNING-DRIVEN MODEL FROM A MULTICENTRIC SERIES.

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Introduction: Adhesive small bowel obstruction (SBO) is a common surgical emergency, often initially managed with non-operative management (NOM) when no signs of complication are evident. While NOM can be effective in up to 90% of

cases, delayed surgical intervention after its failure is associated with increased morbidity and mortality. Despite multiple efforts, no reliable tool exists to predict NOM failure early. Artificial intelligence (AI), and particularly deep convolutional neural networks (DCNNs), have recently shown promise in extracting clinically relevant information from medical imaging. This multicentric prospective study aims to develop and externally validate an AI-driven model based on CT scan data—and a complementary multimodal model including clinical, biochemical, and radiological variables—to predict NOM failure in patients with non-complicated adhesive SBO.

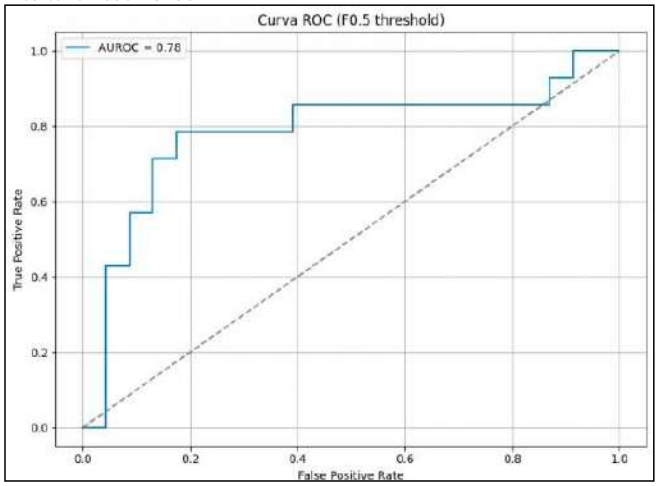
Methods: We enrolled 340 consecutive patients with adhesive SBO initially treated with NOM across three hospitals in France and Italy between May 2022 and October 2024. After excluding cases lacking CT imaging, 276 contrast-enhanced CT scans, performed at emergency department admission, were used to train and test a 3D DCNN based on the MedNet architecture. Segmentation of the small bowel was automated via TotalSegmentator, followed by cropping, normalization, resizing, and data augmentation. The dataset was split 80/20 for training and testing. Model performance was assessed using AUROC, accuracy, precision, recall, F1/F0.5-scores, log-loss, and Cohen's Kappa. External validation was performed using data from 40 patients from an independent hospital. Additionally, we developed a late fusion model by integrating the DCNN output with selected clinical, biochemical, and radiological features using a multi-layer perceptron.

Results: NOM failure occurred in 120 patients (31.6%). The imaging-only DCNN achieved excellent results in internal validation (AUROC 0.94) and good performance on external validation (AUROC 0.78). Using the optimal threshold (Max F0.5-score), external accuracy and precision improved to 0.81 and 0.77, respectively. Virgin abdomen and bowel volvulus emerged as independent predictors of NOM failure. The multimodal model—despite incorporating variables statistically associated with NOM failure in logistic regression—did not outperform the imaging-only model.

Conclusion: This study is among the first to both develop and externally validate an AI model predicting NOM failure in non-complicated adhesive SBO, leveraging diagnostic CT volumes and rigorous methodology. While the DCNN model alone demonstrated strong predictive performance, adding clinical and radiological data did not significantly improve accuracy. These findings suggest that AI-based imaging analysis may aid early, personalized decision- making in abdominal emergencies. Further prospective validation is needed before clinical integration.

Keywords: Artificial Intelligence, small bowel obstruction, adhesive small bowel obstruction, non-operative management, emergency surgery, Deep Learning.

Predictive model AUROC



Predictive model Precision-Recall curve

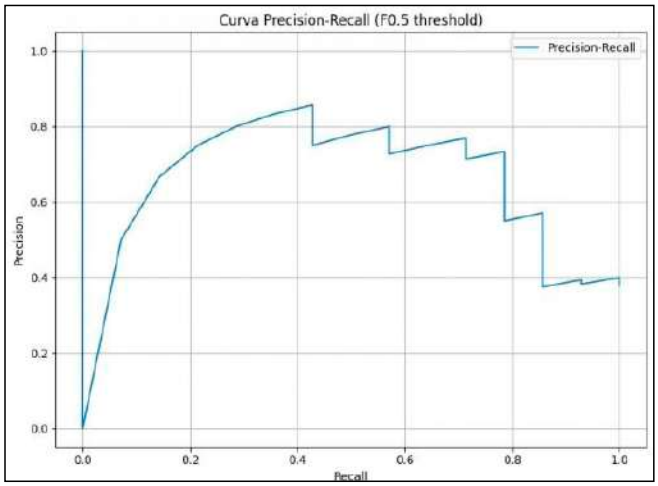


Table 1.

	Train	*Test*	*Validation*
Accuracy	0,98	0,89	0,81
Precision	0,98	0,91	0,77
Recall	0,99	0,85	0,71
F1-score	0,98	0,88	0,74
F0,5-score	0,98	0,9	0,76
AUROC	0,99	0,94	0,78
Log-loss	0,06	0,36	0,67
Cohen kappa	0,97	0,78	0,6

Acute Abdominal and Gastrointestinal Emergencies

OP-141

THE IMPACT OF OPEN AND LAPAROSCOPIC SURGERY ON CLINICAL OUTCOMES IN PEPTIC ULCER PERFORATIONS

Sena Çağla Özden, Mustafa Mert Uzunçam, Özlem Zeliha Sert
Haseki Training and Research Hospital

Introduction: Peptic ulcer perforation is one of the most common emergency surgical conditions of the upper gastrointestinal tract. With the advancement of minimally invasive techniques,

laparoscopic surgery has become increasingly utilized in emergency abdominal procedures. However, the safety and efficacy of laparoscopic intervention in peptic ulcer perforations remain a matter of debate. This study aims to compare clinical outcomes between open and laparoscopic surgical approaches in patients who underwent surgery due to peptic ulcer perforation.

Methods: In this retrospective study, a total of 284 patients operated on for peptic ulcer perforation were analyzed. Variables including age, gender, body weight, comorbidities, lifestyle habits (smoking, alcohol, substance use), type of surgery (open/laparoscopic), postoperative complications (Clavien-Dindo classification), length of hospital stay, intraoperative pathology, control gastrin/serotonin (G/S), and biopsy (BX) results were evaluated.

Statistical analyses were performed using SPSS version 27.0. Normality of distribution was assessed via the Kolmogorov-Smirnov and Shapiro-Wilk tests. The Mann-Whitney U test and Chi-square test were used for group comparisons. A p-value of less than 0.05 was considered statistically significant.

Results:

The male-to-female ratio was 82.4% to 17.6%, respectively.

The mean age was 43.4 ± 17.6 years, and the mean body weight was 68.3 ± 12.9 kg.

Of all patients, 75% underwent open surgery and 25% underwent laparoscopic surgery.

Comparison of the two surgical groups revealed the following:

Patients in the laparoscopic group were significantly younger (36.0 ± 12.6 vs. 45.9 ± 18.3; p=0.000).

Clavien-Dindo scores were significantly lower in the laparoscopic group (p=0.000).

The hospital stay was significantly shorter in the laparoscopic group (6.1 ± 4.4 vs. 9.9 ± 13.1 days; p=0.000).

Intraoperative pathology positivity was significantly lower in the laparoscopic group (1.4% vs. 14.1%; p=0.003).

No significant differences were found between the groups in terms of gender, body weight, comorbidities, lifestyle habits, control G/S, or biopsy results (p>0.05).

Conclusion: This study suggests that laparoscopic surgery is a safe and effective option for selected patients with peptic ulcer perforation. The laparoscopic group was characterized by a younger age profile, lower complication rates, and shorter hospital stays. However, open surgery remains a reliable approach for older patients or those with significant comorbidities. Further prospective randomized studies are required to validate these findings.

Keywords: peptic ulcus, perforation, laparoscopic surgery

Anastomotic Leaks

OP-142

AN EVALUATION OF COLOSTOMY TYPES, INDICATIONS, AND COMPLICATIONS: A RETROSPECTIVE ANALYSIS OF 294 PATIENTS

Sena Çağla Özden, Mustafa Mert Uzunçam, Özlem Zeliha Sert

Haseki Training and Research Hospital

This study retrospectively analyzed 294 patients (197 males, 97 females) who underwent colostomy. The mean age was 62.1 years, and the average hospital stay was 8.3 days. Among all colostomies, 29.5% were loop colostomies and 71.5% were Hartmann's procedures.

Emergency surgery was required in 76.1% of patients. Regarding etiology, 185 cases were due to malignant and 109 to benign conditions. The most common indications for colostomy creation were obstructive masses (n=87), distal rectal tumors (n=61), bowel perforation (n=57), and anastomotic leakage (n=28).

Colostomy-related complications were observed in 40 patients, 72.5% of which occurred in those with Hartmann's colostomy. The most frequently encountered complications included stoma retraction, detachment, prolapse, necrosis, and stricture formation. The mean time to stoma closure was 10.7 months. A total of 87 colostomies were reversed, with a complication rate of 21.3% following reversal. Notably, 79% of these complications occurred after the reversal of a Hartmann's colostomy.

Conclusion: Hartmann's procedure, although commonly performed in emergency settings, appears to be associated with a higher rate of both early and late complications compared to loop colostomy. Careful patient selection, meticulous surgical technique, and close postoperative follow-up are essential to reduce morbidity related to stoma creation and reversal.

Keywords: colostomy, emergency surgery, complication

Acute Abdominal and Gastrointestinal Emergencies

OP-145

DIAGNOSTIC ACCURACY OF FOCUSED APPENDICEAL CT: A SYSTEMATIC REVIEW AND META- ANALYSIS

Benjamin Samra, Badrun Shurovi

University Hospitals Birmingham

Introduction: The diagnosis of acute appendicitis continues to rely heavily on computed tomography (CT) to reduce negative appendicectomy rates, despite the development of clinical scoring systems such as the Alvarado score, the Appendicitis Inflammatory Response (AIR) score, and structured diagnostic pathways like CLARITY. This growing reliance on CT raises concerns regarding radiation exposure and resource utilization. Therefore, this study aimed to evaluate the diagnostic accuracy of faster, lower-radiation CT protocols that focus on the right lower abdomen and the appendix region.

Methods: A systematic search was conducted of databases including the Cochrane Library, PubMed, MEDLINE, EMBASE, EMCARE, and Ovid MEDLINE. After deduplication and abstract and full text screening, 22 studies were included, of which 15 were ultimately suitable for quantitative data extraction. Sensitivity, specificity, and confusion matrices were obtained, along with scanner models, scan parameters, and any reported estimated doses. Meta-analysis of diagnostic accuracy was performed using the OpenMeta[Analyst] tool, applying a bivariate model and hierarchical summary receiver operating characteristic (HSROC) analysis.

Methodological quality was evaluated with the Quality Assessment of Studies of Diagnostic Accuracy – Revised (QUADAS-2) tool.

Results: Included studies displayed considerable heterogeneity in design and patient selection, including both prospective and retrospective methodologies. Of the 15 studies, six used non- contrast CT, while the remaining nine used various combinations of intravenous, oral, or rectal contrast. The overall pooled sensitivity and specificity were 94.5% and 94.6%, re-

spectively. Subgroup analysis revealed that contrast-enhanced CT significantly outperformed non-contrast CT, with sensitivity of 97.8% vs 85.8% and specificity of 96.9% vs 85.8%. Two studies reported estimated doses for their protocols: one reported a reduction to 3.6 mSv compared to 7 mSv for a full CT abdomen/pelvis (CTAP), while the other reported a reduction from 9 mSv to 7.7 mSv.

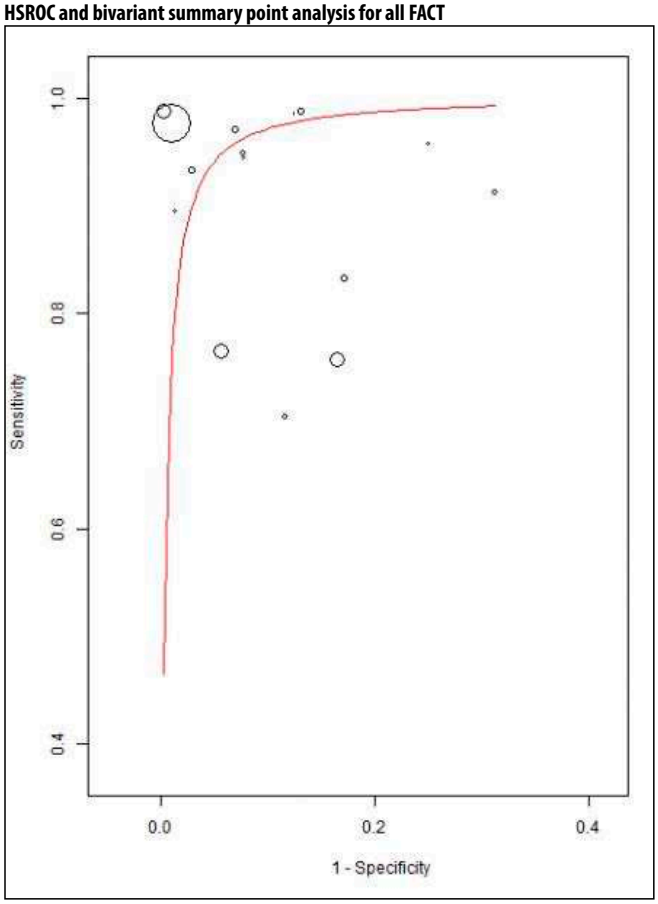
Key Conclusions: These findings suggest that focused appendiceal CT (FACT) offers a high diagnostic yield, showing no significant difference in sensitivity and specificity compared to conventional CTAP (94.5% vs 95% for sensitivity, 94.6% vs 94% for specificity) as reported in a previous Cochrane review. However, there was a significant difference between contrast-enhanced and non- enhanced FACT. Overall reporting of estimated radiation dose was poor, and the information provided in each study regarding scanner models and scan parameters was insufficient to calculate exact radiation doses. Based on the two studies that reported dosage and estimates derived from scanner details and protocols, the estimated radiation reduction is approximately one-third compared to conventional CTAP. One of the main limitations of our study is the heterogeneity of study design and patient populations, as well as the low methodological quality of the underlying studies. Overall, FACT is a safe and effective protocol with no significant difference compared to conventional CTAP for diagnosis of appendicitis.

Keywords: Appendicitis, diagnostic imaging

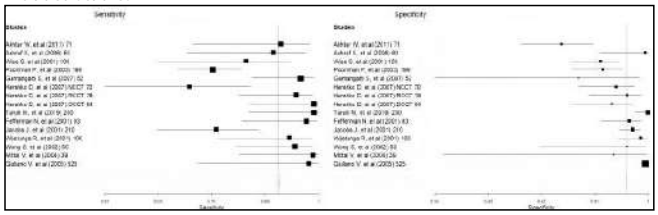
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HSROC and bivariant summary point analysis for all FACT



Summary of individual calculated sensitivity and specificity analysis for all included studies



Acute Abdominal and Gastrointestinal Emergencies

OP-146

NON-OPERATIVE VS OPERATIVE MANAGEMENT OF SMALL BOWEL OBSTRUCTION IN VIRGIN ABDOMEN: A SYSTEMIC REVIEW AND META-ANALYSIS

Asma Majid, **Ghaida Alaraibi**, **Beshoy Elkomos**
Royal United Hospital Bath, United Kingdom

Background: Small bowel obstruction (SBO) is a commonly diagnosed condition and remains one of the surgical emergencies associated with high morbidity and mortality rates. Surgical exploration is still considered mandatory in cases of SBO in a virgin abdomen with no prior surgical history; however, numerous controversial studies and evolving management approaches have led to shifts in clinical practice

Objective: This paper compares operative and non-operative management of small bowel obstruction in patients with a virgin

abdomen and highlights the successful outcomes associated with non-operative management.

Methods: We systematically searched PubMed and the Cochrane Library from 2008 to 2024 for all studies comparing operative management vs non-operative management in SBO in virgin abdomen.

Results: Ten studies enrolling 658 patients were included in this meta-analysis, comparing operative and non-operative management for SBO in a virgin abdomen. Eight studies reported outcomes of non-operative management, with a pooled effect size of 14.01 (95% CI, P <0.00001) in favour of successful non-operative management.

Conclusions: This systematic review and meta-analysis suggest that small bowel obstruction (SBO) in a virgin abdomen can often be managed non-operatively. However, the wide confidence intervals highlight imprecision likely due to small sample sizes, heterogeneity, and potential biases such as selection bias. Ongoing research and clinical experience are essential to refining management strategies, but the emerging trend toward less invasive care represents a significant advancement in SBO treatment.

Keywords: Virgin Abdomen Non operative management Operative management Small bowel obstruction

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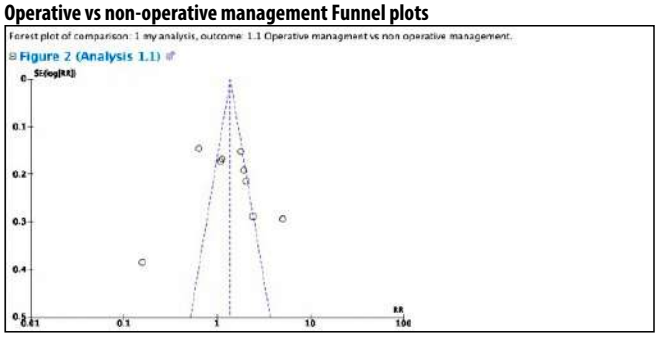
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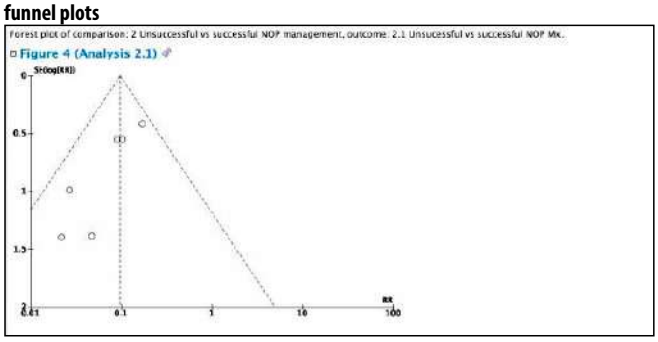
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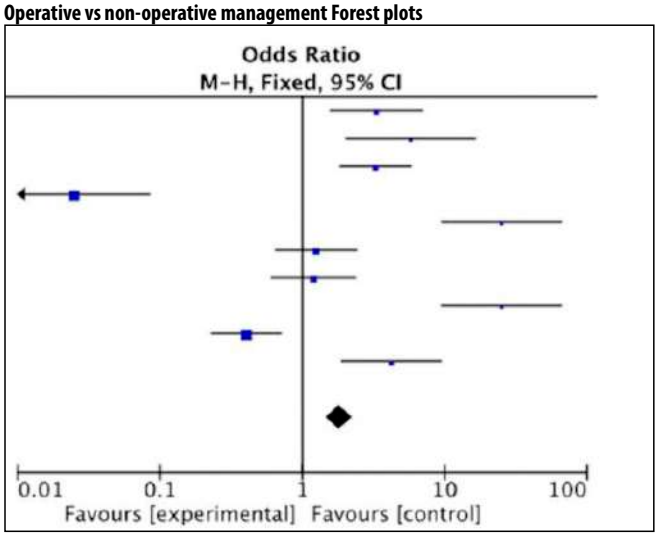
Operative vs non-operative management Funnel plots



Successful non operative managment vs unsuccessful non operative management funnel plots



Operative vs non-operative management Forest plots



Successful non operative managment vs unsuccessful non operative management forest plots

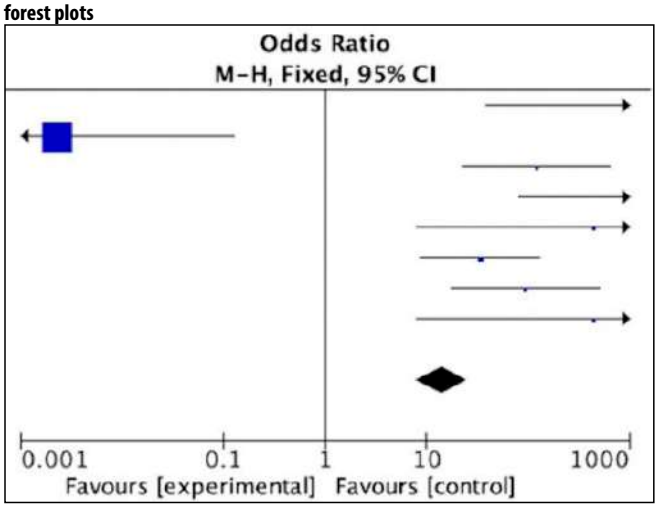


Table 1. Operative vs Non -operative management

Study or Subgroup	Operative management events	Operative management total	Non-operative management events	Non-operative managment total	Weight	Odds Ratio, M-H, Fixed, 95% CI
Beardlsey 2014	40	62	22	62	5.8%	3.31 [1.58, 6.90]
Butt 2009	24	34	10	34	2.2%	5.76 [2.03, 16.25]
Collom 2018	65	101	36	101	9.5%	3.26 [1.83,5.80]
Fukami 2018	6	44	38	44	24.2%	0.02 [0.01,0.08]
MD Aslam 2022	50	60	10	60	1.2%	25.00 [9.57,65.30]
Ng 2016	38	72	34	72	11.8%	1.25 [0.65,2.40]
Saif Ghabisha 2023	35	67	32	67	11.3%	1.20 [0.61,2.36]
Strajina 2019	50	60	10	60	1.2%	25.00 [9.57,65.30]
Tavangri 2016	40	103	63	103	28.4%	0.40 [0.23,0.71]
Young Jin 2021	37	55	18	55	4.3%	4.23 [1.91,9.37]
Total	385	658	273	658	100.00%	1.83 [1.49,2.24]

Table 2. Successful Non-operative vs Unsuccessful non operative management

Study or Subgroup	Successful Non-operative Management events	Successful Non-operative Management total	Unsuccessful non operative management events	Unsuccessful non operative management total	Weight	Odds Ratio, M-H, Fixed, 95% CI
Beardlsey 2014	22	22	0	22	0.1%	2025.00 [38.48, 106571.18]
Butt 2009	0	10	10	10	88.1%	0.00 [0.00, 0.13]
Collom 2018	33	36	3	36	2.2%	121.00 [22.74, 643.71]
Fukami 2018	37	38	1	38	0.2%	1369.00 [82.50, 22716.59]
MD Aslam 2022	10	10	0	10	0.2%	441.00 [7.98, 24372.70]
Ng 2016	29	34	5	34	6.5%	33.64 [8.79, 128.76]
Saif Ghabisha 2023	29	32	3	32	2.5%	93.44 [17.40, 501.90]
Strajina 2019	10	10	0	10	0.2%	441.00 [7.98, 24372.70]
Total	170	192	22	192	100.00%	14.01 [7.84, 25.07]

Acute Abdominal and Gastrointestinal Emergencies

OP-148

PREDICTION OF CLINICAL OUTCOMES AFTER EMERGENCY ABDOMINAL SURGERY USING A DEEP LEARNING CT MODEL FOR SARCOPENIA DIAGNOSIS

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[2]School of Medicine, Shanghai Jiatong University

Objective: To develop a deep learning model for automatic sarcopenia diagnosis on abdominal CT scans and evaluate its correlation with clinical outcomes following emergency abdominal surgery.

Methods: In this prospective observational study, 396 patients undergoing emergency abdominal surgery (June 2020–December 2021) were analyzed after exclusions (53 ineligible, 19 with missing data). A U-Net convolutional neural network was trained on manually segmented skeletal muscle areas from CT scans of 50 randomly selected patients. Model performance was validated using the Dice coefficient (DSC). Skeletal muscle index (SMI) at the third lumbar vertebra (L3) was automatically calculated for all patients. Sarcopenia was defined as L3-SMI in the sex-specific first quartile (male: ≤39.90 cm^2/m^2; female: ≤27.98 cm^2/m^2). Associations between sarcopenia and clinical outcomes (in-hospital mortality, complications, postoperative stay) were assessed using χ^2, independent *t*-tests, or non- parametric tests. Univariate analysis identified confounders, followed by logistic regression modeling. Ethical approval was obtained.

Results: The model achieved a mean DSC of 0.90 ± 0.04 for skeletal muscle segmentation. Sarcopenic patients had significantly higher in-hospital mortality, overall complications, infective complications, and longer postoperative stays ($P < 0.05$). Multivariate analysis confirmed sarcopenia as an independent risk factor for postoperative complications (OR = 3.366; 95% CI: 1.587–7.140; P = 0.002).

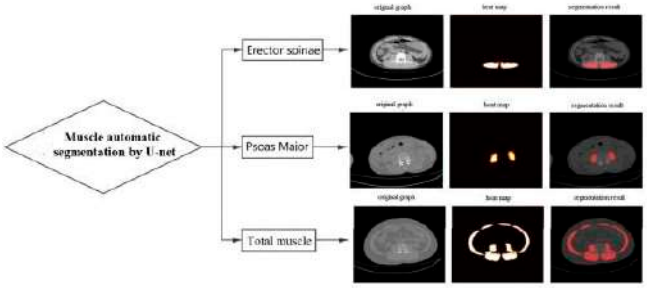
Conclusion: The deep learning model accurately automates sarcopenia diagnosis on abdominal CT. Sarcopenia predicts adverse clinical outcomes in emergency abdominal surgery patients.

Keywords: Deep learning, Sarcopenia, Abdominal computed tomography, Emergency abdominal surgery, Clinical outcomes

Distribution of postoperative clinical outcomes, depending on the diagnosis of malnutrition by sarcopenia

Outcome	Overall	SMI-sarcopenia		P value
		Negative (n= 298)	Positive (n = 98)	
	n (%)	n (%)	n (%)	
Mortality				
No	381 (96.2)	291 (97.7)	90(91.8)	
Yes	15 (3.8)	7 (2.3)	8(8.2)	0.021
Complication				
No	316 (79.8)	266 (89.3)	50(51.0)	
Yes	80 (20.2)	32(10.7)	48(49.0)	<0.001
Infective complication				
No	368 (86.18)	284(95.3)	76(77.6)	
Yes	36 (9.1)	14(4.7)	22(22.4)	<0.001

Muscle automatic segmentation



Open Abdomen

OP-150

NEW ISOLATION TECHNIQUE FOR ENTEROATMOSPHERIC FISTULA

Atakan Erdoğan, **Seracettin Eğin**, **Berk Gökçek**

University of Health Sciences, Prof.Dr. Cemil Taşçıoğlu, Education and Research Hopital, Istanbul

Aim: We aimed to present seven patients with Björck type 4 open abdomen (OA) who were treated with a novel method termed "Fistula Isolation by Penrose Drain Sutured to the Mucosa of EAF" (FIPDSME), in conjunction with negative pressure therapy (NPT), for the management of enteroatmospheric fistula (EAF). These patients were discharged with stomas following the procedure.

Method: All interventions were performed under sterile conditions without anesthesia, in the supine position. The afferent and efferent openings of the EAF were identified, and the most proximal EAF orifice, where intestinal fluid was discharged, was located.In cases with multiple EAFs, saline was injected into the fistula via foley catheter to reveal any connections between these openings.The most proximal EAF orifice was carefully examined, and a Penrose drain was sutured circumferentially to the EAF

mucosa using 6/0 PDS sutures. A small pool was created around the EAF orifice using the Penrose drain, after which saline was instilled into this pool to perform a leakage test.Furosin-soaked gauze was placed on the wound surface of the entire open abdomen, excluding the pool area.A visceral organ protective layer was applied to completely cover the gauze with furosin.The negative pressure sponge was cut according to the size of the open abdomen and adapted to the pool via an opening created on the sponge. The sponge was placed over the open abdomen, and the penrose drain was sutured to it. Continuous negative pressure at -75 mmHg was applied using NPT.The drain was cut at the level of the pool to create an opening, and the open abdomen was isolated from surrounding tissues with a ring-shaped sealing mastic.Finally, the EAF was converted into a stoma by creating an opening from the mouth of the pool and sponge, followed by attaching a large-mouth stoma bag.

Findings: In all seven patients, including four females, the control of EAF was successfully achieved using FIPDSME. The procedure was performed a total of 66 times across these patients.The mean age was 58 years (range: 18–89), and the mean BMI was 23.5 (range: 19–28). In all cases, the location of the EAF was confirmed to be in the small intestine.The average length of hospital stay was 70 days (range: 37–90 days).Two patients remained in the intensive care unit for 2 and 5 days.The mean number of PDEMFİ applications was 9.42 (range: 3–12). All patients were discharged from the hospital with a stoma.Two patients were later re-hospitalized for stoma closure via resection and anastomosis.Three patients were referred to the center where they underwent their initial surgery for stoma closure.Two patients died during the follow-up period due to pre-existing comorbidities (pulmonary embolism / viral pneumonia).

Conclusion: This presentation aims to highlight the effectiveness of PDEMFİ combined with NPT in the management of complex EAFs in patients with Björck type 4 open abdomen.

Keywords: Open Abdomen,Nagetive Pressure Therapy,Enteroathmospheric Fistula

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Isolation of Enteroathmospheric Fistula



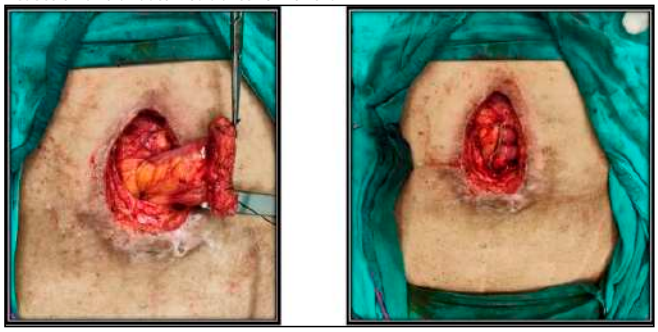
Closing surrounding wound wih sponge



Image of the draped system



Resection and anastomosis after 6 months



Final of the process

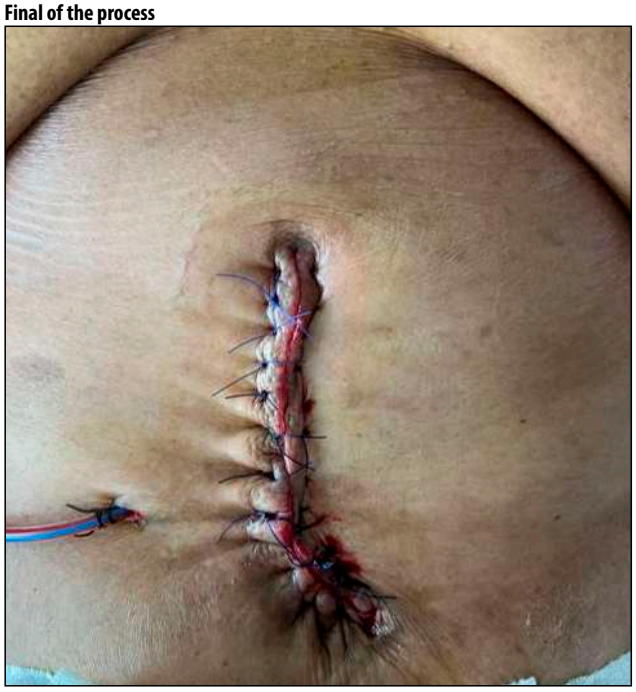


Table 1. The Patients

Age/Sex	Bmi	Location	Number of Applications	Icu Stay (Day)	Hospital Stay (Day)
64/F	26	SI	12	0	67
56/F	21	SI	10	0	78
63/F	25	SI	9	0	70
41/M	21	SI	12	2	90
89/F	28	SI	12	0	74
77/M	24	SI	3	0	37
18/M	19	SI	8	5	75

Vascular Emergencies

OP-151

ACUTE MESENTERIC ISCHEMIA: OUR EXPERIENCE IN THE MANAGEMENT OF FORTY PATIENTS

Ahmet Askar, **Ali Levent İsik**, **Ali Bekraki**

Basaksehir Cam and Sakura City Hospital

Acute mesenteric ischemia is a life-threatening vascular disorder associated with substantial morbidity and mortality. Despite advances in diagnostic modalities and therapeutic interventions in recent years, mortality rates for acute mesenteric ischemia remain high, ranging from 50% to 75%. This persistently poor prognosis is primarily due to the difficulty of establishing an early diagnosis and the consequent delays in initiating treatment. In most cases, acute mesenteric ischemia results from mesenteric vascular occlusion caused by atheroma, thrombus, or embolus, while less common etiologies include dissecting aneurysm, arteritis, sepsis, intestinal obstruction, and trauma. The condition can be classified into four main categories: superior mesenteric artery thrombosis or embolism, accounting for approximately 75% of cases; nonocclusive mesenteric ischemia, representing about 20% of cases; and mesenteric vein thrombosis, observed in fewer than 10% of cases. Management strategies are tailored to the underlying pathology. Here, we present our experience in the surgical management and treatment of forty patients diagnosed with acute mesenteric ischemia.

Keywords: Mesenteric Ischemia, Acute Mesenteric Arterial Thrombosis, Acute Mesenteric Arterial Embolus, Mesenteric Venous Thrombosis, Nonocclusive Mesenteric Ischemia

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Vascular Emergencies

OP-152

OUR CASE OF RUPTURED CELIAC ARTERY ANEURYSM

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Introduction: Celiac artery aneurysms (CAA) are rare cases, 180 patients have been reported in the world. When they rupture, mortality is 25-70%. We wanted to present our case presenting with acute abdomen and hemorrhagic shock.

Case: A 44-year-old male patient admitted to the emergency room with severe abdominal pain that had been hitting his back for the last half hour. He has a medical history of hypertension and a family history of his father suffering from abdominal aortic aneurysm. On physical examination, there is widespread tenderness and rebound throughout the abdomen. tachycardic

Laboratory: Emergency department arrival hemoglobin (Hb) value was 15.4 mg/dl, 45 minutes later, control Hb level was 10.4 mg/dl, and the CT scan detected a rupture of the CAA, so he was taken into operation.

After the Mattox maneuver, a 3x2 cm ruptured segment was detected in the celiac artery trunk, including the splenic, left gastric and hepatic artery. The aorta was rotated and suspended proximally over the supdiaphragmatic and distally over the iliac bifurcation to prevent uncontrolled bleeding. A vascular clamp was placed on the aneurysm root.

The splenic and left gastric artery stumps were ligated. It was determined that the dissection progressed 2-3 cm towards the common hepatic artery (HA). It was decided to place a graft on the intact segment of the HA to ensure liver (LIVE) blood flow. The arterial graft taken from the splenic artery was anatomized to the celiac artery, but the flow was found to be low because the intima of the celiac trunk was disrupted due to both dissection and vascular clamp. Liver blood flow was checked with intraoperative Doppler USG. The operation was terminated when HA flow was detected adequately (SMA-GDA-HA arc). The patient was discharged after two days in intensive care and seven days in the ward. Hepatic Doppler and liver functions were checked during the follow-up period.

Discussion: While visceral artery anaeurysms are treated by follow-up or interventional radiology when they are asymptomatic, surgery may be required in case of rupture.

Keywords: Celiac Artery Aneurysm Rupture, Emergency Surgery, Viscereal aneurysm,

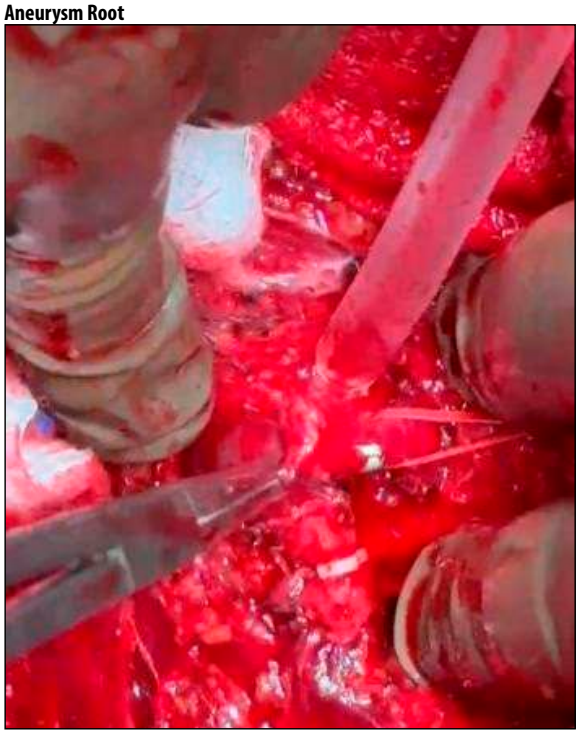
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Aneurysm Root 3D



Aneurysm Root



Thrombus within the aneurysm



Acute Abdominal and Gastrointestinal Emergencies

OP-154

ERCP RELATED PERFORATIONS: TREATMENT OPTIONS, CONSERVATIVE APPROACH AND OPTIMAL TIME FOR SURGERY

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Background: Endoscopic retrograde cholangiopancreatography (ERCP) is an invasive method used in the diagnosis and treatment of pancreatic and biliary tract diseases.

The rate of perforations associated with ERCP has been reported to be 0.08-2%, with a mortality rate of 3-20%.

The diagnosis of post-ERCP perforations is challenging and may lead to changes in symptoms, laboratory findings, and imaging results depending on the location of the perforation. One of the most important points in diagnosis is the clinician's suspicion of perforation. We aimed to evaluate ERCP-related perforation cases encountered in our clinic and compare our Results: with those reported in the literature.

Methods: Age, gender, comorbidities, ERCP indication, and general outcomes were retrospectively determined from hospital records, and iatrogenic perforation was detected in 14 patients (0.18%).

Four types of perforation were defined based on the mechanism, clinical condition, and surgical type. Type 1 perforation cases were operated on in emergency situations, while types 2, 3, and 4 injuries were initially treated with a conservative approach and/or minimally invasive procedures.

Result: Over the past 10 years, 7,762 ERCP procedures were performed, and 14 patients (0.18%) admitted to the hospital with abdominal pain following ERCP were diagnosed with ERCP-related perforation. The mean age of the patients was 64 (range 19–79), with 12 patients (85%) female and 2 patients (15%) male. Perforation was detected in 4 patients during ERCP. Seven patients were followed conservatively, and 7 patients underwent surgery. We encountered prolonged and difficult cannulation in 4 patients, papilla localized at the edge of the diverticulum in 3 patients, and anatomical changes in one patient.

Conclusion: Prolonged and difficult cannulation, papilla localized at the diverticulum margin, and anatomical changes were identified as risk factors for perforations associated with ERCP. In ERCP-related perforations, conservative, minimally invasive (interventional radiological or endoscopic), or surgical treatments may be preferred depending on the perforation location, the patient's clinical condition, and laboratory and radiological findings.

Keywords: ERCP related perforations, Biliary stents, post-ERCP Complications

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Acute Abdominal and Gastrointestinal Emergencies

OP-156

ETIOLOGY, OUTCOMES, AND PROGNOSTIC FACTORS IN PORTAL VENOUS GAS: A RETROSPECTIVE MULTICENTER COHORT STUDY

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Background: Portal venous gas (PVG) signifies gas within the portal venous system, typically indicating critical underlying gastrointestinal pathology on imaging and necessitating urgent evaluation. While historically associated with high mortality, contemporary data suggest prognostic variability. Significant controversy persists regarding optimal management (surgical versus conservative) and prognostic implications, heavily influenced by diverse etiologies and comorbidities. This study characterizes the etiological spectrum, outcomes, and mortality predictors in PVG to inform clinical decision-making.

Objective: This multicenter retrospective observational study aimed to describe the etiological distribution, clinical characteristics, complications, and factors associated with 30-day mortality in patients with CT-confirmed portal venous gas (PVG).

Methods: This retrospective observational cohort study consecutively included 61 adult patients with CT-confirmed PVG diagnosed between January 2017 and December 2023 across 11 centers. Data collected encompassed demographics, comorbidities, clinical presentation, laboratory/radiological findings, primary PVG etiology, management, complications, and 30- day survival.

Results: The cohort comprised 61 patients (34 male, 27 female; median age 67 years). Overall 30-day mortality was 42.6%. Sepsis (n=23) and elevated lactate (n=30) were significantly associated with increased mortality (both $p<0.05$). Prevalent comorbidities included Hypertension (49.2%), Coronary Heart Disease (31.1%), Intestinal Gas (57.4%), and Intestinal Obstruction (39.3%).

Etiological stratification revealed distinct profiles: the Infection group (n=23, 37.7%) had the highest median age (71 years), diabetes prevalence (n=9, 39.1%), and sepsis (n=13, 56.5%); the Obstruction group (n=19, 31.1%) had female predominance (n=12, 63.2%) and frequent bowel obstruction (n=11, 57.9%); the Ischemia group (n=19, 31.1%) involved younger patients (median 62 years) with prevalent Arrhythmia (n=6, 31.6%). 29 patients (47.5%) underwent surgical intervention and 32 (52.5%) received non-surgical management. No significant difference in 30-day survival was observed between surgical and non-surgical patients (62.1% vs. 59.4%, $P > 0.05$).

Conclusions: Portal venous gas (PVG) indicates severe underlying gastrointestinal pathology and was associated with high mortality (42.6%) in this multicenter cohort. Elevated lactate or sepsis were significant predictors of mortality. Etiologies were diverse, categorized into Infection, Obstruction, and Ischemia groups, each exhibiting distinct clinical profiles. Surgical intervention was common, but this study demonstrated no significant difference in 30-day mortality between surgical and non-surgical management overall. PVG management must be individualized, emphasizing prompt etiological diagnosis, aggressive sepsis treatment, and careful assessment of surgical indications based on specific clinical findings.

Keywords: Portal venous gas, Sepsis, Etiology, Mortality, Retrospective study

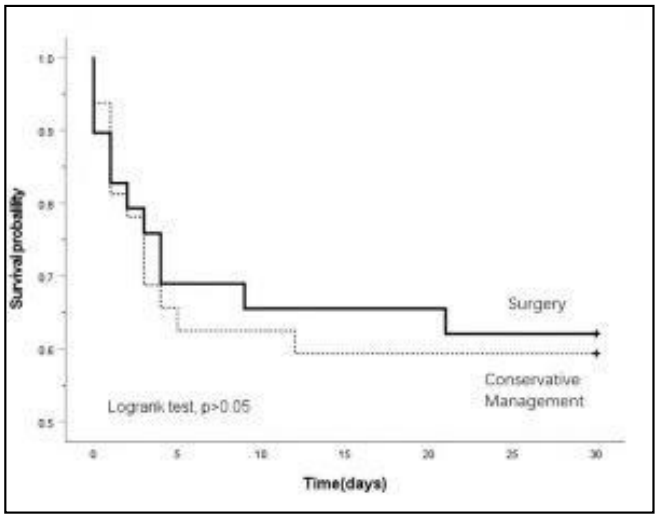


Figure 1. 30-Day Survival Curve of Patients

Table 1. Patient Baseline Characteristics

	Number of patients (%)	*Mortality No. (%)*	*p-value*
Total	61	26 (42.62%)	
Gender			0.798
Male	34 (55.74%)	14 (41.18%)	
Female	27 (44.26%)	12 (44.44%)	
Age	67.00 [59.00, 77.00]	71.00 [61.00, 78.25]	0.321
Comorbidities			
Thrombosis	8 (13.11%)	4 (50%)	0.945
Elevated Lactate	30(49.18%)	17(56.67%)	0.029
Intestinal Obstruction	24 (39.34%)	13 (54.17%)	0.142
Intestinal Gas	35 (57.38%)	18 (51.43%)	0.925
Intestinal Ischemia	15 (24.59%)	6 (40.00%)	0.813
Intestinal Necrosis	9 (14.75%)	5 (55.56%)	0.628
Hypertension	30 (49.18%)	13 (43.33%)	0.912
Diabetes	14 (22.95%)	8 (57.14%)	0.211
Smoking	4 (6.56%)	3 (75.00%)	0.406
Malignant Solid Tumor	8 (13.11%)	3 (37.50%)	>0.999
Nephrotic Syndrome	3 (4.92%)	2 (66.67%)	0.791
Coronary Heart Disease	19 (31.15%)	10 (52.63%)	0.288
Peripheral Vascular Disease	6 (9.84%)	3 (50.00%)	>0.999
Vasculitis/Venous Occlusion	6 (9.84%)	3 (50.0%)	>0.999
Sepsis	23 (37.70%)	15 (65.22%)	0.006
Moderate/Severe Chronic Heart Failure	12 (19.67%)	8 (66.67%)	0.060
Arrhythmia	13 (21.31%)	7 (53.85%)	0.356
Treatment			0.852
Surgery	29(47.54%)	12(46.15%)	
Conservative Management	32(52.46%)	14(53.85%)	

Table 2. Etiology Group Classification

	Number of Patients	*Infection*	*Obstruction*	*Ischemia*	*p-value*
Gender					0.12
Male	34 (55.74%)	14 (41.18%)	7 (20.59%)	13 (38.24%)	
Female	27 (44.26%)	9 (33.33%)	12 (44.44%)	6 (22.22%)	
Age	67.00 [59.00,77.00]	71.00 [61.00,77.50]	65.00 [60.50,73.00]	62.00 [57.50,80.00]	0.926
Comorbidities					
Thrombosis	8 (13.11%)	1 (12.50%)	4 (50.00%)	3 (37.50%)	0.256
Intestinal Obstruction	24 (39.34%)	8 (33.33%)	11 (45.83%)	5 (20.83%)	0.117
Intestinal Gas	35 (57.38%)	17 (48.57%)	12 (34.29%)	6 (17.14%)	0.018
Intestinal Ischemia	15 (24.59%)	7 (46.67%)	4 (26.67%)	4 (26.67%)	0.807
Intestinal Necrosis	9 (14.75%)	6 (66.67%)	1 (11.11%)	2 (22.22%)	0.163
Hypertension	30 (49.18%)	10 (33.33%)	10 (33.33%)	10 (33.33%)	0.787
Diabetes	14 (22.95%)	9 (64.29%)	2 (14.29%)	3 (21.43%)	0.071
Smoking	4 (6.56%)	0 (0.00%)	3 (75.00%)	1 (25.00%)	0.102
Malignant Solid Tumor	8 (13.11%)	1 (12.50%)	3 (37.50%)	4 (50.00%)	0.245
Nephrotic Syndrome	3 (4.92%)	2 (66.67%)	1 (33.33%)	0 (0.00%)	0.769
Coronary Heart Disease	19 (31.15%)	9 (47.37%)	3 (15.79%)	7 (36.84%)	0.352
Peripheral Vascular Disease	6 (9.84%)	1 (16.67%)	3 (50.00%)	2 (33.33%)	0.492
Vasculitis/Venous Occlusion	6 (9.84%)	1 (16.67%)	2 (33.33%)	3 (50.00%)	0.492
Sepsis	23 (37.70%)	13 (56.52%)	3 (13.04%)	7 (30.43%)	0.029
Moderate/Severe Chronic Heart Failure	12 (19.67%)	5 (41.67%)	4 (33.33%)	3 (25.00%)	0.924
Arrhythmia	13 (21.31%)	4 (30.77%)	3 (23.08%)	6 (46.15%)	0.534
Treatment					
Surgery	29 (47.54%)	10 (34.48%)	11 (37.93%)	8 (27.59%)	0.550

Acute Abdominal and Gastrointestinal Emergencies

OP-157

THERAPEUTIC UPPER GASTROINTESTINAL STENT PROCEDURES PERFORMED IN EMERGENCY SITUATIONS

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Istanbul Traning and Research Hospital Background and Objectives:

The self-expandable metal stent (SEMS) is an alternative for several possible surgical and palliative treatments of upper gastrointestinal obstructions that occur in several disease states. The present study was performed to describe a single-center experience with upper gastrointestinal stents in emergency situations.

Methods: All patients in a single center who underwent SEMS placement due to obstruction in the upper gastrointestinal tract, anastomotic fistulas and strictures resulting from previous surgical interventions, endoscopic procedures related perforations, and esophageal invasion of mediastinal and lung tumors were included in the study. Procedural success and early and late complication rates were investigated.

Results: A total of 325 endoscopic procedures were performed in 139 patients. Procedural success was 97% (n = 134) and dilatation was performed in 152 patients. The rate of perioperative complication was 13.6% (n = 19). After 1 month, stents were patent in all patients (n = 139). Stent obstruction was noted in 6 patients: 2 each at 2, 7, and 10 months.

Conclusion: SEMS for palliative and curative purposes in benign or malignant upper gastrointestinal system emergency (obstruction, fistula, perforations…) is an efficient and reliable treatment method with advantages, such as shortening hospital stay, decreased pain, cost-effectiveness, and low mortality–morbidity rates when compared to surgical procedures, and a high rate of clinical success.

Keywords: Self-Expandable Metal Stent (SEMS), Gastrointestinal Fistula, Endoscopic Perforations

Acute Abdominal and Gastrointestinal Emergencies

OP-159

COMPARISON OF EARLY AND LATE LAPAROSCOPIC CHOLECYSTECTOMY OUTCOMES IN PATIENTS WITH ACUTE BILIARY PANCREATITIS

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Objective: We aimed to compare the results of early and late laparoscopic cholecystectomy (LC) in patients with acute biliary pancreatitis (ABP) and to investigate the safety of early LC, the risk of recurrent biliary pancreatitis, and its effects on the length of stay, morbidity and mortality.

Material and Method: The electronic hospital records of patients who had an ABP attack or attacks and underwent LC between 01.01.2016 and 08.04.2022 at the General Surgery Clinic of Istanbul Prof. Dr. Cemil Taşcıoğlu City Hospital were retrospectively reviewed. The study is a retrospective cohort analysis.

Right upper quadrant pain, serum amylase levels greater than 3 times higher, and gallbladder and bile duct stones were defined as ABP. The patient's treatment choice was left to the preference of the surgeon who previously undertook the treatment. Patients were grouped as Group 1 early (those who underwent LC within 2 weeks) and Group 2 late (those who underwent LC after 2 weeks). A total of 244 patients were included in the study, 97 patients in Group 1 and 147 patients in Group 2. Demographic data (age, gender), clinical features (duration of symptoms, time from symptom onset to surgery, number of attacks, Ranson score), surgical procedure (LC, intraoperative cholangiography, laparoscopic bile duct exploration), duration of surgery, complications of surgery (retained bile duct stone, intra-abdominal bleeding, postoperative pancreatitis, pancreatic pseudocyst, leakage from cystic duct remnant) and length of hospital stay (LOS) were compared between the two groups and univariate analysis was performed. The primary result variable of the study included length of hospital stay. Secondary result variables included recurrent pancreatitis attacks and postoperative complications.

The inclusion criteria for the study were male and female patients aged between 18-85 years who underwent LC after ABP. The exclusion criterion for the study was patients who developed acute necrotizing pancreatitis during the period of ABP. The Ranson scoring system, which is widely used in ABP, was used in the study.

Results: Age, duration of abdominal pain complaints, number of ABP attacks, number of hospitalizations, time until surgery, Ranson score after 48 hours, LOS were xi found to be statistically significantly higher in 2nd Group. Of the 147 patients in Group 2, 34 (23%) underwent surgery during their second ABP attack, 8 (5.4%) during their third ABP attack, and 1 (0.7%) during their fourth ABP attack. In total, 43 (29%) patients in Group 2 were admitted to the emergency surgery clinic due to recurrent pancreatitis. In this study, the recurrent pancreatitis rate was found to be 29% if early cholecystectomy was not performed.

Although the conversion to open cholecystectomy was higher in Group 2 than in Group 1 with a rate of 9.5%, there was no statistical difference between the groups.

Conclusion: This study exposed that in mild or moderate ABP, LC reduced LOS within 2 weeks after the first ABP episode and prevented the development of recurrent ABP. Further large-scale prospective randomized studies are needed to document the safety and efficacy of this approach.

Keywords: Keywords: Biliary pancreatitis, timing of cholecystectomy, laparoscopic cholecystectomy

Table 1.

	EARLY (n=97)	*DELAYED (n=147)*	*P*
Age	46,15 ± 15,804 (17-85)	56,78 ± 14,165 (17-85)	<0,001*
Gender			0,700
Female	59 (60,8)	93 (63,3)	
Male	38 (39,2)	54 (36,7)	
Pregnancy	1 (1,0)	1 (0,7)	1,000
Initial admission diagnosis			0,473
Pancreatitis	78 (80,4)	110 (74,8)	
Pancreatitis + cholecystitis	5 (5,2)	8 (5,4)	
Pancreatitis + cholangitis	6 (6,2)	19 (12,9)	
Pancreatitis + cholecystitis + cholangitis	4 (4,1)	4 (2,7)	
Cholecystitis	2 (2,1)	5 (3,4)	
Cholangitis	2 (2,1)	1 (0,7)	
Duration of abdominal pain symptoms (days)	4 (3-5)	5 (4-8)	<0,001**
Number of attacks	1 (1–1)	1 (1–2)	0,029*
Number of hospital admissions	1 (1–1)	2 (2–3)	<0,001**
Time to surgery (days)	5 (3–6)	141 (76-239)	<0,001**
Ranson score at first admission	1 (0–2)	1 (0–2)	0,079**
Ranson score at 48 hours	2 (1–3)	2 (1–3)	0,010**
Operation time (minutes)	60 (60–85)	60 (60–70)	0,331
Length of hospital stay (LOS, days)	7 (5–11)	9 (7–11)	<0,001**

Table 2. Distribution of ERCP, postoperative complications, and mortality by groups

	EARLY (n=97)		*DELAYED (n=147)*		*P*
	n	%	n	%	
Before cholecystectomy					
Cholangitis	14	14,4	28	19,0	0,350
ERCP	10	10,3	70	47,6	<0.001
After cholecystectomy					
Pancreatitis	6	6,2	3	2,0	0,161
Cholangitis	2	2,1	4	2,7	1,000
Abscess or biloma	1	1,0	0	0,0	1,000
ERCP	13	13,4	7	4,8	0,016
Postoperative complications					0,739
None	92	94,8	137	93,2	
ERCP-related pancreatitis	2	2,1	2	1,4	
Bile leakage	1	1,0	4	2,7	
Sepsis	1	1,0	1	0,7	
Pulmonary edema	0	0,0	1	0,7	
Pseudocyst	1	1,0	1	0,7	
Gallbladder bed collection/ hematoma	0	0,0	1	0,7	
Mortality					0,279
None	97	100,0	144	98,0	
Present	0	0,0	3	2,0	

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Table 3. Distribution of ERCP procedures between groups

	EARLY (n=97)		*LATE (n=147)*		*p*
ERCP Sphincterotomy	n	%	n	%	
None	74	76,3	70	47,6	<0,001
Performed	20	20,6	72	49,0	
Failed Cannulation	3	3,1	5	3,4	
ERCP Stone Extraction					<0.001
None	92	94,8	112	76,2	
Performed	4	4,1	35	23,8	
Cholecystoduodenostomy	1	1,0	0	0,0	
ERCP Stent					1,000
None	94	96,9	141	95,9	
Performed	3	3,1	6	4,1	
ERCP					0,096
None	93	96,9	136	92,5	
Pus Extraction	2	2,1	5	3,4	
Cyst Hydatid Extraction	1	1,0	0	0,0	
Bleeding	0	0,0	6	4,1	
First Admission ERCP					0,002
No	86	88,7	106	72,1	
Yes	11	11,3	41	27,9	
ERCP in Subsequent Admission					0,004
No	84	86,6	104	70,7	
Yes	13	13,4	43	29,3	
Preop ERCP Count					<0.001
None	86	88,7	78	53,1	
1	11	11,3	61	41,5	
2	0	0,0	7	4,8	
3	0	0,0	1	0,7	
Postop ERCP Count					0.034
None	84	86,6	140	95,2	
1	9	9,3	6	4,1	
2	4	4,1	1	0,7	

Acute Abdominal and Gastrointestinal Emergencies

OP-160

PREDICTORS OF SURGICAL INTERVENTION AND SUCCESS OF CONSERVATIVE MANAGEMENT IN BODY PACKERS: A RETROSPECTIVE COHORT STUDY

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Objective: This study aimed to identify clinical, laboratory, and radiological factors associated with the need for surgical intervention among body packers and to evaluate the overall success rate of conservative management in a tertiary emergency care center.

Methods: We conducted a retrospective observational study of 36 patients who were admitted to the emergency department of a tertiary center between 2021 and 2025 with confirmed body- packing. Demographic data, clinical presentation, laboratory results, and imaging findings were collected. Patients were grouped based on whether they required surgical intervention and whether they were successfully managed conservatively.

Continuous variables were summarized using median and interquartile ranges, and categorical variables were expressed as percentages. The Mann–Whitney U test was used to compare continuous variables between groups. A p-value < 0.05 was considered statistically significant.

Results: Among the 36 patients:

- 88.9% (n = 32) were successfully managed conservatively, while 11.1% (n = 4) failed conservative treatment.
- 16.7% (n = 6) required surgical intervention, while 83.3% (n = 30) did not.

Factors associated with failure of conservative management:

- Abnormal physical examination findings ($p < 0.0001$)
- Positive toxicology screen ($p = 0.0001$)
- Presence of symptoms upon admission ($p = 0.0003$)
- Positive imaging findings, abnormal urinalysis, and EKG also showed significant differences.

Conclusion: Conservative treatment remains highly effective in the majority of body packer cases. However, patients with abnormal physical findings, symptoms at presentation, or positive toxicological screening are more likely to fail conservative management and require surgical intervention. These parameters may help guide early risk stratification and clinical decision-making in emergency settings.

Keywords: Body packer, drug smuggling, conservative management, surgical intervention, risk factors, emergency department, radiological findings, toxicology screening

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Acute Abdominal and Gastrointestinal Emergencies

OP-161

THE ROLE OF EARLY REPERFUSION AND ENDOVASCULAR INTERVENTIONS IN ACUTE MESENTERIC ISCHEMIA

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Introduction: Acute mesenteric ischemia (AMI) is a rare but life-threatening vascular emergency with high mortality rates, in which time is critical for both diagnosis and treatment. This study aimed to evaluate the clinical outcomes of AMI cases managed

with endovascular therapy and to assess the impact of early reperfusion on surgical necessity and mortality.

Methods: Between January 2020 and June 2025, 34 consecutive patients diagnosed with AMI who underwent endovascular intervention were retrospectively reviewed. Demographic data, lesion localization, endovascular techniques used [TPA + aspiration or TPA + aspiration + balloon angioplasty], technical success, surgical requirement, ICU admission, and mortality rates were recorded.

Results: The mean age of the patients was 72.3±11.8 years (range: 54–96), and 55.9% were female. Lesions were located at the SMA origin in 50%, SMA distal in 44.1%, and combined SMA + celiac in 5.9% of cases. Post-procedural technical success was achieved in 82.4% and clinical success in 64.7%. Eleven patients were discharged without the need for surgery, whereas 20 patients did not achieve clinical improvement; 18 of these underwent surgical exploration. ICU admission rate was 79.4%, and overall mortality was 50.0%. Survival was significantly higher in patients who did not require surgery after the endovascular procedure.

Conclusion: Endovascular therapy provides high technical success and a significant survival advantage in appropriately selected AMI cases. Early reperfusion reduces the need for surgery and decreases mortality. However, patient selection, rapid diagnosis, and a multidisciplinary approach are crucial for treatment success.

Keywords: Mesenteric ischemia, endovascular treatment, thrombolysis, balloon angioplasty, mortality

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Table 1.Results

Variable	*n (%)*
Total patients	34 (100%)
Male	15 (44.1%)
Female	19 (55.9%)
Age range (years)	54–96
SMA origin occlusion	17 (50%)
SMA + celiac origin occlusion	2 (5.9%)
Distal SMA occlusion	15 (44.1%)
TPA + aspiration	19 (55.9%)
TPA + aspiration + balloon angioplasty	15 (44.1%)
Partial recanalization	6 (17.6%)
No clinical improvement after endovascular	20 (58.8%)
Surgery after endovascular	18 (52.9%)
Discharged without surgery	11 (32.3%)
Second-look surgeries	6 (17.6%)
Additional resection after second look	4 (66.7% of second looks)
Tertiary ICU follow-up	27 (79.4%)
Deaths after surgery	9 (26.5%)
Deaths after endovascular only	5 (14.7%)
Deaths after surgery before procedure	3 (8.8%)
Deaths after surgery post-resection	5 (14.7%)
Good outcome (no surgery after endovascular)	11 (32.3%)
Pre-procedure surgery + resection	3 (8.8%)

Acute Abdominal and Gastrointestinal Emergencies

OP-164

ACUTE DIVERTICULITIS: A FIVE-YEAR RETROSPECTIVE ANALYSIS FROM A TERTIARY REFERRAL HOSPITAL

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Background: Diverticular disease is caused by herniation of mucosal and submucosal layers through weak points in the colonic wall. It is common in elderly populations of Western societies. Acute diverticulitis, the most frequent complication, ranges from localized inflammation to abscess, perforation, and peritonitis. Computed tomography (CT) with Hinchey classification is the gold standard for assessing severity and guiding treatment. This study aimed to evaluate the demographic and clinical features, management, and outcomes of patients with acute diverticulitis over five years at a tertiary referral hospital.

Methods: We retrospectively reviewed all patients diagnosed with acute diverticulitis between January 2020 and January 2025. Inclusion criteria were age ≥18 years, CT-confirmed diagnosis, and Hinchey staging. Data included age, sex, diverticulum location, stage, antibiotic regimens, hospitalization, surgery, recurrences, elective colonoscopy, malignancy, and length of stay.

Outpatient vs. inpatient management was based on severity, comorbidities, and oral intake. Recurrence was defined as a new episode ≥30 days after resolution.

Results: A total of 223 patients were included. Mean age was 54 years; 57.4% male (n=128), 42.6% female (n=95). Sigmoid colon was most common (78.0%, n=174), followed by cecum (9.9%), descending colon (8.5%), ascending colon (2.2%), and transverse colon (1.3%). Hinchey stages were: 0 (48.9%),

1a (42.2%), 1b (3.1%), 2 (3.1%), 3 (1.8%), and 4 (0.9%). Antibiotics included ciprofloxacin+metronidazole (71.7%), ampicillin-sulbactam+metronidazole (16.1%), ceftriaxone+metronidazole (7.2%), and piperacillin-tazobactam (4.5%). Outpatient management was applied in 34.5% (n=77). Recurrence occurred in 13.5% (n=30); 10 had ≥3 episodes. Of eight such patients treated in our center, three underwent anterior resection, three had surgery elsewhere, and two refused surgery and were lost to follow-up. Elective colonoscopy was performed in 57.8% (n=129), revealing rectosigmoid carcinoma in two patients. Loss to follow-up occurred in 42.2% (n=94).

Conclusion: Acute diverticulitis can be managed effectively with guideline-based Hinchey staging. Most patients were treated nonoperatively, reserving surgery for complicated or recurrent cases. Malignancy detection supports colonoscopic evaluation after resolution, especially for sigmoid involvement. High loss-to-follow-up rates emphasize the need for better adherence to surveillance.

Keywords: Diverticulitis, Hinchey Classification, Acute Abdomen, Diverticular Perforation, Colonoscopy, Treatment Outcome

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Catastrophic Wound Management

OP-165

CLINICAL OUTCOMES AND PROGNOSTIC FACTORS IN SURGICALLY TREATED FOURNIER'S GANGRENE: A SINGLE-CENTER EXPERIENCE

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Background: Fournier's gangrene is a surgical emergency that requires rapid and effective management in general surgery practice. Delays in diagnosis and treatment are associated with high morbidity and mortality. This study aimed to present the outcomes of patients who underwent surgical treatment for Fournier's gangrene in our clinic and to evaluate the usefulness of contemporary management approaches.

Materials and Methods: We retrospectively reviewed the records of patients who underwent surgical treatment for Fournier's gangrene between January 2014 and December 2022. Data on demographics, laboratory parameters at diagnosis, body mass index (BMI), comorbidities, surgical techniques, wound management methods, tissue culture results, length of hospital stay, intensive care unit (ICU) stay, Fournier's Gangrene Severity Index (FGSI), Uludağ FGSI (UFGSI) scores, and disease extent were collected.

Results: A total of 63 patients were treated for Fournier's gangrene during the study period. The mean age was 51.4 ± 13.2 years, with a male-to-female ratio of 37:26. Diversion stoma was created in 17 patients (27%). The overall mortality rate was 4.8% (n = 3). The mean hospital stay was 27.1 ± 23 days. The median number of surgical debridements was 4 (range, 1–16), and the median number of vacuum-assisted dressings was 4 (range, 0–14). The mean UFGSI and FGSI scores were 9.98 ± 4.7 and 6.98 ± 3.9, respectively. The disease involved the perineum and pelvis in 59.6% (n = 28), was limited to the perineum in 14.3% (n = 9), and extended beyond the perineum and pelvis in 22.2% (n = 14). A statistically significant positive correlation was found between UFGSI score and both hospital stay and number of debridements, while no correlation was found for FGSI score. Greater disease extent, as categorized by the UFGSI, was associated with longer hospital stay ($p < 0.05$) and more debridements ($p < 0.05$). Comorbidities included diabetes mellitus in 54% and cardiac disease in 19% of patients. The most common pathogens were Escherichia coli (34.9%), and polymicrobial flora (25.4%).

Conclusion: Fournier's gangrene is a severe, potentially fatal disease that requires aggressive surgical management and repeated debridements. A proactive treatment approach is essential.

Prognostic scoring systems, particularly the UFGSI, are valuable in assessing disease severity at initial presentation. In our series, the extent of disease at admission had a significant impact on prognosis. The low mortality rate in our cohort limited statistical evaluation of mortality predictors.

Keywords: Fournier Gangrene, Debridement, Surgical Procedures, Operative, Severity of Illness Index, Vacuum-Assisted Closure, Prognosis

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Acute Abdominal and Gastrointestinal Emergencies

OP-166

OUR SINGLE-CENTER EXPERIENCE WITH PUNCTURE AND CUT INJURIES

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Introduction and Objective: Puncture and cut injuries (PCIs) are common types of trauma injuries that can rapidly deteriorate the patient's hemodynamic status. Penetrating abdominal trauma accounts for 38% of all trauma cases. The aim of this study was to evaluate the demographic characteristics, injury locations, surgical procedures performed, and clinical outcomes of PTI cases followed at a single center.

Materials and Methods: Between January 2020 and December 2024, 170 cases presenting with abdominal DKAY at the General Surgery Clinic of Istanbul Kanuni Education and Research Hospital were retrospectively reviewed. Patient age, gender, injury location, type of surgical procedure, and length of stay were recorded.

Results: A total of 170 patients were reviewed. The mean age of the patients was 33.4 (median: 31.5). Of these, 82.4% were male (n=140) and 17.6% were female (n=30). When examined according to injury location, 42 patients (24.7%) had left upper quadrant injuries, 37 patients (21.8%) had right upper quadrant injuries, 32 patients (18.8%) had right lower quadrant injuries,

29 patients (17.1%) had left lower quadrant injuries, 20 patients (11.8%) had epigastric injuries, and 10 patients (5.8%) had multiple quadrant injuries. Surgery was performed on 55 of all patients. The remaining 115 patients were followed up with non-operative medical treatment. Of the 55 patients who underwent surgery, 46 were male (83.6%) and 9 were female (16.4%). The average age of the patients was 34.3±11.6 years. The average length of stay for patients who underwent surgery was 7.73 ± 5.20 days. For those who were followed up non-operatively, it was 2.58 ± 0.98 days. Of the 55 patients who underwent surgery, 16 (29.1%) underwent small intestine repair, 14 (25.5%) underwent bleeding control, 4 (7.3%) underwent liver laceration repair, 4 (7.3%) underwent stomach repair, 2 (3.6%) underwent duodenal repair, 3 (5.5%) underwent major vessel repair, 1 (1.8%) underwent splenectomy, and 7 (12.7%) underwent colon repair. Two of the 4 cases underwent negative laparotomy (3.6%), and 2 underwent negative laparoscopy (3.6%). Two of the colon repairs (3.6%) were sigmoid, 2 (3.6%) were ascending colon, and 3 patients (5.5%) underwent transverse colon repair. Two (3.6%) of the small bowel repairs were segmental resection anastomoses, and 14 (25.5%) were primary repairs.

Three (5.5%) of the stomach repairs were primary repairs, and 1 (1.8%) was a wedge resection. Three colon repairs (5.5%) were segmental resection anastomoses, and 4 (7.3%) were primary repairs. In addition to the 55 patients who underwent surgery, 2 (1.18%) patients experienced per- operative mortality due to major vessel injury.

Conclusion: Most cases can be followed up non-operatively. Mortality increases in patients with major vessel injuries. These results demonstrate that rapid assessment and appropriate treatment approaches are critical in reducing morbidity and mortality in cases of sharp instrument injuries.

Keywords: Puncture and cut injuries, abdominal trauma

Acute Abdominal and Gastrointestinal Emergencies

OP-167

CAN WE PREDICT SURGERY IN UPPER GASTROINTESTINAL BLEEDING?

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Introduction and Objective: Upper gastrointestinal bleeding is a common and potentially life- threatening emergency in patients presenting to the emergency department. This study was conducted to evaluate the role of scoring systems, hemoglobin levels, and red blood cell suspension replacement requirements in predicting the need for surgery by assessing the demographic data, laboratory findings, endoscopic findings, and treatment approaches of patients presenting with UGIB.

Methods: A total of 130 patients with UGIB who were followed up at the General Surgery Clinic of Istanbul Kanuni Training and Research Hospital between January 2020 and December 2024 were retrospectively reviewed. Demographic data (age, gender), white blood cell(WBC) count, C-reactive protein(CRP) levels, hemoglobin(HB) levels, Glasgow Blatchford

Score (GBS), endoscopic procedures, and Forrest classification were recorded. Patients who were conservatively followed up and those who required surgery were also recorded. ROC analysis was used to determine the cutoff values for GBS, Hb, and replacement requirements in predicting the need for surgery.

Results: The mean age of the 130 patients included in our study was 64.3±14.2 years(median 65), and 63.8%(n=83) of the patients were male and 36.2%(n=47) were female. When laboratory parameters were examined, the mean WBC value was 8.00±3.42 x$10^3/\mu$L(median: 7.5), the mean CRP value was 27.97±32.25 mg/L(median: 17.5), and the mean Hb level was 12.2±2.1 g/dL. Endoscopy was performed on all patients. Of the 130 patients, 98(75.38%) did not undergo endoscopic therapeutic procedures, while 32(24.62%) underwent at least one therapeutic procedure. The most common procedures were sclerotherapy in 19(14.62%), clip application in 11(8.46%), adrenaline application in 5(3.85%), band ligation in 3(2.31%), and argon application in 1 patient(0.77%). When examining the distribution of Forrest classifications, Forrest 1A(n=6, 4.62%), Forrest 1B(n=12,9.23%), Forrest 2A(n=7,5.38%), Forrest 2B(n=8, 6.15%),Forrest 2C(n=4,3.08%), combined Forrest 2C and 3(n=1,0.77%), and Forrest 3(n=92,70.77%). The mean Glasgow-Blatchford Score(GBS) of the patients was 10.1±3.5(median 10). In the treatment approach, 116 patients(89.23%) were followed up non-operatively, while 14(10.77%) underwent surgical intervention.As a result of ROC analyses, the cut-off value determined for the Glasgow-Blatchford Score(GBS) was ≥11, with sensitivity of 84% and specificity of 70% at this threshold value. The area under the curve(AUC) was calculated as 0.81 and found to be statistically significant($p<0.001$). In the analysis conducted for hemoglobin(Hb) levels, the cut-off value was determined as ≤8.5 g/dL; at this value, sensitivity was 78% and specificity was 65%. The area under the curve (AUC) was found to be 0.76($p<0.001$), and the cutoff value for blood transfusion requirement was determined to be ≥2 units. At this threshold value, sensitivity was 69% and specificity was 60%. The area under the curve(AUC) was determined to be 0.72($p=0.002$).

Conclusion: Low Hb levels, high GBS, and increased blood transfusion requirements in patients with upper gastrointestinal bleeding are significant predictors of the need for surgery. Patients with GBS ≥11, Hb ≤8.5 g/dL, and ≥2 units of transfusion requirement should be considered high-risk for surgery and should undergo close monitoring and rapid surgical evaluation.

Keywords: Upper gastrointestinal bleeding, Glasgow-Blatchford Score

Damage Control Surgery

OP-168

OUR CLINICAL EXPERIENCE WITH WHIPPLE SURGERY PERFORMED AT OUR CLINIC OVER THE PAST 10 YEARS

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Objective: Pancreaticoduodenectomy, commonly known as Whipple surgery, is a challenging surgical procedure primarily performed for distal bile duct, pancreatic head, and periampullary tumors, requiring a complex postoperative follow-up and treatment process. This study examines the postoperative follow-up and treatment processes of patients who underwent Whipple surgery at our clinic.

Materials and Methods: Patients over the age of 18 who underwent surgery between 2016 and 2025 with the necessary indications were included in the study. The patients' demographic data, postoperative hospital stay durations, surgical indications, pathology data, tumor sizes, resection margins, postoperative complications, and complication management were recorded.

Results: Between 2016 and 2025, 85 patients underwent Whipple surgery at our clinic. The mean age of the patients was 62±8.7. Forty-nine patients were male and 36 were female. The mean hospital stay was 17 days (range: 1-131). The mean tumor size was 3x2.1x1 cm. R0 surgical resection was achieved in 64 patients. (75.9%) Surgery was performed on 80 patients (94.1%) due to malignant tumors. In the final pathology of the patients, 31.7% were evaluated as N0, 35.2% as N1, 15.2% as N2, and 17.6% as Nx. Postoperative complications were observed in 64.7% of patients. Of these, 21.8% were bleeding, 21.8% were pancreatic fistula, 23.6% were leakage, 29% were infection, 10.9% were ileus, and 3.6% were electrolyte imbalance. 54.54% of complications were followed up. 14.5% underwent reoperation. 9.09% had a stent placed in the leak area. 5% underwent PTK. 1.8% underwent drainage. 18.8% of patients died during the postoperative follow-up period. (Table 1)

Conclusion: Pancreaticoduodenectomy surgery and postoperative follow-up involve a challenging process. Therefore, the patient preparation process, surgery, and follow-up should be well planned, and precautions should be taken against postoperative complications.

Keywords: Whipple, Pancreaticoduodenectomy, Complication management

Table 1. Complications

Complications	Postop Diagnosis Time				Performed Procedure					Post-Complication Course		
	0/1 day	1/3 days	3/5 days	+5 days	Follow-up	Surgery	Stent	PTK	Drain	Discharged in good health	Additional complication	Exitus
Bleeding	11	1	0	0	11	1	0	0	0	10	4	2
Pancreatic fistula	0	0	10	2	9	3	0	0	0	12	6	0
Leak	0	1	9	2	0	9	1	3	0	11	6	1
Infection	0	0	6	10	15	0	0	0	1	16	8	0
Ileus	0	1	4	1	4	2	0	0	0	6	4	0
Electrolyte imbalance	0	0	0	2	2	0	0	0	0	2	1	0

Damage Control Surgery

OP-169

OPEN ABDOMEN WITH NEGATIVE PRESSURE WOUND THERAPY FOR SEVERE INTRA-ABDOMINAL INFECTION: IMPACT OF LATE CLOSURE ON PATIENT OUTCOMES

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Background: In severe intraabdominal infections(IAI), when physiologic instability necessitates damage control surgery(DCS), the open abdomen(OA) with Negative Pressure Wound Therapy(NPWT) strategy has shown significant efficacy to help reducing morbidity and mortality. Early definitive abdominal closure is recommended to minimize complications, though not always achievable.

Methods: Seventy-two consecutive patients treated for severe IAI were retrospectively reviewed out of 108 cases of DCS and OA with NPWT performed between February 2015 and February 2024. We comparatively analyzed clinical and perioperative data of patients treated with OA for ≤7 days(short OA) or for >7 days(long OA), focusing on late OA closure(>7 days). Primary outcomes were overall 30-day survival and primary fascial closure(PFC) rates.

Results: The main indication for OA was second look for persistent abdominal contamination. Fifty-six patients had short OA, 16 long OA. Overall mortality was 23.6%, with APACHE II score the only independent predictor(1.9, 95%CI 1.25-2.92,p=0.003). Fifty-two patients survived to achieve early closure and 12 late closure, respectively. Overall PFC rate was 92.2%(59 patients), 75% within late closure(p=0.001). Compared to short OA, in long OA nine patients(56.3%, p<0.001) experienced intraabdominal complications including enteroatmospheric fistula(3, 18.8%) and frozen abdomen(7, 43.8%); in 10 patients(87.5%, p<0.001) NPWT regimen was modified to isolate and divert efluent or clean a contaminated field.

Conclusions: In severe IAI, APACHE II score independently predicts survival after DCS. Delayed closure does not affect survival but increases major abdominal morbidity including EAF and frozen abdomen. NPWT specific properties may be leveraged to address complex anatomical situations, extensive contamination, or the need for targeted wound-healing responses.

Keywords: damage control surgery, open abdomen, negative pressure wound therapy

Acute Abdominal and Gastrointestinal Emergencies

OP-170

INCARCERATED AMYAND'S HERNIA WITH ACUTE APPENDICITIS: REPORT OF TWO CASES

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In this case report, we aim to compare the treatment processes of two patients who presented with Amyand's hernia with acute appendicitis—one of which was a delayed and complicated case with perforated acute appendicitis and generalized peritonitis—and to highlight the potential complications that may arise in delayed presentations.

Case 1: A 64-year-old female patient presented to the emergency general surgery department on March 21, 2025, with complaints of right groin pain and swelling. Physical examination revealed tenderness in the right inguinal region and a non-reducible inguinal hernia.

Contrast-enhanced abdominal CT was performed, which demonstrated mesenteric fat and bowel loops extending into the inguinal hernia sac, along with signs of infection within the hernia sac. Based on these findings, an emergency diagnostic laparoscopy was planned.

The laparoscopy revealed that the appendix had herniated into the right inguinal canal. The hernia contents were reduced back into the abdominal cavity. Laparoscopic transabdominal preperitoneal (TAPP) repair of the hernia applied for the right inguinal hernia. The appendix that was reduced to the abdomen was found to be inflamed but not perforated.

Laparoscopic appendectomy was performed. The patient was discharged on the third postoperative day without any complications.

Case 2: A 56 years old male presented to the emergency department on 01.09.2024 with abdominal pain and administered to the internal medicine due to increase in his AFRs (WBC: 17000,

CRP: 350, PROCALCITONIN: 11). On the fourth day after his administration he was consulted to the general surgery department and administered to emergency surgery department due to incarcerated right inguinal hernia. A patient underwent contrast-enhanced abdominal CT (oral and IV), which revealed free intra-abdominal fluid and air-fluid levels within the intestinal loops. Based on these findings, the patient was scheduled for diagnostic laparoscopy with a presumptive diagnosis of incarcerated inguinal hernia.

During laparoscopy, seropurulent fluid was observed in all four quadrants, and the appendix was noted to be contained within the right inguinal canal hernia sac. Due to these findings, a decision was made to convert to open surgery. The hernia contents were reduced into the abdominal cavity, revealing a perforated appendix within the hernia sac. Appendectomy was performed, and the abdomen was thoroughly irrigated. The inguinal hernia defect was repaired transabdominally without using a mesh. On postoperative day 7, purulent discharge was observed from the wound (due to generalized peritonitis), and the patient underwent reoperation. The skin and fascial sutures were removed, and the patient was managed with an open abdomen approach using a VAC system. The patient underwent a total of 10 abdominal washouts and VAC changes, after which intra-abdominal sepsis resolved. Finally, the skin was closed using flap advancement.

Conclusion: Early recognition of Amyand's hernia is crucial to prevent complications. Differentiating symptoms of acute appendicitis and Amyand's hernia can be challenging. Early diagnosis and management are crucial to prevent potentially life-threatening complications, such as perforation, sepsis and generalized peritonitis. Surgical management with open abdomen and VAC therapy can be an effective strategy in managing postoperative intra-abdominal sepsis.

Keywords: Amyand's hernia; Acute Appendicitis; Perforation; Generalized Peritonitis; Open Abdomen; VAC

Intraabdominal sepsis



Formation of the granulation tissue and the healing process



Vac system



Skin closure after recorvery



Acute Abdominal and Gastrointestinal Emergencies

OP-171

A RARE CASE REPORT: INTESTINAL ADENOSIS IN THE ILEOCECAL REGION PRESENTING AS AN OBSTRUCTIVE MASS

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Objective: Intestinal adenosis is an exceedingly rare benign lesion of the gastrointestinal tract. When manifesting as a mass, it can closely mimic malignant disease, and the diagnosis is typically confirmed only after surgical excision and histopathological analysis. We describe a rare case of ileocecal intestinal adenosis presenting with bowel obstruction.

Case Presentation: A 38 year old woman presented with a 24 hour history of abdominal pain, progressive abdominal distension, and inability to pass stool or flatus. She had no history of prior abdominal surgery or chronic illness. On examination, the abdomen was distended with diffuse tenderness but without peritoneal signs. Laboratory investigations revealed mildly elevated C-reactive protein, with all other parameters within normal limits. Abdominal radiography demonstrated multiple air–fluid levels consistent with intestinal obstruction.

Conservative managemen including nasogastric decompression, intravenous fluid resuscitation, and bowel rest was initiated. However, owing to persistent symptoms after seven days, exploratory laparotomy was undertaken. Intraoperatively, a well circumscribed, firm mass was identified, completely obstructing the terminal ileum and cecum. Ileocecal resection with functional end to end anastomosis was performed. Histopathological evaluation revealed well-differentiated glandular proliferation confined to the mucosal and submucosal layers, without dysplasia or invasive carcinoma, consistent with intestinal adenosis. The postoperative course was uneventful, and the patient was discharged in good condition on the fifth postoperative day.

Conclusion: Although benign, intestinal adenosis can clinically and radiologically mimic malignant neoplasms or inflammatory bowel disease, particularly when presenting as an obstructive mass. Radiologic assessment alone is often inadequate for definitive diagnosis, which requires histopathological confirmation. Surgical resection remains both diagnostic and curative, with no recurrences reported following complete excision. This case underscores the importance of including intestinal adenosis in the differential diagnosis of ileocecal masses causing bowel obstruction, and highlights the need for surgical vigilance regarding benign lesions that can closely resemble malignancy.

Keywords: Intestinal adenosis, ileocecal mass, bowel obstruction, benign intestinal lesion

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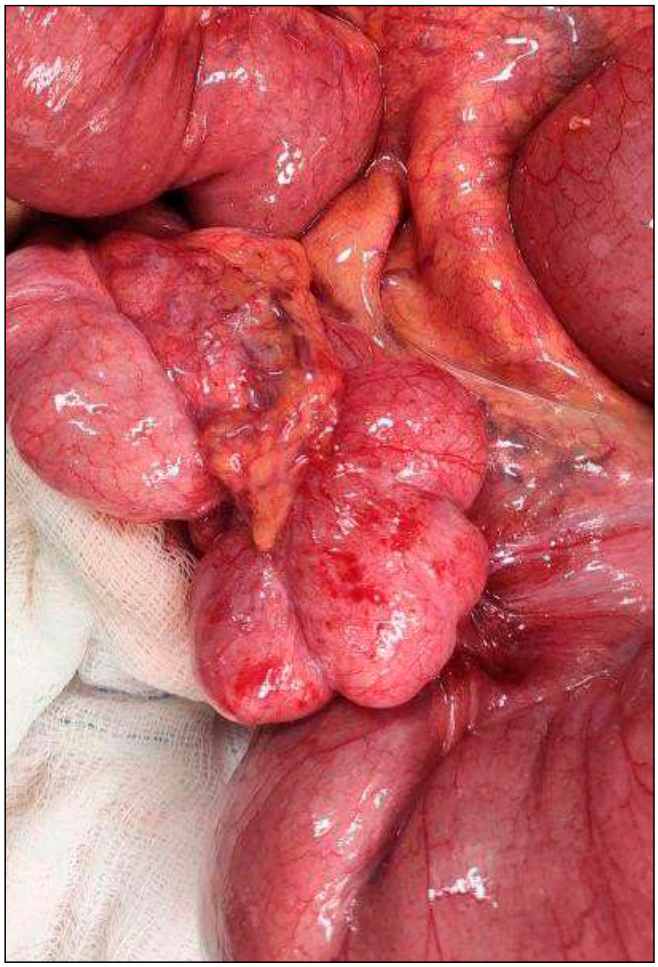


Figure 1. Peroperative view



Figure 2. CT image

Catastrophic Wound Management

OP-172

NEW SCORING SYSTEM FOR PREDICTION OF MORTALITY IN FOURNIER'S GANGRENE

Seracettin Eğin, Seniha Deniz Şahin, Metin Mustafa Bildirici

Prof. Dr. Cemil Tascıoglu City Hospital

Background: This study aimed to investigate the factors affecting mortality in Fournier's gangrene (FG) and to establish a simplified scoring system that enables practical bedside assessment for clinicians.

Methods: The medical records of 130 patients treated for FG between February 2012 and January 2025 were retrospectively reviewed. Survivors (Group 1, n = 101) were analyzed separately from non-survivors (Group 2, n = 29). The collected data included sex, age, infection spread score, Uludag Fournier's Gangrene Severity Index (UFGSI), Fournier's Gangrene Severity Index (FGSI) scores, source of infection, presence of diabetes mellitus (DM), obesity, and other comorbidities. Additional variables included the presence of a diverting stoma, duration of vacuum-assisted closure (VAC) therapy, length of hospital stay, intensive care period (ICP), and isolated bacterial species. Associations between mortality and factors such as age, infection spread score, comorbidities other than DM and obesity (CADO), and ICP were examined.

Results: A significant difference was observed between the groups in terms of age and age score. The infection spread score was significantly higher in Group 2. While 60 patients in Group 1 had CADO, all patients in Group 2 did, demonstrating a statistically significant difference. ICP was also significantly higher among non-survivors. The Eğin score showed a sensitivity of 96.6% and a specificity of 63.4% at a threshold value of >3 in the receiver operating characteristic (ROC) analysis.

Conclusion: Age, infection spread score, CADO, and ICP which constitute the Eğin score demonstrated significant differences between survivors and non-survivors and were independently associated with mortality. These parameters are crucial in predicting mortality related to FG.

Keywords: Fournier's gangrene, Fournier's gangrene severity index, Uludag Fournier's gangrene severity index, Mortality, Vacuum-assisted closure.

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Acute Abdominal and Gastrointestinal Emergencies

OP-173

AN UNEXPECTED SCENARIO IN ACUTE ABDOMEN FOLLOWING BUTANE GAS INGESTION: PSEUDO-PERFORATION AND PULMONARY EMBOLISM

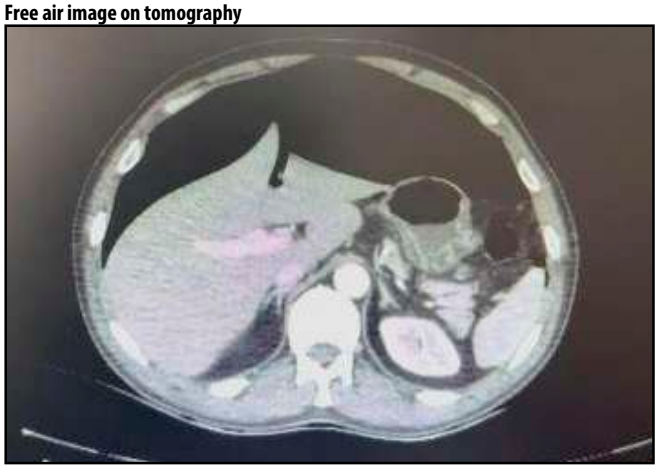
Ahmet Zahit Kaan, Harun Avcuoglu, Nezihe Berrin Dodur Onalan, Deniz Sıla Solum, Erkan Somuncu

University of Health Sciences Kanuni Sultan Suleyman Training and Research Hospital

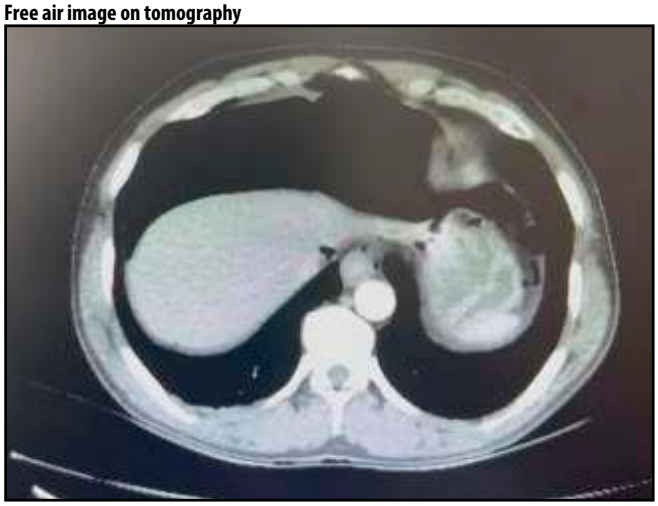
Oral ingestion of volatile hydrocarbons like butane gas is rare but can lead to severe morbidity. This case report describes a 52-year-old male patient who presented to the emergency department with acute abdomen following the suicidal ingestion of approximately 200 ml of butane gas. Physical examination revealed acute abdomen findings, and contrast-enhanced abdominal computed tomography showed widespread free air, leading to emergency laparotomy. Although no macroscopic perforation was observed during the operation, a strong gas odor emanated from the abdominal cavity upon opening, and hyperemic, ulcerative areas were noted in the stomach. Postoperatively, the patient developed pulmonary embolism, for which anticoagulant therapy was initiated. Diagnostic gastroscopy revealed a 7 mm fibrinous ulcer with a depressed center and adjacent superficial ulcers in the lesser curvature; biopsy confirmed inflammation. Healing of the ulcer was observed one month after ulcer treatment. This case is significant as it highlights severe gastrointestinal damage that can occur without macroscopic perforation, and systemic complications such as pulmonary embolism, following butane gas ingestion. Endoscopic evaluation and thromboembolism prophylaxis are critically important in such cases.

Keywords: Butane Gas Intoxication, Acute Abdomen, Gastric Ulcer, Pulmonary Embolism

Free air image on tomography



Free air image on tomography



Ulcer in gastroscopy



Acute Abdominal and Gastrointestinal Emergencies

OP-174

CLINICAL CHARACTERISTICS AND OUTCOMES OF ACUTE MESENTERIC VENOUS ISCHEMIA: A DECADE OF EXPERIENCE IN A TERTIARY TRAUMA CENTER

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Background: Venous mesenteric ischemia (VMI) is an uncommon but serious clinical condition characterized by impaired venous drainage of the intestines, most commonly due to thrombosis of the superior mesenteric vein (SMV). Although accounting for less than 10% of all mesenteric ischemia cases, VMI carries significant morbidity and mortality. The heterogeneous clinical presentation of VMI often leads to diagnostic delays, contributing to a wide range of clinical outcomes. The aim

of this study is to evaluate and characterize the clinical features, diagnostic pathways, and outcomes of patients diagnosed with venous mesenteric ischemia in our institution.

Material and Methods: We retrospectively analyzed patients diagnosed with acute mesenteric venous thrombosis with bowel involvement between January 1, 2015, and December 31, 2024. Exclusion criteria included chronic mesenteric venous thrombosis, referral after initial surgery for VMI at another center, and cases without bowel involvement. The diagnosis was established by contrast-enhanced computed tomography (CT) in all cases. Patient characteristics, treatment approaches, and outcomes were assessed.

Results: A total of 31 patients were included in the study. One patient was moribund at admission and died shortly after CT; this case was excluded from further analysis. Of the remaining 30 patients, 19 (46.3%) were male and 22 (53.7%) were female, with a median age of 49 years [20-76]. The median duration of symptoms prior to diagnosis was 4 days [1–60]. The most common presenting symptom was abdominal pain, reported in 97.6% of patients. Twenty-one patients had purely acute mesenteric venous thrombosis, while in nine patients (30%) the thrombus was characterized as acute-on-chronic. SMV involvement alone was seen in 6 patients (20%), SMV + portal vein in 6 patients (20%), and thrombosis extending to the SMV–splenic vein–portal vein confluence in 13 patients (43.3%). The inferior mesenteric vein was affected in 7 patients (23.3%). Conservative treatment with low-molecular-weight heparin was applied in 23 patients (76.67%), while 6 patients (20%) underwent surgical intervention. Median time to surgery was 1 day [1–13]. Two surgeries were for increased intra-abdominal pressure, and four for peritonitis. Surgical procedures included resection and anastomosis, with or without open abdomen management using a vacuum-assisted closure (VAC) device. No postoperative complications occurred in the conservative group, whereas 4 patients (66.7%) in the surgical group developed complications—including atelectasis, anastomotic leakage, intra-abdominal abscess, and intracerebral hemorrhage. The median length of hospital stay was 4 days for the conservative group and 28 days for the surgical group. In-hospital mortality occurred in 1 patient (3.3%) in the surgical group.

Conclusion: Mesenteric venous ischemia is a rare but potentially life-threatening clinical entity with heterogeneous presentations and outcomes. Early cross-sectional imaging has improved diagnostic accuracy, enabling timely anticoagulation and reducing the risk of irreversible intestinal damage. Nevertheless, delays in diagnosis remain closely associated with adverse outcomes, and VMI continues to pose a substantial mortality risk despite advances in management.

Keywords: venous mesenteric ischemia, bowel infarct, conservative treatment

Acute Abdominal and Gastrointestinal Emergencies

OP-175

TRANSVERSE BLOWHOLE COLOSTOMY OR END COLOSTOMY IN ADVANCED OBSTRUCTIVE LEFT COLON TUMORS?

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Objective: In patients with advanced colorectal cancer, the aim of emergency surgical intervention is symptom control and rapid transition to oncologic treatment. This study compared the outcomes of transverse blowhole colostomy with those of end colostomy, with or without bowel resection, in cases of obstructive left colon tumors without perforation but with metastatic disease or peritoneal carcinomatosis.

Methods: Between January 2018 and December 2024, 34 patients diagnosed with obstructive left colon tumors, without perforation on imaging, and with confirmed metastatic disease or peritoneal carcinomatosis, were retrospectively reviewed. Group 1 consisted of patients who underwent transverse blowhole colostomy (n=20), and Group 2 included patients who underwent end colostomy with or without bowel resection (n=14). Demographic data, operative time, postoperative complications in hospital mortality, length of hospital stay, and time from surgery to initiation of chemotherapy were recorded.

Results: The median age of the cohort was 64 [46-94] years, comprising 18 males and 16 females. The median operative time was 60 minutes in Group 1 and 200 minutes in Group 2. Postoperative complications were observed in 4 patients (% 20) in Group 1 and 10 patients (%71) in Group 2. According to the Clavien–Dindo classification, Group 1 had one complication classified as Grade I–II and three as Grade III–IV, whereas Group 2 had two Grade I–II and eight Grade III– IV complications.The median length of hospital stay was 3 [1-20] days for Group 1 compared with 11 [4-25] days for Group 2 (One patients who was deceased on the first postoperative day was excluded). Five patients in Group 1 and two patients in Group 2 did not receive chemotherapy. The median interval from surgery to initiation of chemotherapy was 28 days in Group 1 and 44 days in Group 2.

Conclusion: In metastatic or carcinomatosis cases of obstructive left colon tumors without perforation, transverse blowhole colostomy may reduce surgical trauma, shorten hospital stay, and expedite the initiation of chemotherapy. These advantages make it a valuable palliative option for advanced-stage patients in whom quality of life is the primary consideration.

Keywords: Blowhole Colostomy , End Colostomy, Obstructive Left Colon Tumors

Catastrophic Wound Management

OP-177

THE ENDURING BURDEN OF CIVILIAN LOWER LIMB LANDMINE INJURIES IN POST-CONFLICT SETTINGS

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Background: Despite international treaties, landmines remain a persistent global health crisis. Over 110 million active landmines across 70 countries continue to cause death and disability long after conflicts end. With rising civilian casualties in warzones like Ukraine, Yemen, and Sudan, the devastating impact of landmine injuries requires renewed global attention.

Aims: To synthesise evidence on epidemiological trends and injury patterns of lower limb landmine casualties in civilian populations (1947–2025), with focus on long-term morbidity and mortality across age groups and genders. Findings highlight critical gaps for global health intervention within humanitarian surgery and the Sustainable Development Goals (SDGs) 3 and 16.

Methods: A systematic review was conducted using PubMed, Ovid MEDLINE, and Embase for English-language original studies from 1947 to 2025. Inclusion criteria comprised civilian cohorts, peacetime or post-conflict settings, and lower limb injuries from antipersonnel landmines. Military populations, non-limb injuries, IED/gunshot trauma, and case reports were excluded. Data extracted included demographics, injury mechanisms, anatomical distribution, amputation rates, mortality, access to rehabilitation, and psychosocial outcomes. Study quality was assessed using the Cochrane Risk of Bias Tool and the Mixed Methods Appraisal Tool.

Results: Eighteen studies from conflict-affected regions were analysed. Males made up 72– 95% of casualties, reflecting occupational exposure, while women and children experienced proportionally higher bilateral amputation rates and greater barriers to rehabilitation. Children, often injured while playing or herding livestock, had pre-hospital mortality rates up to 85% due to small body mass and delayed evacuation. Amputation rates ranged from 38% to over 70%, predominantly below-knee. Severe soft tissue and vascular injuries often required multiple surgeries; limb salvage was rare in low-resource settings. Rehabilitation was inconsistent, and psychosocial care was minimal. Incidents peaked seasonally during agricultural activity and persisted decades post-conflict, despite demining efforts.

Conclusions: Civilian lower limb landmine injuries remain a preventable yet neglected global surgery issue. With conflict escalating globally, integrated action on mine clearance, trauma care, and survivor rehabilitation is urgently needed to protect civilians and uphold SDG commitments.

Keywords: landmine, abandoned explosive ordnance, cluster munition, explosive remnant, war OR bounding mine, s-mine, blast injuries

Acute Abdominal and Gastrointestinal Emergencies

OP-178

IDENTIFYING INDEPENDENT PREDICTORS OF MORTALITY AND SURGICAL INTERVENTION IN ACTIVE PEPTIC ULCER BLEEDING

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Background: Upper gastrointestinal bleeding (UGIB) remains a common emergency with an incidence of 50–150 per 100 000 and mortality of 3.5–10 %. The Forrest classification recognises high-risk stigmata (Ia spurting and Ib oozing), but its ability to predict mortality or the need for surgery is limited. Although validated scores such as Glasgow-Blatchford (GBS) and Rockall aid early triage, they do not specifically forecast surgical rescue in Forrest Ia/Ib bleeds. We aimed to identify independent clinical and laboratory predictors of rebleeding, in-hospital mortality and surgical intervention in this high-risk subgroup.

Methods: We retrospectively analysed 78 consecutive adults with Forrest Ia or Ib peptic ulcer bleeding admitted to a tertiary referral centre between January 2019 and December 2024.

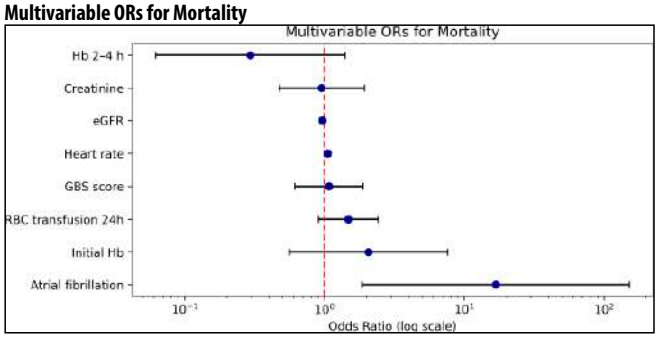
Demographics, comorbidities, presenting symptoms, vital signs, laboratory values, transfusion requirements and endoscopic findings were extracted. Rebleeding, need for surgery and in-hospital death were recorded. Uni- and bivariate comparisons used χ^2, Fisher's exact or Student's t-tests as appropriate; multivariable logistic regression identified independent predictors of each outcome. Discrimination of the Glasgow-Blatchford and Rockall scores was assessed by receiver-operating characteristic curves.

Results: Ten patients (12.8 %) had Forrest 1A lesions and 68 (87.2 %) Forrest 1B lesions. Rebleeding occurred in 19 patients (24 %), surgery was required in 20 (26 %) and in-hospital mortality was 12 (15 %). Univariate analysis showed that higher pulse rate, lower albumin, syncope on presentation and diabetes were associated with rebleeding (all $p < 0.05$). Patients who underwent surgery had a faster heart rate, lower haemoglobin at 2–4 h, lower albumin, larger transfusion requirements, and were more likely to have Forrest 1A ulcers (all $p < 0.05$). Non-survivors had higher pulse rates, higher Glasgow-Blatchford scores, lower baseline and 2–4 h haemoglobins, worse renal function (higher creatinine and lower estimated GFR), more atrial fibrillation (all $p < 0.05$). In multivariable models, Forrest 1A class and higher heart rate independently predicted surgery, and atrial fibrillation remained the strongest predictor of mortality (all $p < 0.05$). Both GBS and Rockall scores had moderate ability to predict death but poor discrimination for rebleeding or surgical intervention.

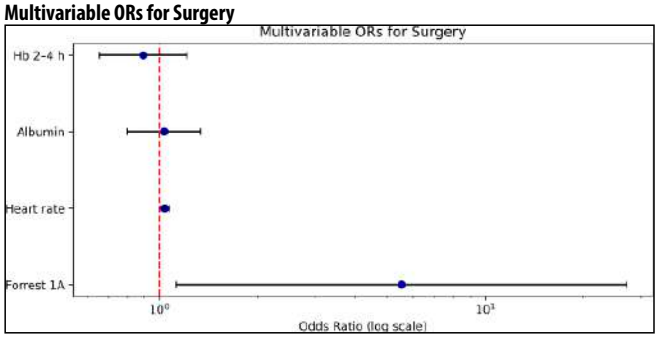
Conclusion: In patients with active spurting or oozing ulcer bleeds, the Forrest classification alone did not predict rebleeding or mortality. Tachycardia, low early haemoglobin and Forrest 1A lesions were associated with operative intervention, while atrial fibrillation strongly predicted death. Clinical and laboratory parameters therefore enhance risk stratification beyond endoscopic appearance. Combined use of vital signs, haemoglobin trends and comorbidities alongside established scoring systems may help identify patients who require early surgery or intensive care, potentially improving outcomes in this challenging cohort.

Keywords: Forrest classification; upper gastrointestinal bleeding; risk stratification; rebleeding; surgical intervention

Multivariable ORs for Mortality



Multivariable ORs for Surgery



Acute Abdominal and Gastrointestinal Emergencies

OP-179

COMPLICATED VENOUS MESENTERIC ISCHEMIA: A CASE REPORT

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Background: Heparin-induced thrombocytopenia (HIT) is a transient, immune-mediated, acquired syndrome characterized by platelet activation, consumption, thrombocytopenia, and thromboembolism following heparin exposure. Early recognition is crucial to prevent life- threatening complications.

Case Presentation: A 51-year-old woman underwent left total knee arthroplasty for gonarthrosis and was discharged with a prescription for low-molecular-weight heparin (LMWH) prophylaxis, which she did not take. On postoperative day 18, she presented with abdominal pain and vomiting. CT revealed bilateral pulmonary emboli, left femoral vein thrombosis, portal vein thrombosis, and superior mesenteric vein thrombosis. She underwent diagnostic laparoscopy, exploratory laparotomy, segmental small bowel resection, and functional end-to-end anastomosis. LMWH was initiated preoperatively. On postoperative day 2, platelet count decreased to 41,000/μL. The HIT score indicated low risk initially, but the patient's platelet count remained low and she subsequently developed acute neurological deterioration. Cranial CT revealed a large right temporal intracerebral hematoma with midline shift. Neurosurgery performed decompressive craniectomy and hematoma evacuation. Due to high suspicion for HIT, LMWH was discontinued and a new oral anticoagulant (rivaroxaban) was initiated once platelet count improved. An inferior vena cava filter was placed during the period without anticoagulation. The patient was discharged in good condition.

Conclusion: This case highlights the importance of early recognition of HIT in postoperative patients receiving heparin therapy. Delayed diagnosis can lead to catastrophic complications including multi-site thrombosis and intracerebral hemorrhage. Early discontinuation of heparin and initiation of alternative anticoagulation are critical for patient outcomes.

Keywords: Venous Mesenteric Ischemia, HIT

Right temporal intracerebral hematoma



Venous ischemia



inferior vena cava filter



Acute Abdominal and Gastrointestinal Emergencies

OP-180

PREDICTIVE VALUE OF PREOPERATIVE C-REACTIVE PROTEIN FOR COMPLICATED GALLSTONE CHOLECYSTITIS IN ELDERLY PATIENTS: A MULTICENTER RETROSPECTIVE STUDY

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Introduction: In elderly patients, differentiating between uncomplicated acute gallstone cholecystitis (AC) and complicated cholecystitis (CC) is critical for effective treatment planning. While the severity grade assigned by the Tokyo Guidelines doesn't always correlate with the actual extent of inflammation, C-reactive protein (CRP) is typically considered only for the initial diagnosis. There is limited evidence on CRP as a marker of AC severity in elderly patients.

Methods: A retrospective, multicenter diagnostic cohort study was conducted on 840 patients over 65 years old who underwent emergency cholecystectomy for AC between June 2018 and June 2023. Clinicopathological, imaging, and operative data were collected, including preoperative CRP, white cell count, neutrophil levels, and the Neutrophil-to-Lymphocyte Ratio (NLR). A multivariable analysis was run on individual test results and the intraoperative detection of CC (empyema and gangrenous cholecystitis). A Receiver Operating Characteristic (ROC) curve was used to identify optimal laboratory values related to the severity of cholecystitis.

Results: In elderly patients with AC, preoperative CRP levels were the only laboratory-based independent factor for CC. The estimated severity of AC increased by 1.011 for each mg/L increase in CRP (95% CI: 0.9465–0.9853; P<0.001). The cut-off preoperative CRP value for CC was 96, with a respective Area Under the Curve (AUC) of 0.757 (95% CI: 0.654–0.861; P<0.001), a sensitivity of 77.5%, and a specificity of 72.3%.

Conclusion: Adding CRP as a predictive factor for severity may enhance the clinical assessment of AC within the Tokyo Guidelines framework and improve the ability to detect complicated cases, thereby facilitating appropriate and timely management. The evidence from this study supports the inclusion of CRP as a severity criterion in future revisions of the guidelines.

Keywords: Cholecystitis, Cholecystectomy, Aged, Acute gallstone cholecystitis, Minimally Invasive Surgery, C-reactive protein, diagnostic study, gallbladder empyema, gangrenous cholecystitis, elderly patient, multicenter study, multivariable analysis, emergency laparoscopic cholecystectomy, Tokyo guidelines

Acute Abdominal and Gastrointestinal Emergencies

OP-181

COMPARISON OF LAPAROSCOPIC AND OPEN ADHESIOLYSIS IN PATIENTS WITH ACUTE MECHANICAL INTESTINAL OBSTRUCTION: A SINGLE-CENTER RETROSPECTIVE STUDY

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Introduction: Acute mechanical intestinal obstruction (AMIO) is a common surgical emergency, most often caused by postoperative adhesions. Open adhesiolysis has long been the gold standard; however, advances in minimally invasive surgery have expanded the role of laparoscopy even in urgent settings. This study aimed to compare laparoscopic and open adhesiolysis in terms of perioperative outcomes, postoperative recovery, and early complications.

Methods: We retrospectively analyzed 80 consecutive patients undergoing emergency surgery for AMIO between January 2021 and February 2024 at a tertiary referral center. Laparoscopic adhesiolysis was performed in 20 patients and open adhesiolysis in 60. Patients with bowel ischemia, generalized peritonitis, or gross contamination were excluded. Data included demographics, comorbidities, prior abdominal surgeries, preoperative white blood cell count (WBC) and C-reactive protein (CRP), operative

time, intraoperative findings, time to return of bowel function, length of hospital stay, and complications (Clavien–Dindo classification). Statistical analysis used chi-square or Mann–Whitney U tests, with $p<0.05$ considered significant.

Results: Median operative time was shorter in the laparoscopic group (60 vs. 85 minutes, $p<0.01$). Return of bowel function was faster (median 1.5 vs. 4 days, $p<0.01$) and hospital stay was shorter (median 3 vs. 6 days, $p<0.01$). Preoperative CRP and WBC were significantly higher in the laparoscopic group ($p<0.05$), suggesting a more acute inflammatory presentation. Postoperative complications occurred in 10% of laparoscopic cases versus 23% in the open group, a non-significant difference. No conversions to open surgery were required. Prior abdominal surgery was more frequent in the open group, potentially influencing both surgical choice and recovery outcomes.

Conclusion: In carefully selected AMIO patients, laparoscopic adhesiolysis appears to be a safe and effective alternative to open surgery, with measurable benefits in operative efficiency, bowel function recovery, and length of hospitalization. These findings support its use in emergency adhesive obstruction when performed by experienced surgeons. However, the retrospective nature, uneven group sizes, and selection bias limit the strength of conclusions. Prospective, randomized multicenter trials are needed to confirm these results and establish clear patient selection criteria.

Keywords: Acute mechanical intestinal obstruction, Adhesive small bowel obstruction, Laparoscopic adhesiolysis, Open surgery, Emergency surgery

Damage Control Surgery

OP-182

COMPARISON OF OUTCOME IN DAMAGE CONTROL SURGERY AND DEFINITIVE SURGERY IN PERITONITIS DUE TO HOLLOW VISCUS PERFORATION

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[3]*Faisalabad Medical University*

Introduction: This study evaluates the effectiveness of Damage Control Surgery versus definitive surgery (Graham's omentopexy) in terms of hospital stay, recovery time, and cost. By analyzing 57 patients over five years, we aim to determine the optimal surgical approach for managing perforation-related peritonitis. Our findings provide insights into improving patient outcomes while optimizing healthcare resource utilization.

Objective: To compare outcome of damage control surgery and definitive surgery in patients of peritonitis due to hollow viscus perforation in terms of length of hospital stay, return to work and total cost of treatment.

Material & Methods: A Total of 57 patients of both gender between 20-70 years of age were included in the study according the selection criteria. 40 patients underwent damage control surgery only and 17 patients underwent both damage control surgery and definitive surgery.All patients were observed in high dependency unit for clinical improvement.

Damage Control Surgery includes insertion of B/L lower abdominal drains under local anesthesia. Definitive surgery includes Graham's omentopexy under general anesthesia. Setting:Faisal Hospital,Faisalabad.Duration: Five years from 01-02-2019 to 31-12-2024.

Design: Prospective comparative cohort study. Sampling Technique:Non-probability purposive sampling .

Results: Among 40 patients who underwent damage control surgery, drains were removed on the 7th post-admission day and discharged the same day. All these patient were followed up after 7 days for clinical and radiological examination. Out of 40 patients, 8 patients were having mild pelvic ascites and low grade fever that was managed conservatively. 32 patients were clinically and radiologically fine.Total cost of management with damage control surgery was Rs. 165000/ for each patient for seven-day stay in the hospital.

Among 17 patients who also underwent damage control surgery, showed transient or no clinical improvement after 8 hours observation in HDU. All these patients subsequently underwent Graham's omentopexy. All the patients were discharged on 6th postoperative day and were called for follow up after 7 days. 3 patients had mild collection in morrison pouch and on and off fever that was managed conservatively. 7 patients had mild SSI that was managed conservatively. Total expenditure for each patient was Rs. 360000/ for seven- day stay in hospital.

Return to work was 20 days in DCS group and it was 34 days after Graham's omentopexy. Length of hospital was almost same in both groups.

Selection criteria:

Incision criteria:

1. All patients, with peritonitis due to Duodenal perforation diagnosed clinically and radiologically by CT scan.
2. Early presentation within 72 hours
3. Patients who give informed consent to include in the study
4. Age between 20-70 years. Extremes of ages produce bais in the results.

Exclusion criteria:

1. Late presentation after 72 hours
2. Peritonitis due to other causes of bowel perforation
3. Patients not willing to give informed consent to include in the study

Conclusion: This study supports a step-up approach, DCS should be considered as the initial treatment for peritonitis due to hollow viscus perforation, given its lower cost, faster recovery, and avoidance of major surgery in most cases.

Definitive surgery (Graham's omentopexy) remains necessary for non-responders, though it carries higher costs and longer recovery times.

Keywords: Damage Control Surgery Omentopexy (or Graham Patch) Length of Stay Recovery of Function (for return to work) Health Care Costs Treatment Outcome

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Acute Abdominal and Gastrointestinal Emergencies

OP-183

FACTORS RELATED TO THE NEED FOR SURGERY FOLLOWING SUCCESSFUL COLONOSCOPIC DETORSION OF A VOLVULUS

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Background: Colonic volvulus poses a constant challenge in emergency surgery, with outcomes hinging on timely diagnosis and intervention. While colonoscopic detorsion is often successful in restoring luminal continuity, this technical success does not always translate into definitive resolution. Many patients still progress to surgery due to ischemia, perforation, or early recurrence. Identifying who will ultimately require surgery—before the clinical picture deteriorates—remains a crucial gap in management algorithms. This study evaluates a comprehensive set of clinical, laboratory, and procedural parameters to determine predictors for surgical intervention following initial colonoscopic detorsion.

Methods: We retrospectively analyzed all patients presenting with colonic volvulus between January 2017 and December 2024 at a tertiary emergency surgery center. All underwent an initial attempt at colonoscopic detorsion. Patients were stratified into two groups: those proceeding to surgery and those managed without surgery. Variables assessed included demographics, comorbidities, ASA score, presentation features, laboratory data, imaging findings, procedural timing, and recurrence rates. Factors with $p<0.05$ in univariate analysis were entered into a multivariate logistic regression model to identify independent predictors.

Results: A total of 49 patients (median age 67 years, 73% male) met inclusion criteria; 30 (61.2%) underwent surgery. Indications included failed detorsion, endoscopic evidence of ischemia, and perforation. Univariate analysis revealed significant associations with second endoscopy requirement (53.3% vs. 15.8%, $p=0.015$), recurrence within 30 days (36.7% vs. 0%, $p=0.003$), recurrence within 90 days (46.7% vs. 5.3%, $p=0.003$), and recurrence within one year (86.7% vs. 21.1%, $p<0.001$). In multivariate analysis, ASA score emerged as the sole independent predictor for surgical need ($p=0.031$; OR=0.119; 95% CI 0.017–0.825). Operated patients had a median operative time of 155 minutes, ICU admission in 30% of cases, and a median hospital stay of 8 days. The 30-day mortality rate was 13.3%, exclusively within the surgical cohort.

Conclusion: Technical success in colonoscopic detorsion does not guarantee clinical resolution. Our findings underscore the predictive power of the ASA score in determining surgical necessity, independent of other clinical or procedural variables. Early identification of high- ASA patients could expedite operative management, potentially reducing recurrence, complications, and mortality. Incorporating ASA score into triage protocols may strengthen decision-making frameworks for colonic volvulus in emergency settings.

Keywords: Colonic volvulus , Colonoscopic detorsion, Surgical predictors, ASA score , Emergency surgery, Risk factors, Sigmoid volvulus

Acute Abdominal and Gastrointestinal Emergencies

OP-187

OUR ASA 4-E SURGICAL PATIENTS OVER 65 YEARS OF AGE

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Sanko University General Surgery Gaziantep Türkiye

Introduction: ASA score; It is a system that evaluates and classifies patients according to their physical health status before surgery.

Normal healthy patient (ASA 1), Patient with mild systemic disease (ASA 2), Patient with severe systemic disease, which does not affect daily activities (ASA 3), Patient with serious life-threatening systemic disease, whose daily activities are affected (ASA 4)

The patient who has no hope of survival without surgery is defined as terminally ill (ASA 5), and the patient who is declared brain dead and is waiting for organ transplantation (ASA 6). The letter "E" is added in cases of emergency surgery. Surgeries that would not be a problem in normal healthy individuals, but as comorbidities increase with age, mortality and morbidity increase. In this presentation, we wanted to share our results of ASA 4E patients over the age of 65 in our clinic.

Materials-Methods: ASA 4E patients who applied to our clinic between 2021-2025 at the Department of General Surgery, Sanko University Faculty of Medicine, were included in the study. The diagnosis of the patients, additional diseases (DM, HT, KBY, ANGIO, CABG, Antiplatelet use), postoperative complications, length of stay and mortality were examined.

Results: 26 patients were included in the study (14 M/12F). The average age was 77.5 ± 6. The characteristics of the patients are shown in table 1.

Discussion: Surgeries with low complications in healthy individuals become high risk due to advanced age and comorbidities. Although the mortality of these patients is high, surgery is inevitable in emergency situations. Additional diseases and medications used determine the surgery method and postoperative process. Although operating on these patients is difficult and risky, surgery is sometimes the only option. We think that in these patients, multidisciplinary follow-up of the preoperative, operational and postoperative intensive care periods together with relevant branches will reduce postoperative morbidity and mortality.

Keywords: ASA 4E, Emergency surgery in comorbid patients, Geriatric patient

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Table 1. Characteristics of Patients

Age	Gender	Surgical Indication	Surgical Treatment	Hypertension	Diabetes Mellitus	CABG or Coronary Stent	Chronic obstructive pulmonary disease or asthma	Other Diseases	Use of Antiaggr egant	Mortality
66	Male	Mesentery Ischemia	Colectomy, embelectomy	Yes	No	Yes	Yes	No	Klopidogrel	Yes
81	Female	Tumor perforation	Colectomy	Yes	Yes	Yes	Yes	Obesity	Aspirin	No
76	Male	Gangrenous Cholecystitis	Cholecystectomy	Yes	Yes	Yes	No	No	Aspirin, Klopidogrel	No
92	Male	Intestinal perforation	Small bowel resection	Yes	No	Yes	No	No	Aspirin	Yes
72	Female	Strangulated Hernia	Small Small bowel resection bowel	No	Yes	Yes	No	Obesity	Aspirin	No
68	Male	Strangulated Hernia	Small Small bowel resectionowel	Yes	No	No	Yes	No	No	No
70	Male	Gangrenous Cholecystitis	Laparoscopic cholecystectomy	Yes	No	Yes	Yes	Heart Failure	Aspirin	No
78	Male	Gangrenous Cholecystitis	Laparoscopic cholecystectomy	Yes	Yes	No	Yes	Mesane Ca	No	No
80	Male	Tumor Obstruction	Gastroenterostomy, hepaticojegenostomy	No	Yes	No	Yes	No	No	Yes
78	Female	Gangrenous Cholecystitis	Laparoscopic cholecystectomy	Yes	Yes	No	No	No	No	No
80	Female	İleus	Small bowel resection	Yes	Yes	No	No	Heart Failure	Aspirin	No
81	Male	Cholangitis	Hepaticojejunostomy	No	Yes	Yes	Yes	Dementia	Aspirin	No
81	Female	Retroperit oneal abscess	Drainage	Yes	Yes	Yes	No	Heart failure, obezite	Aspirin	No
88	Female	Incarcerated hernia	Repair with Prolene Meshgraft	Yes	No	Yes	Yes	Cirrhosis	No	No
89	Female	Gangrenous Cholecystitis	Laparoscopic cholecystectomy	No	Yes	Yes	No	No	Klopidogrel, aspirin	No
78	Male	Volvulus	Colectomy	Yes	Yes	No	No	Dementia	Aspirin	Yes
77	Female	Volvulus	Colectomy	Yes	Yes	Yes	Yes	End- stage renal failure	Aspirin	Yes
77	Male	Intestinal perforation	Distal gasrectomy	Yes	Yes	No	Yes	End-stage renal failure, Heart Failure	Klopidogrel	No
77	Male	Tumor Obstruction	Operation Whipple	Yes	Yes	No	No	No	No	Yes
71	Female	Gangrenous Cholecystitis	Laparoscopic cholecystectomy	Yes	Yes	No	No	End-stage renalfailure	No	No
76	Female	Incarceratedhernia	Repair with Prolene Meshgraft	No	Yes	Yes	No	Obesity	Aspirin	No
76	Male	Intestinalbleeding	Ploroplasty, bilateral trunkvagatomy, gastroduodenal arteryligation	No	No	No	No	Obesity	No	No
75	Male	Volvulus	Colectomy	Var	Yes	Yes	No	Dementia	No	No
72	Female	Tumoral bleeding	Operation Whipple	Var	Yes	No	No	No	Aspirin	No
70	Male	Tumoral bleeding	Nephrectomy	Var	No	No	No	No	No	No
89	Male	Volvulus	Colectomy	Var	Yes	No	No	Heart Failure, Dementia	No	Yes

Organ-Specific Emergencies
Prehospital Trauma Management and Acute Care

OP-190

AN 11-YEAR RETROSPECTIVE STUDY OF PREVENTABLE DEATH IN A WESTERN-STYLE TRAUMA CENTER IN SHENZHEN CHINA

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Introduction: The author conducted a retrospective study over the past 11 years to understand whether there were differences in preventable trauma deaths before and after the establishment of the trauma center.

Methods: Patient data were collected using trauma audit meeting forms from the hospital statistical department. This study used ATLS clinical guidelines to analyze patients who died from trauma systematically.

Results: The study found that from January 1, 2013, to December 31, 2023, there were 1433 severe trauma patients (ISS>15), and 79 people died from trauma with median age (IQR) 48 (30-73), and median ISS (IQR) 29 (25-45). Among the 79 deaths, 17 were preventable and potentially preventable, accounting for 21.5% of all deaths. The study identified 69 errors among 17 patients with preventable or potentially preventable trauma deaths; Out of 62 patients with non-preventable traumatic deaths, the study identified 94 errors. Trauma deaths were 44 cases before the establishment of the trauma center and 35 cases after the establishment (P=0.028) without excluding death on arrival. After excluding death on arrival, trauma deaths were 41 cases before the establishment and 25 cases after the establishment (P=0.002). Preventable and potentially preventable deaths before the establishment were 11 (25%) and 7 (20%) after the establishment (P=0.132).

Conclusion: An alert system, the multidisciplinary trauma teams, trauma training, an ideal trauma resuscitation area, systematic trauma resuscitation techniques, guidelines for severe trauma management, and a trauma audit meeting system all contributed to the decrease of trauma mortality from the above study.

Keywords: Trauma preventable death; Trauma audit; Trauma center; Trauma system; Trauma

Minimal Invasive Emergency Surgery

OP-191

THE ROLE OF ROUTINE BLOOD TESTS IN IMPROVING CANCER OUTCOMES POST-EMERGENCY COLECTOMY FOR COLORECTAL CANCER

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Introduction: Multiple studies have investigated serum biomarkers as predictors of oncological outcomes after colorectal cancer resection with inconsistent outcomes. Evidence is lacking regarding their value in the emergency setting. The aim of this study was to evaluate these biomarkers as predictors of overall survival (OS) and disease-free survival (DFS) for emergency colorectal cancer resections.

Methods: All patients who underwent emergency curative resection for colon cancer at Royal United Hospital NHS trust in Bath from 2016 to 2023 were included. Rectal cancer patients and palliative resections were excluded. 20 serum biomarkers were tested either pre- or post-operatively in 135 patients Cut-off values were selected based on receiver operating characteristic (ROC) curves for each variable.

Results: Among these biomarkers, pre-operative leucocyte-to-monocyte ratio (LMR), the difference between post-operative and pre-operative platelet-to-leucocytes ratio (delta-PLR), Prognostic Nutritional Index (PNI) and delta-LMR had the best area under the curve (AUC). Mean 5-year OS was 53,5months LMR>1.46 vs 47,3 months for NLR<1.46 (p=0.033) after emergency colorectal cancer resection, with mean 5-year DFS was 47,9 and 37,3 months respectively (p=0.015) Additionally, higher pre-operative delta-PLR resulted in better 5-year OS (53,5 vs 47,5 months; p=0.031), but did not reach statistical significance for better DFS. Pre-operative leucocyte-to-CRP ratio (LCR) also

emerged as a possible predictor of 5 year DFS (p=0.05). Other biomarkers including PNI and delta-LMR failed to reach statistical significance. Neutrophil-to-leucocyte ratio (NLR) did not emerge as a useful biomarket in our emergency cohort.

Conclusion: Pre-operative LMR and delta-PLR were found to be the serum biomarkers best predicting long-term oncological outcome after emergency resection for colon cancer. Larger prospective studies are needed to validate these results and assess whether these biomarkers could be used to offer adjuvant chemoherapy to patients when not currently indicated on usual histological risk factors.

Keywords: emergency colectomy, colorectal cancer prognosis, blood biomarkers, postoperative survival, leucocyte-to-monocyte ratio (LMR), delta-PLR

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Lymphocytes) / Platelets

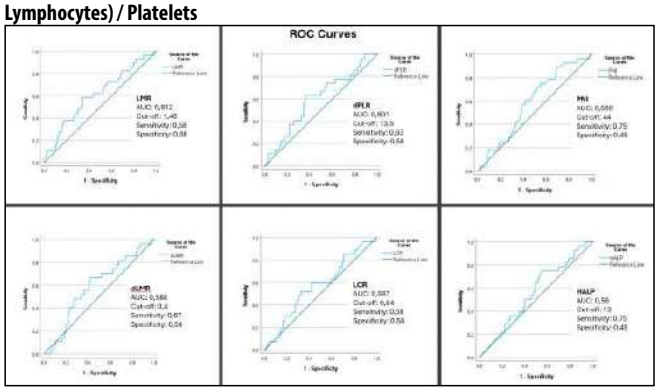


Figure 1. Receiver perating characteristic (ROC) curves for the six biomarkers with the best area-under-the-curve (AUC). Cut-off points with respective sensitivity and specificity are given for each biomarker. LMR: Lymphocyte-to-monocyte ratio, dPLR: delta platelets-to-lympocytes ratio, PNI: Prognostic Nutritional Index, LCR: leucocytes- to-CRP ratio, HALP: Composite score calculate as follows (Hemoglobin * Albumin *

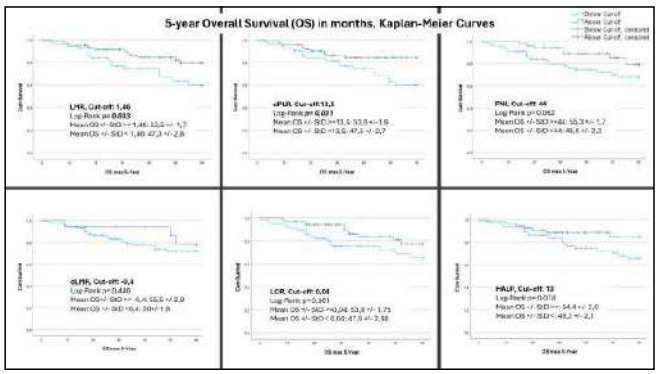


Figure 2. Kaplan-Meier curves depicting 5-year Overall Survival (OS) for patients who underwent emergency colon resection for colon cancer, comparing outcomes for the cut-off values selected for each biomarker. Outcomes are given as mean survival in months +/- standard deviation (StD) and were compared using Log-Rank test.

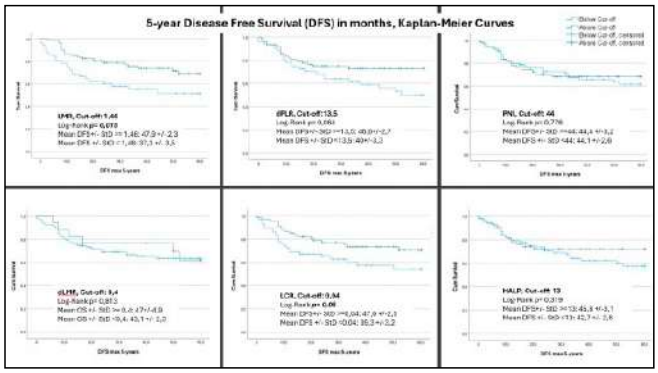


Figure 3. Kaplan-Meier curves depicting 5-year Disease Free Survival (DFS) for patients who underwent emergency colon resection for colon cancer, comparing outcomes for the cut-off values selected for each biomarker. Outcomes are given as mean survival in months +/- standard deviation (StD) and were compared using Log-Rank test.

Endocrine and Breast Surgery

OP-192

MANAGEMENT OF CAROTID BODY TUMORS: A RETROSPECTIVE MULTICENTER STUDY

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Objective: To study the characteristics, diagnosis, and management of patients diagnosed with carotid body tumors at three institutions in the United Arab Emirates.

Study design: Multicenter retrospective study

Setting: Three tertiary hospitals in the UAE

Method: Patients diagnosed with carotid body tumors at our institutions between January 2010 and December 2023 were included. Patient demographics, clinical symptoms, investigative modalities, therapeutic interventions, pathological findings, and clinical outcomes were assessed.

Results: Twelve patients (58.3% women) with a median age of 51.5 years were evaluated. The most common symptom was a painless neck mass (83.3%). Tumors were located on the right side in eight patients (66.6%); there were no bilateral cases. One patient had a synchronous small glomus vagale tumor. Contrast-enhanced computed tomography was used as the primary imaging modality in 11 patients. Multiple imaging modalities were used in 66.6% of patients. The median tumor size was 4.6 cm. Of these, 33.3% were Shamblin Class I, 50% were Shamblin Class II, and 16.6% were Shamblin Class III. Seven patients underwent surgery, while five opted for non-surgical treatment. Preoperative embolization was performed in two patients. All operated cases were histopathologically confirmed to be paragangliomas. No deaths or recurrences occurred. Complications (hoarseness and dysphagia) occurred in three patients.

Conclusion: Carotid body tumors are rare and challenging to treat; however, positive outcomes are possible with careful planning and precise surgery. Active surveillance can be an effective initial

approach in selected patients. Future studies should create individualized risk plans to guide treatment decisions and follow-ups.

Keywords: Carotid Body, Complications, Outcome, Surgery, Tumor.

Organ-Specific Emergencies

OP-196

SMALL VERSUS LARGE BORE CHEST TUBE IN TRAUMATIC HEMOTHORAX, HEMOPNEUMOTHORAX, AND PNEUMOTHORAX: A META-ANALYSIS OF RCTS WITH TRIAL SEQUENTIAL ANALYSIS

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Background: The optimal tube size for managing traumatic hemothorax, pneumothorax, or hemopneumothorax remains debated. While large-bore chest tubes (LCTs - ≥28 Ch) are traditionally favored, emerging evidence suggests that small-caliber tubes (SCTs - ≤14 Ch), such as pigtail catheters and small straight tubes, may offer similar efficacy with fewer complications. This study aimed to evaluate the comparative effectiveness and safety of SCTs versus LCTs from Randomized Controlled Trials (RCTs) in adult trauma patients and to assess the conclusiveness of the current evidence using trial sequential analysis (TSA).

Methods: The study was conducted according to the Cochrane recommendations, searching the PubMed, Scopus, and EMBASE datasets up to 25th March 2025 without language restrictions (PROSPERO ID: CRD420251023165). The primary outcome was treatment failure; secondary outcomes included insertion-related complications, duration of drainage, and length of hospital stay. Random effects models based on restricted maximum likelihood and Hartung-Knapp correction were developed. Sensitivity analysis was conducted to detect sources of heterogeneity. The risk of bias was assessed using the Cochrane RoB 2 tool. TSA was used to evaluate the risk of random error and to determine whether the required information size (RIS) had been reached.

Results: Four RCTs (n = 676 patients) were included. Pooled analysis showed no significant difference in failure rates between SCTs and LCTs (RR 0.95, 95% CI 0.66–1.35, I^2 = 0%). No significant differences were observed in complication rates or hospital stay. Duration of tube placement was significantly shorter in the SCD group (MD –0.49 days, p = 0.02). TSA indicated that the cumulative evidence was underpowered, achieving only 22% of the RIS (3110 patients). The Z-curve did not cross thresholds for benefit, harm, or futility.

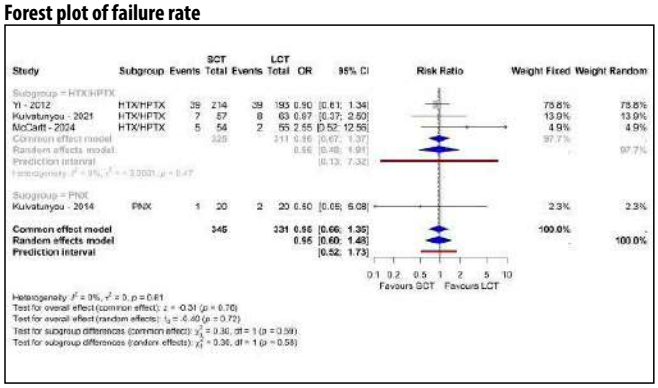
Conclusion: SCTs appear to be as effective and safe as LCTs for selected trauma patients with uncomplicated thoracic injuries. However, due to limited sample size and heterogeneity across trials, current evidence is inconclusive. Larger, high-quality RCTs are warranted to confirm these findings and guide clinical practice.

Keywords: thoracic trauma, percutaneous drainage, chest tube, hemothorax, hemopneumothorax, pneumothorax, systematic review, meta-analysis

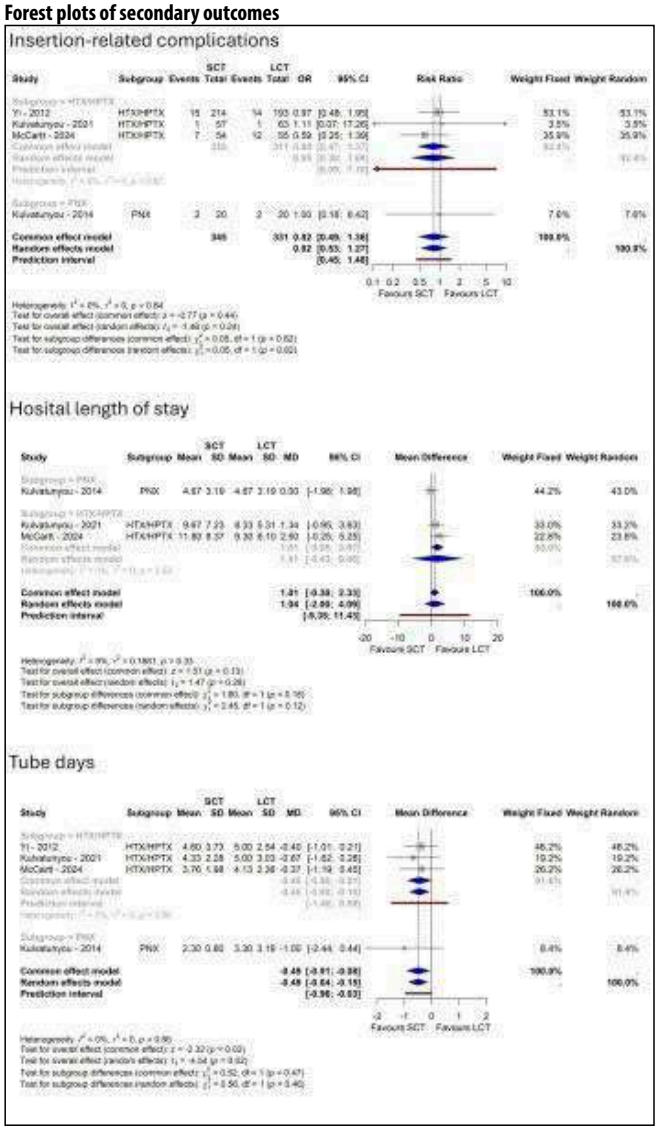
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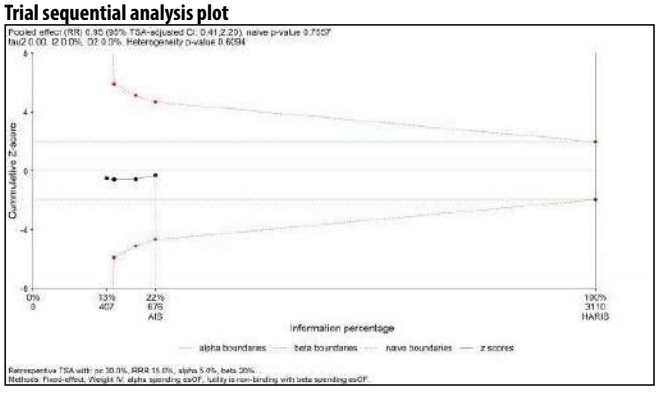
Forest plot of failure rate



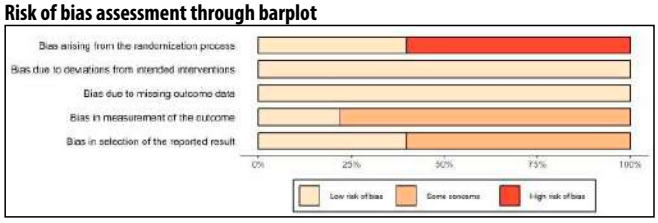
Forest plots of secondary outcomes



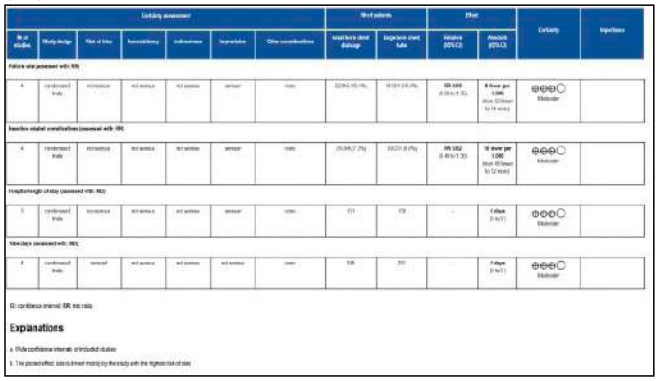
Trial sequential analysis plot



Risk of bias assessment through barplot



GRADE



Organ-Specific Emergencies

OP-197

EARLY POST-KIDNEY TRANSPLANT EMERGENCIES AND OUR TREATMENT APPROACHES

Erbay Tümer

Sanko University Urology Clinic

Kidney transplantation (KT) is the most effective treatment for end-stage renal disease. In patients with chronic kidney disease (CKD), uremia affects the entire body, particularly the cardio-vascular system. The risk of postoperative complications in CKD patients is higher compared to individuals without renal disease. Early complications can also develop after KT. Early recognition of such complications and the implementation of appropriate treatment strategies are critical for graft survival and the overall condition of the patient.

In this report, we aimed to share the cases in our clinic in which emergency interventions were performed within the first 30 days following kidney transplantation.

Keywords: kidney transplantation, emergency complications

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Table 1.

Name	Age	BMI	CKD etiology	Donor type	CKD duration	Reason for reoperation	Cardiac status	Smoking status	ATS	Transplant side	Number of arteries	Anticoa Gulant Use	Gender	Post- Reoperation Hospital stay	Creatinine at discharge
1	27	23	Nephrotic syndrome	Living donor	18	Evisceration	Normal	No	No	Left	2	No	Male	4	1
2	46	27	HT	Living donor	6	Hematoma	Normal	Yes	No	Left	1	No	Female	5	0.9
3	58	32	HT	Cadaveric donor	128	Evisceration	Cabg	Yes	Yes	Right	1	Aspirin	Male	3	1.2
4	25	31	DM+HT	Living donor	12	Hematoma	Coronary Stent	No	Yes	Left	1	Aspirin + Clopidogrel	Male	4	1.7
5	36	21	DM	Cadaveric donor	185	Rinary Leakage	Cabg	Yes	Yes	Right	3	Aspirin	Female	5	2.1
6	43	19	Glomerulonephritis	Cadaveric donor	79	Rinary Leakage	Normal	No	No	Left	2	Aspirin	Male	4	1.9
7	58	28	HT	Living donor	3	RAS	Coronary Stent	Yes	Yes	Right	2	Clopidogrel	Female	4	0.9
8	56	25	HT	Livin g dono r	8	Renal Veinthrombosis	Coronary Stent	Yes	No	Right	1	Aspirin	Male	19	4.7
9	29	22	VUR	Living donor	2	Hematoma	Normal	Yes	Yes	Left	1	No	Female	5	0.8
10	38	29	DM	Living donor	16	Evisceration	Normal		Yes	Left	2	No	Female	3	1
11	57	23	DM	Cadaveric donor	307	Rinary Leakage	Coronary Stent	No	Yes	Right	2	Aspirin	Male	5	1.1
12	63	29	Glomerulonephritis	Living donor	26	Hematoma	Cabg	Yes	No	Left	1	Aspirin + Clopidogrel	Female	6	0.8
13	58	22	VUR	Cadaveric donor	68	Hematoma	Cabg	No	Yes	Left	3	Aspirin	Male	4	1.6
14	47	31	VUR	Cadaveric donor	108	Hematoma	Coronary Stent	No	Yes	Right	2	Aspirin	Female	4	2.1
15	22	19	HT	Livin g dono r	6	RAS	Normal	No	No	Left	1	No	Male	5	1.2
16	56	29	DM	Living donor	2	Hematoma	Cabg	Yes	No	Left	1	Aspirin	Female	5	1
17	61	23	HT	Cadaveric donor	96	Evisceration	Cabg	Yes	Yes	Right	2	Aspirin	Male	3	1.4

Organ-Specific Emergencies

OP-199

COMPARISON OF THE NEUTROPHIL-TO-LYMPHOCYTE RATIO AND THE BEDSIDE INDEX FOR SEVERITY IN ACUTE PANCREATITIS FOR THE PREDICTION OF SEVERE PANCREATITIS

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Aim: Due to the worsened prognosis of severe pancreatitis, clinical tools that predict the progression of acute pancreatitis into severe disease plays a crucial role in early clinical decision making for the initiation of aggressive treatment as well as for the need of admission to the intensive care unit. The Bedside Index for Severity in Acute Pancreatitis (BISAP) score is a clinical tool that includes five parameters including blood urea nitrogen (BUN)>25 mg/dL, impaired mental status, presence of systemic inflammatory response syndrome (SIRS), age>60 years, and the presence of pleural effusion. The aim of this study was to compare the BISAP score with the neutrophil-to-lymphocyte ratio (NLR), derived from routine serum laboratory parameters, to early predict the progression to severe pancreatitis.

Materials and Methods: Historical records of patients hospitalized with the diagnosis of acute pancreatitis between 2018 and 2025 were retrospectively analyzed from a prospectively recorded database. The NLR was calculated using absolute neutrophil and lymphocyte counts. Severe pancreatitis was defined as a c-reactive protein (CRP) level >150 mg/L on the second day of admission. The BISAP score was calculated for all patients as a score greater than 2 was considered indicative of high risk. Receiver operating characteristic (ROC) curve analysis was applied to both NLR and BISAP score. The optimal NLR cutoff was determined by the Youden index. $p<0.05$ was considered statistically significant.

Results: The study group of 111 patients consisted of 61 (55%) men and 50 (%45) women with a median age of 66 (IQR: 27) years. A total of 59 patients (53.2%) had CRP values >150 mg/L. According to ROC analysis, the area under curve (AUC) was 0.726 for NLR and 0.708 for the BISAP score. The optimal NLR cutoff determined using the Youden index was 6.89, with a sensitivity of 69.5% and specificity of 76.9%. As results of the logistic regression analysis, BISAP>2 was found to be a significant predictor of severe pancreatitis [Odds Ratio (OR): 4.65, 95% confidence interval (CI): 1.97–10.97, $p<0.001$] where a BISAP score higher than 2 was associated with approximately 5 times greater risk of progression to severe pancreatitis. The NLR was also independently associated with predicting severe disease [OR: 7.59, 95% CI: 3.24–17.77, $p<0.001$] as for having an NLR greater than 6.89 increased the risk for the development of severe pancreatitis by 8 times.

Conclusion: The NLR was found to be a significant and independent predictor of progression to severe course in acute pancreatitis. The performance of the NLR model created with use of the Youden index based cutoff of 6.89 was comparable to the BISAP score. Due to its simplicity and cost-effectiveness, the NLR can be used as an alternative decision-making tool in clinical practice, especially in settings where BISAP scoring is not readily available.

Keywords: Pancreatitis, Acute; Neutrophils; Lymphocytes; C-Reactive Protein; General Surgery

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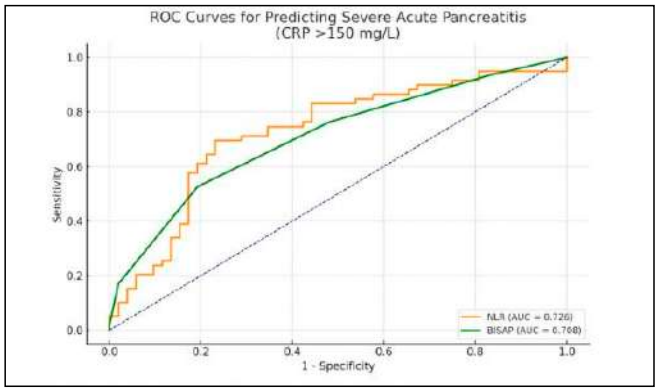


Figure 1. The ROC curve for NLR and BISAP in predicting severe pancreatitis.

Hernia

OP-202

SURGICAL APPROACH AND CLINICAL MANAGEMENT IN AMYAND HERNIAS: TWO CASE REPORTS AND A REVIEW OF THE LITERATURE

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Background: Amyand hernia is a rare clinical condition defined by the presence of the vermiform appendix within an inguinal hernia sac. Its incidence is less than 1% among all inguinal hernias. Clinical presentation is often nonspecific, and diagnosis is typically made intraoperatively. The management strategy is largely influenced by the inflammatory status of the appendix and is guided by the Losanoff and Basson classification.

Case Presentation: We report two male patients diagnosed with Amyand hernia, both presenting with acute symptoms and intraoperative findings of perforated appendicitis.

Case 1: A 57-year-old male presented with right lower quadrant pain. Laboratory results showed WBC 10.8×10^9/L and CRP 26.8 mg/L. Abdominal CT revealed a soft tissue mass extending from the bladder lateral to the right inguinal region, with a radiologically normal-appearing appendix. Diagnostic laparoscopy revealed a perforated appendix within the hernia sac.

Appendectomy and adhesiolysis were performed without mesh use. The patient was discharged uneventfully on postoperative day 3. Histopathology confirmed acute appendicitis.

Case 2: A 72-year-old male presented with a painful, irreducible right inguinal mass. Lab results showed WBC 1.9×10^9/L and CRP 108.7 mg/L. Imaging suggested incarcerated hernia with partial intestinal obstruction. Open exploration revealed a perforated appendix. Appendectomy and primary hernia repair without mesh were performed. The patient was discharged without complications on postoperative day 5. Pathology revealed perforated appendicitis with abscess formation.

Discussion: The management of Amyand hernia varies based on the Losanoff and Basson classification. While mesh repair is commonly employed in non-inflamed cases, mesh use in inflamed or perforated appendicitis is controversial due to infection risk. In both our cases, due to perforation and contamination, primary hernia repair without mesh was preferred. These cases highlight the need for intraoperative vigilance and a tailored approach based on the appendix status.

Conclusion: Amyand hernia poses both diagnostic and therapeutic challenges. Preoperative imaging may fail to reveal the diagnosis, which is often made intraoperatively. Surgeons must evaluate the appendix status and adapt the surgical strategy accordingly. In cases of inflammation or perforation, mesh-free primary repair remains a safe and effective option. Personalized surgical planning supported by literature-guided algorithms can enhance outcomes in these rare but complex hernias.

Keywords: Hernia, Inguinal; Appendicitis; Appendix; Herniorrhaphy; Perforation; Laparoscopy; Abscess; General Surgery; Diagnosis, Differential; Treatment Outcome;

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Figure 1. CT showing Amyand hernia

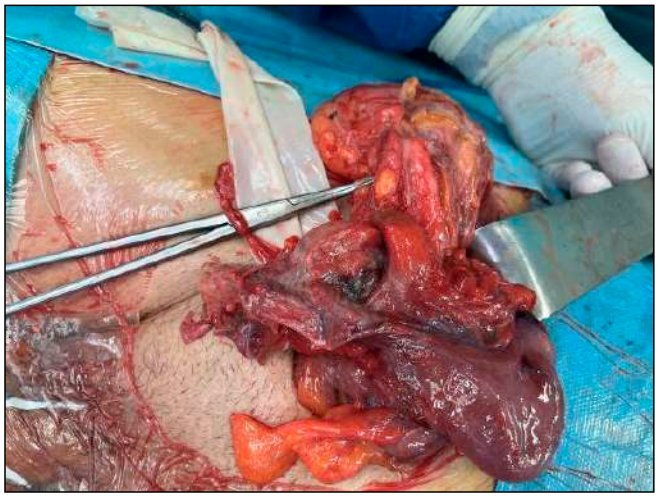


Figure 2. Intraoperative Photograph

Table 1. Losanoff and Basson Classification of Amyand Hernia

Type	*Definition*	*Suggested Surgical Management*
Type 1	Normal appendix within an inguinal hernia (non- inflamed)	Hernia repair with mesh; appendectomy not recommended in young patients
Type 2	Acute appendicitis within an inguinal hernia, without abdominal sepsis	Appendectomy through hernia sac; primary hernia repair without mesh
Type 3	Acute appendicitis within hernia sac with peritoneal/abdominal sepsis	Laparotomy, appendectomy, hernia repair without mesh
Type 4	Amyand hernia with other unrelated intra-abdominal pathology (e.g. malignancy, inflammatory disease)	Treat the appendicitis and hernia as in Type 1–3 + manage associated pathology

Perioperative, Critical Care & TICU, SICU

OP-203

ENHANCED RECOVERY AFTER SURGERY (ERAS) IN LAPAROSCOPIC CHOLECYSTECTOMY FOR ACUTE CALCULOUS CHOLECYSTITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS.

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Background: Laparoscopic cholecystectomy (LC) is the gold standard for the treatment of acute calculous cholecystitis (ACC); however, it can be associated, in some cases, with considerable postoperative pain and prolonged hospital stay. Enhanced Recovery After Surgery (ERAS) protocols, well established in elective surgery, aim to reduce the physiological stress of surgery and improve recovery through evidence-based perioperative care. While their benefits in elective settings are well-documented, the application of ERAS in emergency procedures such as LC for ACC is still limited and not standardized. This systematic review and meta-analysis investigate the impact of ERAS protocols on perioperative outcomes in patients undergoing emergency LC for ACC, compared to conventional care approaches.

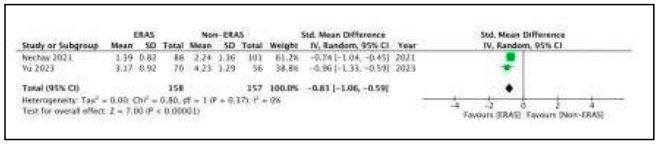
Methods: This systematic review and meta-analysis were conducted by PRISMA guidelines and prospectively registered in PROSPERO (CRD42025583713). A comprehensive search of MEDLINE, EMBASE, Web of Science, Cochrane Library, and PubMed databases, as well as a manual search, was conducted from inception to November 2024. Eligible studies included randomized controlled trials (RCTs) and non-randomized comparative studies evaluating ERAS protocols versus conventional care in patients undergoing laparoscopic cholecystectomy for acute calculous cholecystitis. Outcomes included postoperative length of stay (LOS), postoperative pain intensity (VAS score), morbidity, unplanned readmission, and reoperation. Meta-analyses were performed using random-effects models applying the inverse variance and Mantel-Haenszel, as appropriate.

Results: After screening 48 citations, 3 studies were included, comprising 367 patients managed with ERAS protocols and 571 receiving conventional care. In patients undergoing laparoscopic cholecystectomy for ACC, ERAS protocols were associated with a significant reduction in postoperative length of stay (MD 0.83 days, 95% CI 0.59–1.33, p < 0.00001) and postoperative pain intensity (MD 1.02, 95% CI 0.32–1.72, p = 0.005). There was a non-significant reduction in overall morbidity (RR 0.83, 95% CI 0.28–1.89, p = 0.51) and in severe morbidity (Clavien–Dindo grade > III) (OR 0.70, 95% CI 0.33–1.46, p = 0.34) in the ERAS group. Similarly, a non-significant reduction was observed in the risk of unplanned readmission (OR 0.47, 95% CI 0.17–1.34, p = 0.16) and reoperation (OR 0.81, 95% CI 0.21–3.06, p = 0.76).

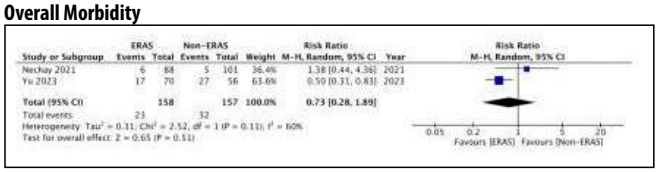
Conclusion: ERAS protocols in patients undergoing laparoscopic cholecystectomy for acute calculous cholecystitis appear to significantly reduce postoperative length of stay and pain intensity. Although reductions in morbidity, unplanned readmission, and reoperation were not statistically significant, ERAS did not increase these risks. Overall, ERAS protocols may offer clinical benefits in this setting, but further high-quality studies are needed to confirm their safety and efficacy in the acute care context.

Keywords: Enhanced Recovery After Surgery – Laparoscopic cholecystectomy – Acute calculous cholecystitis – Length of stay – Perioperative care – Acute care surgery

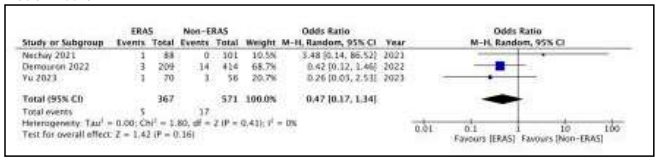
LOS



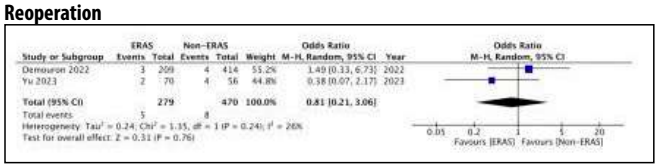
Overall Morbidity



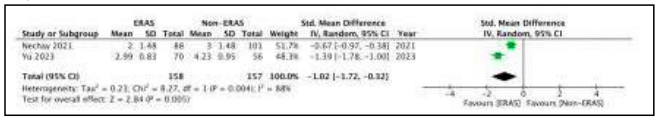
Readmission



Reoperation



VAS



Education for Emergency Surgery

OP-205

FIELD-BASED RECOMMENDATIONS FOR TRAUMA CARE IN CONFLICT ZONES: A QUALITATIVE ANALYSIS FROM HUMANITARIAN HEALTH PROFESSIONALS

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Background: Trauma care is a core function of humanitarian medical response in conflict zones. However, many operational lessons remain undocumented, passed verbally between shifts or missions. This study aimed to gather and analyze field-based insights from frontline professionals to define practical, systems-oriented requirements for effective trauma care delivery in conflict settings.

Methods: A qualitative, thematic analysis was conducted based on 19 in-depth interviews with trauma surgeons, emergency physicians, anesthesiologists, nurses, and healthcare coordinators from organizations including MMedecins Sans Frontieres, International Committee of the Red Cross, EMERGENCY, and INTERSOS. Participants were selected for their extensive experience across conflict-affected regions. Data were coded inductively and analyzed using Braun and Clarke's approach.

Results: Participants underscored that effective trauma care in conflict zones depends on more than clinical skill-it requires cohesive systems rooted in coordination, communication, context-specific training, and adaptive leadership. Interviews revealed that the absence of standardized protocols, interoperable information tools, and reliable prehospital care consistently compromised outcomes. Field personnel emphasized the need for competency frameworks grounded in operational reality, culturally attuned leadership, and integrated research practices that prioritize learning from lived experience rather than post-hoc analysis. Together, these findings point to a set of field-derived requirements that redefine what is essential for trauma system functionality in humanitarian crises.

Conclusions: Trauma care systems in conflict zones require a shift from reactive models to scalable, prepared, and context-integrated systems. Field insights offer a roadmap for building more equitable, efficient, and ethically sound trauma care by strengthening coordination, information sharing, training, and trust-based collaboration.

Keywords: trauma care, conflict zones, humanitarian response, emergency surgery, qualitative research

Organ-Specific Emergencies

OP-207

CHOLECYSTECTOMY OUTCOMES IN HIGH- VS MIDDLE/LOW-INCOME COUNTRIES: A POST HOC ANALYSIS OF THE SPRIMACC GLOBAL DATABASE

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Background: Acute calculous cholecystitis (ACC) is a common surgical emergency globally, with laparoscopic cholecystectomy (LC) representing the gold standard treatment. However, access to LC varies significantly across countries with different income levels, reflecting broader global disparities in surgical care. This study aims to compare the clinical characteristics and perioperative outcomes of ACC patients undergoing cholecystectomy across high-, middle-, and low-income countries, with a focus on laparoscopic surgery.

Methods: This is a post-hoc analysis of the prospective SPRiMACC study, which included 1,253 patients from 79 centers across 19 countries. Patients were stratified into two groups based on the World Bank income classification: high-income countries (HICs) and middle-/low-income countries (LMICs). Propensity score matching (PSM) was used to balance patient characteristics across groups. Outcomes assessed included complication rates, mortality, length of hospital stay (LOS), use of bailout procedures, and conversion to open surgery.

Results: Prior to matching, significant differences were observed in comorbidity indices (including Charlson comorbidity index and the American Society of Anesthesiologists index) and ACC severity between HICs and LMICs. After PSM, 366 matched patients were analyzed. No significant differences were found in intraoperative complications, conversion rates, or mortality. However, LOS >10 days was more frequent in HICs (12.6% vs. 3.8%, $p = 0.004$), while bailout procedures were more common in LMICs (11.5% vs. 3.3%, $p = 0.004$). These findings suggest that surgical outcomes are largely comparable, though influenced by contextual factors such as resource availability and health system capacity.

Conclusions: This study highlights the feasibility of safe laparoscopic surgery for ACC across diverse economic settings, while also exposing persistent disparities in access, surgical strategies, and health system efficiency. Expanding access to laparoscopic techniques in resource-limited settings will require targeted investments in training, infrastructure, and policy reform. These efforts align with global surgery goals and the Sustainable Development Goals, particularly SDG 3 (Good Health and Well-Being) and SDG 10 (Reduced Inequalities).

Keywords: Laparoscopic cholecystectomy, acute cholecystitis, global surgery, low- and middle-income countries, surgical disparities, health equity.

Education for Emergency Surgery

OP-211

A LOW-COST SIMULATOR TO TEACH POINT-OF-CARE ULTRASOUND

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Aim: To develop and evaluate a practical, low-cost ultrasound training simulator for teaching basic ultrasound physics and knobology, including probe orientation, tissue impedance, essential hand movements, and recognizing image artifacts while observing scanned objects.

Methods: The simulator consists of 1) one complete lemon, 2) half a lemon, 3) half a kiwi fruit, and 4) an avocado pit. These objects were secured inside a plastic box using screws, nails and double-sided foam tape, after which the box was filled with water. The estimated total cost was less than 15 US dollars. The simulator was prospectively tested to teach basic ultrasound physics during the period of 4th January 2021 till 14th October 2021 on 59 undergraduate junior surgical clerkship students, who had no prior exposure to ultrasound. Quantitative feedback was collected through a Likert-scale questionnaire evaluating educational value, skill acquisition, and user satisfaction. Qualitative data were obtained from open-ended questions. Descriptive statistics were used for quantitative responses, while inductive thematic analysis was applied to qualitative comments.

Results: 58 students filled the questionnaire (response rate of 98.3%), 57 of them (98.3%) recommended the simulator to peers, and all assessed items received the highest median rating (5 out of 5), including items assessing conceptual understanding, procedural skills, and enjoyment. Thematic analysis provided three major themes: Learning *Enhancement*, *Engagement and Motivation*, and *Training Limitations*. Students reported improved understanding of ultrasound physics, artifact recognition, and probe handling. The simulator was described as engaging and enjoyable, promoting self-directed learning.

However, students noted limitations related to session duration, realism, and the need for additional practice opportunities.

Conclusion: The proposed low-cost ultrasound simulator was highly rated for its educational value and engagement potential. Qualitative insights complemented these findings by revealing strong learner enthusiasm. Expanding session duration and increasing clinical fidelity may further enhance its utility.

Keywords: Ultrasound education, medical students, simulation, surgical clerkship, mixed- methods, learner engagement, skill acquisition

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Organ-Specific Emergencies

OP-214

SURGICAL AND CLINICAL CHARACTERISTICS OF RECTAL FOREIGN BODIES: A SINGLE-CENTER EXPERIENCE

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Objective: Patients presenting with rectal foreign bodies are often evaluated in emergency departments, and the diagnostic, therapeutic, and follow-up processes require a multidisciplinary approach. This study aims to retrospectively analyze the clinical, demographic, and surgical characteristics of patients with rectal foreign bodies and contribute to the management strategies of this rare clinical entity.

Methods: Thirteen patients who underwent surgical intervention due to rectal foreign body impaction between 2020 and 2025 at our center were retrospectively evaluated. Data collected included age, gender, presenting complaints (sensation of foreign body in rectum, inability to defecate or pass gas, abdominal pain), diagnostic methods, type and location of foreign body, surgical approach, laboratory findings (HGB, WBC, HCT, CRP), complications, perforation, stoma requirement, and length of hospital stay. Results: All patients in the study were male, with a mean age of 40.1 years (range: 18 to 85 years). The most common presenting complaint was the sensation of a rectal foreign body, reported by 69% of patients. In two cases, the patients presented with inability to pass stool or gas, and in two others with abdominal pain. Diagnosis was typically made using abdominal direct X-ray (ADBG), and in four patients, computed tomography (CT) was also utilized. The rectum was the most common site of impaction (n=10), with sigmoid colon involvement in three cases. The foreign bodies were mostly glass or plastic objects, such as bottles, perfume containers, or plastic cups. Twelve patients underwent transanal extraction in the lithotomy position under general anesthesia or sedation. In one patient, due to the large size of the object, laparotomy and stoma formation were required. Literature reports indicate that rectal foreign body cases are overwhelmingly male and typically occur in individuals aged 20–40. ADBG is commonly the first-line imaging modality, although CT provides additional value, especially for non-radiopaque objects. Transanal extraction is reported in the literature to have a success rate ranging from 60% to 95%; in our series, this rate was 92.3%. No major complications or perforations were observed. The mean hospital stay was 1.5 days. Laboratory findings revealed a mean hemoglobin (HGB) of 14.2 g/dL, WBC of 12.3 $\times 10^3/\mu L$, and hematocrit (HCT) of 43.5%. CRP was measured in only two patients, with a mean value of 4.25 mg/L.

Conclusion: Rectal foreign bodies are more commonly encountered in young to middle-aged male patients and are typically managed successfully with minimally invasive techniques. Early diagnosis and the appropriate surgical approach are essential to avoid complications. Laparotomy and stoma formation are rarely needed. The findings of this study align with the current literature, demonstrating that most cases can be managed transanally without major abdominal surgery. Further multicenter, large-scale studies are warranted.

Keywords: Rectal Foreign Bodies, Surgical Management, Emergency Proctology, Clinical Outcomes

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Education for Emergency Surgery

OP-215

IMPACT OF ROSMARINUS OFFICINALIS AND DEXAMETHASONE ON ISCHEMIA/REPERFUSION İNJURY

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Introduction: The increasing preference for laparoscopic surgical applications over conventional surgery points to the necessity of developing strategies to prevent or minimize ischemia/reperfusion (I/R) damage. The optimal treatment for preventing I/R damage remains unidentified. This study aimed to examine the efficacy of RO and dexamethasone in preventing I/R damage. This study predicts that demonstrating the protective effect of RO may reduce the side effects associated with glucocorticoids. The principal hypothesis of this investigation is that RO can enhance dexamethasone's protective effects. The primary endpoint of this study was established as OSI.

Method: The study involved 40 male Sprague-Dawley rats. Throughout the study, all rats were treated in accordance with the 'Guide for the Care and Use of Laboratory Animals.' The rats were divided into five equal groups, with each group comprised of eight rats. The

groups included:

Grup S (Sham) (n=8): laparotomy + 2 ml intraperitoneal isotonic

Grup C (Control) (n=8): laparotomy + 2 ml intraperitoneal isotonic + I/R

Grup R (Rosmarinus) (n=8): laparotomy + intraperitoneal 320 mg/kg/2ml RO +I/R

Group D (Dexamethasone) (n=8): laparotomy + intraperitoneal 4 mg/kg/2ml

Grup RD (Rosmarinus+Dexamethasone) (n=8): Laparotomy+ intraperitoneal 4 mg/kg/1 mL Dexamethasone+320 mg/kg/1 mL RO+I/R.

All rats, except for Group S, underwent one hour of superior mesenteric artery ischemia followed by one hour of reperfusion. After this period, blood samples were collected for biochemical analysis, and tissue samples were obtained for histopathological assessment.

Results: A statistically significant difference was observed in the mean TAS, TOS, and OSI values of Group R, Group D, and Group RD when compared to Group C ($p=0.001$). A statistically significant difference was observed in the mean MDA and IMA values of Group R, Group D, and Group RD compared to Group C ($p<0.001$).

Conclusion: Our study determined that the combined use of RO and dexamethasone is more effective in preventing I/R damage compared to the use of RO or dexamethasone alone. This finding indicates that dexamethasone may enhance the prevention of I/R damage by facilitating dose reduction and minimizing the risk of side effects when administered with RO.

Keywords: Ischemia, reperfusion, superior mesenteric artery, dexamethasone, Rosmarinus Officinalis, OSI, TAS, TOS.

Emergency Surgical Complications

OP-217

OUTCOMES AND MICROBIOLOGICAL RESISTANCE PATTERNS IN TRAUMA PATIENTS

Riccardo Guelfi, Camilla Cremonini, Serena Musetti, Giuseppe Zocco, Filippo Vagelli, Jacopo Giuliani, Massimo Chiarugi, Lorenzo Ghiadoni, Francesco Forfori, Federico Coccolini

Pisa University Hospital

Background: The initial phase of patient with polytrauma assessment and stabilization is of paramount importance, especially with regard to evaluating endpoints such as mortality, complications, and length of hospital stay. Infections have long been considered among the leading causes and contributing factors of those outcomes.

Material and methods: This is an observational trial using data prospectively collected within the "trauma registry" database of the General and Emergency Surgery department of the Pisa University Hospital - Trauma Center of Cisanello (Pisa), collected from November 2019 to December 2021. Epidemiological, clinical and microbiological data have been registered, and all patients were followed from the time of admission to the ED until the end of their hospital stay, those who developed infections were analyzed.

Results: Among the 533 patients examined, 75 people developed an infection with at least one positive microbiological isolate during hospitalization, for a total of 234 positive isolates, among which pathogens resistant to one class of antimicrobials (R) and pathogens resistant to more than three classes of antimicrobials (MDR) were identified. Multivariate analyses were performed to correlate trauma severity (ISS Score), general population characteristics and microbiological patterns with outcomes such as length of hospital stay, complications, and mortality.

Conclusions: The presence of resistant strains identified in the second culture test together with ICU admission were found to be risk factors for the development of complications.

Microbiological patterns were not statistically significant risk factors for mortality. A multidisciplinary team plays a pivotal role in defining the correct antibiotic stewardship program.

Keywords: antimicrobical_resistance_patterns_outcomes_mortality_length of hospital stay_complications_ventilation days_antibiotic stewardship

Distribution and frequency of broncho aspirate coltures microorganisms

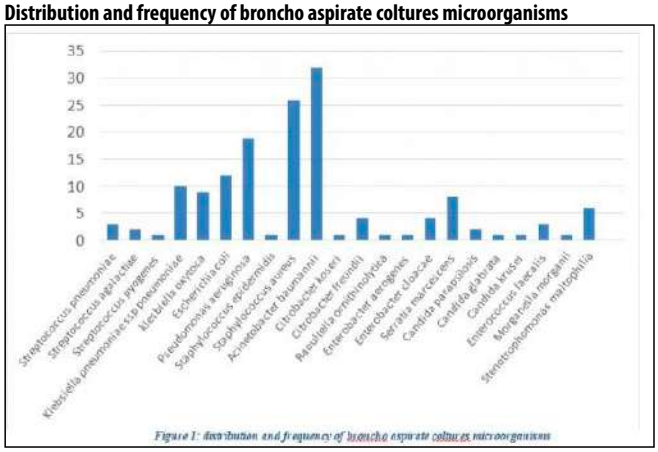


Figure 1: distribution and frequency of broncho aspirate coltures microorganisms

Distribution and frequency of blood cultures microorganisms

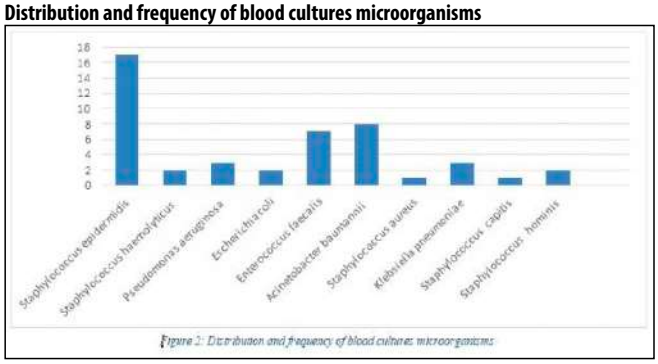


Figure 2: Distribution and frequency of blood cultures microorganisms

Distribution and frequency of urine cultures microorganisms

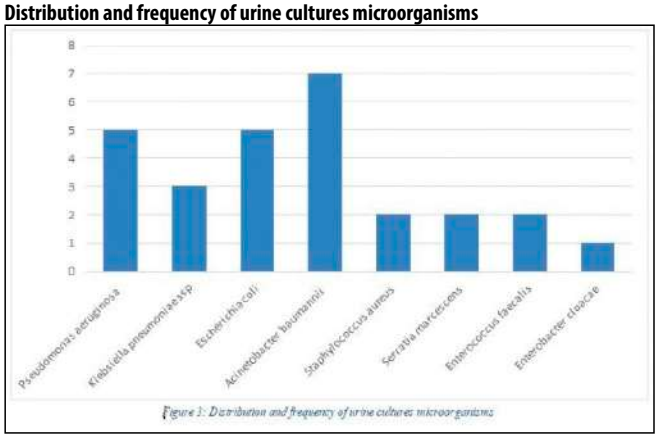


Figure 3: Distribution and frequency of urine cultures microorganisms

Distribution and frequency of wound cultures micro-organisms

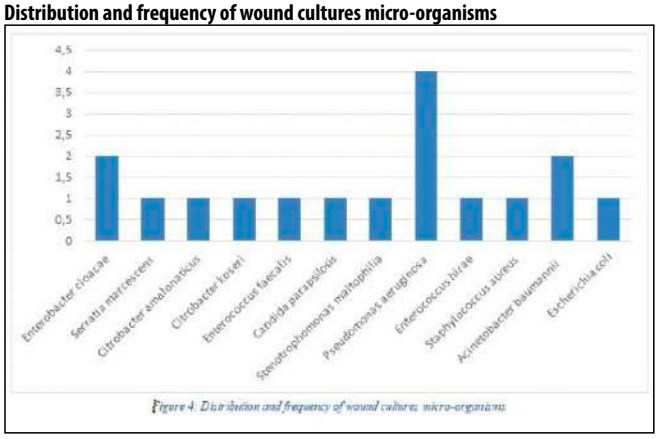


Figure 4: Distribution and frequency of wound cultures micro-organisms

20% antibiotic resistance threshold in isolated bacteria.

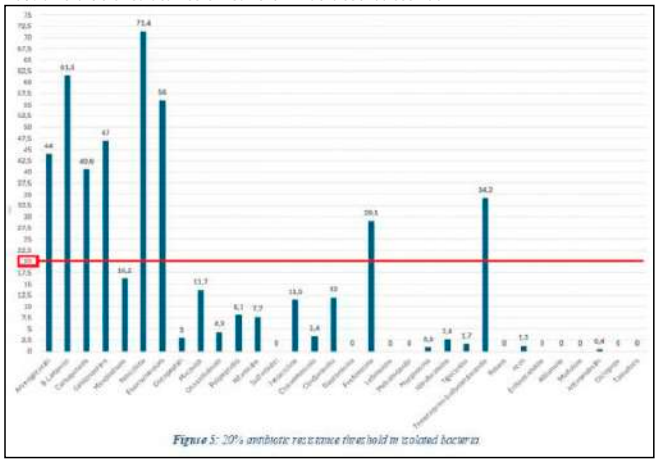


Figure 5: 20% antibiotic resistance threshold in isolated bacteria

Perioperative, Critical Care & TICU, SICU

OP-219

IMPACT OF DO-NOT-ATTEMPT RESUSCITATION POLICY ON THE OUTCOMES OF ADULT IN-HOSPITAL CARDIAC ARREST IN THE UNITED ARAB EMIRATES

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Background: Survival rates for in-hospital cardiac arrest (IHCA) have been improving due to advances in resuscitation. There have been recent changes in Do-Not-Attempt-Resuscitation (DNAR) legislation and the practice of resuscitation medicine in our setting. We aimed to study the impacts of these changes on outcomes of adult IHCA patients in a Middle Eastern Country.

Methods: We analyzed all IHCA patients 18 years or older at our institutions from January 2017 to December 2019 and January 2021 to December 2023. We compared the patient's

demographics, cardiac arrest parameters, admission vital signs and discharge neurological outcomes in these two periods.

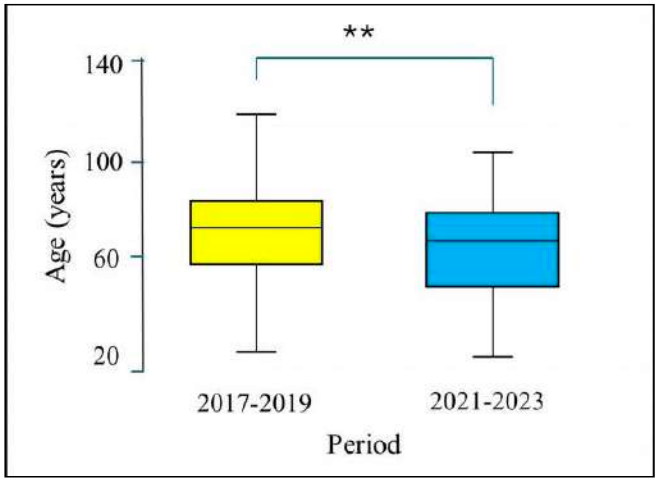
Results: There were 427 patients in the first period and 190 patients in the second period. The IHCA rate dropped by 65% from 8.2/1000 hospital admissions in period 1 to 2.9/1000 admissions in period 2. Cardiac and respiratory were the primary causes of cardiac arrest in 265 (44.3%). The patients in period two were younger (64.5 (45.7-76.3) versus 70 (55-81)) years and they had higher GCS (IQR) (15 (12-15) versus 14 (6-15)) compared with patients in period one. (P=0.003 and <0.001 respectively). The initial rhythms were non-shockable in 94% in both periods and the return of spontaneous circulation improved from 40% to 56.8%. (P=0.009) Survival rate to hospital discharge and neurological outcomes remained unchanged in the study periods.

Conclusions: The DNAR policy reduced the in-hospital cardiac arrest rate allowing younger and physiologically fitter patients to be resuscitated, improved the ROSC rates, but did not translate to better survival outcomes.

Keywords: In-Hospital-Cardiac Arrest; Do-Not-Attempt-Resuscitation; Survivor; Good Neurological outcome.

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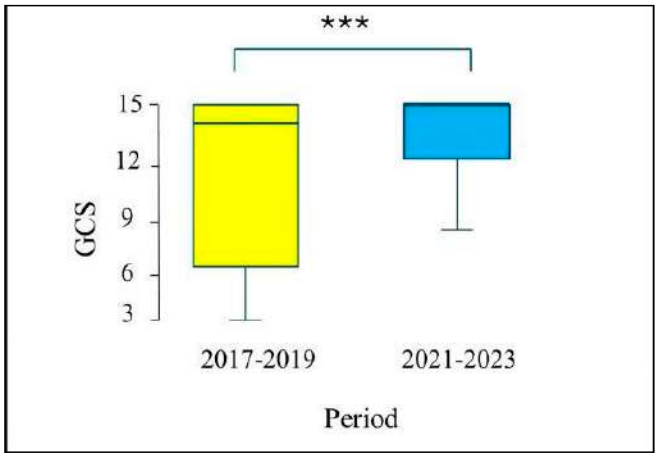


Table 1. Comparison of Arrest Characteristiics and Outcomes Between the Two Periods

	2017-2019	*2021- 2023*	*P-Value*
Location			<0.001`
Critical Area	338 (79.2)	93 (48.9)	
Non-critical Area	89 (20.8)	97 (51.1)	
Response Time	0 (0-0)	0 (0-3)	0.001
Code Duration	21 (20-28)	16 (8-24)	0.001
Initial Rhythm			0.853
Shockable	26 (6.1)	10 (5.4)	
Non-shockable	401 (93.9)	175 (94.6)	
ROSC			0.009
YES	193 (45.2)	108 (56.8)	
NO	234 (54.8)	82 (43.2)	
Outcome			0.581
Survive	46 (10.8)	23 (12.3)	
Died	380 (89.2)	164 (87.7)	
Good Neurological Recovery*			0.484
Yes	26 (6.1)	15 (8.6)	
No	398 (93.9)	174 (87.7)	

ROSC: Return of spontaneous circulation
* Number did not add up due to missing values

OP-221

RE-AUDIT: CRACKING THE CODE TO RIB FRACTURE MANAGEMENT IN A UK DISTRICT GENERAL HOSPITAL

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Peterborough City Hospital, United Kingdom

Introduction: This re-audit assesses compliance with rib fracture management guidelines at a district hospital between November 2024 and April 2025 (n=62), comparing against a prior audit (n=101) to evaluate progress in risk stratification, analgesia, multidisciplinary care, and complication prevention.

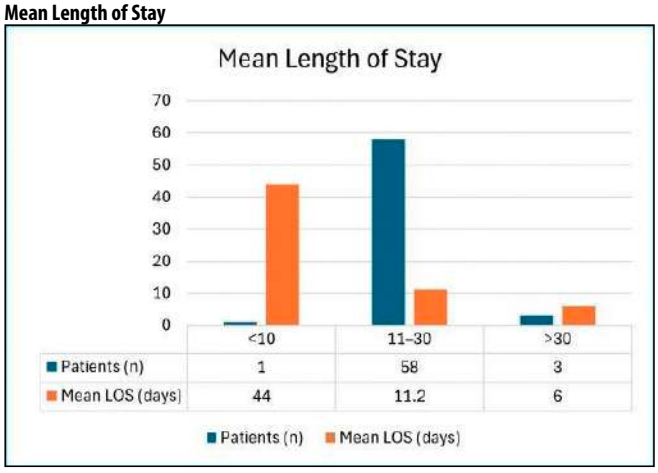
Methods: 62 consecutive patients with multiple rib fractures were identified retrospectively via electronic records. Data on demographics, guideline adherence, Chest Injury Score (CIS) documentation, analgesia bundles, regional anaesthesia, geriatric/respiratory referrals), and outcomes (Length of Stay, complications, mortality) were extracted. Comparisons used historical audit metrics.

Results: Median age was 76 years (vs. mean 71 previously), with 74% (46/62) aged ≥65 (vs. 65% previously). CIS calculation declined to 26% (16/62) from 59% (60/101). Chest drains were inserted in 14.5% (9/62) of cases, primarily for pneumothorax (4/9), haemothorax (1/9), and pleural effusion (1/9). Appropriate analgesia bundles significantly improved to 66% (41/62) from 18% (18/101). Regional anaesthesia referrals increased to 55% (34/62) from 40%. Geriatrician referrals for ≥65yo remained low at 30% (14/46) vs. 33% (22/66) previously. Pneumonia/VTE complications occurred in 19% (12/62) vs. 22% (22/101). Mortality was 8% (5/62) vs. 12% (12/101). Median Length of Stay (LOS) was 9 days (IQR 4-18), with age correlating with prolonged LOS, consistent with prior findings.

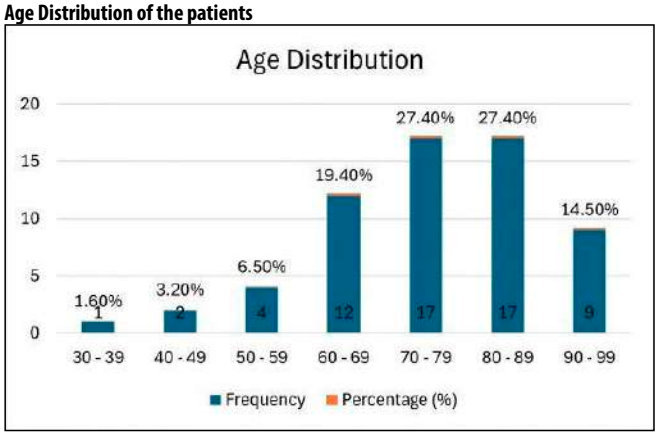
Conclusion: Significant improvements in analgesia compliance (66% vs. 18%) and regional anaesthesia referrals (55% vs. 40%) demonstrate progress in pain management. However, critical deficiencies persist: CIS documentation regressed (26% vs. 59%), geriatrician referrals remain inadequate (30%), and respiratory team engagement was suboptimal (23%). While complications decreased modestly, mortality remains high in elderly cohorts. Urgent interventions are needed to standardize calculation (CIS), implement geriatric consults for ≥65yo, and respiratory team review for high-risk injuries.

Keywords: Rib fractures, Chest Injury Score, Geriatric referral, Analgesia bundle, Regional anesthesia, Chest drain, Length of stay, Complications, Quality improvement, Multidisciplinary care

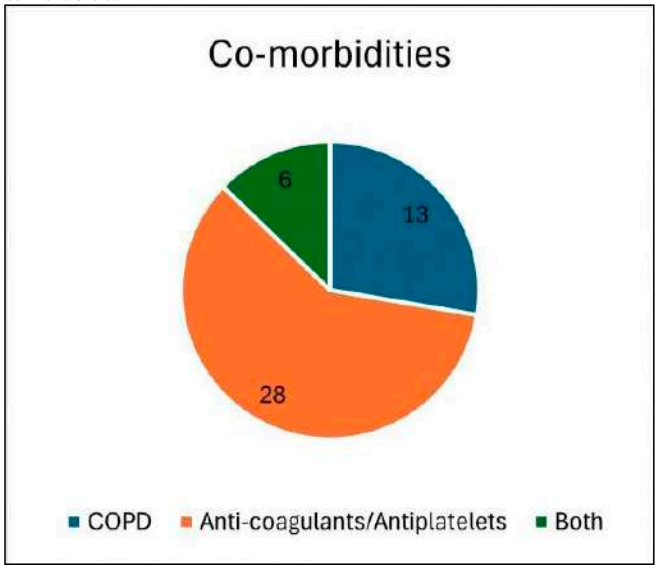
Mean Length of Stay



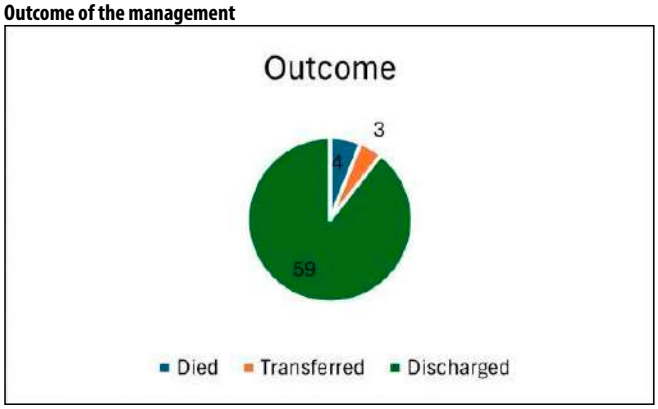
Age Distribution of the patients



Co-Morbidities



Outcome of the management



Number of Ribs fractured

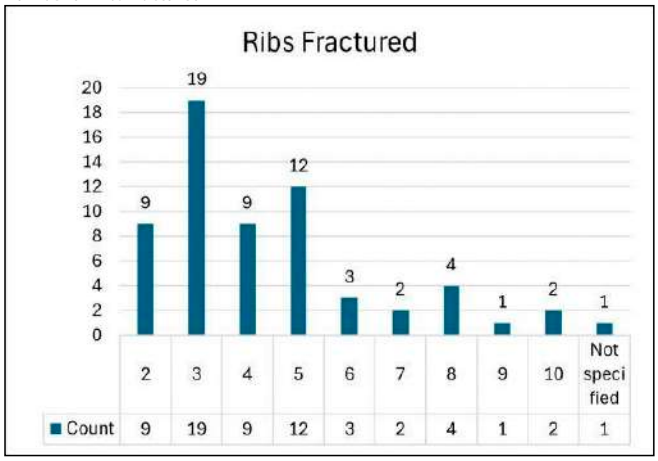


Table 1. CIS Stratification to compare LOS, complications and Mortality

CIS Group	*Patients (n)*	*Mean LOS (days)*	*Pneumonia*	*Mortality*
<10	1	44	0% (0)	0% (0)
11–30	58	11.2	17% (10)	6.9% (4)
>30	3	6	0% (0)	0% (0)

Education for Emergency Surgery

OP-226

ASSESSING FRAILTY AND THE NEED FOR SPECIALIST GERONTOLOGY INPUT IN AN EMERGENCY GENERAL SURGERY PATIENT POPULATION

Orla Conway, Rory Ward, Angus Lloyd, Rachel Fitzgerald, Clara McGurk, Emer Ahern, Noel Lynch

Cork University Hospital Introduction:

Improved healthcare systems and socioeconomic systems is leading to a global increase in life expectancy(1). This has resulted in an increasingly elderly and comorbid population presenting to emergency general surgery services(2,3). Early assessment of frailty and involvement of gerontology specialists is recommended(4,5) to manage the preoperative risk factors associated with this population. The Clinical Frailty Score(CFS) is a simple tool that can be used for predicting perioperative morbidity and mortality in this high-risk group(6).

Methods: We have undertaken a prospective study of admissions under a dedicated Emergency General Surgery (EGS) service, in a Model 4 tertiary hospital, over the course of 10 weeks. We aimed to assess the prevalence of frailty in our elderly patient population, and assess the need for specialised Gerontology input.

Results: Over the 10 week period, there were 570 admissions under the EGS service, 27% of which were over the age of 65. 46% of elderly patients admitted were identified as frail (CFS ≥ 5). 11% had a documented delirium. Only 7% of those ≥65 were seen by Gerontology throughout their admission.

Conclusion: We have now implemented a shared care model with our Gerontology colleagues for those elderly patients admitted under the EGS service, based on these results. This will be audited in the coming weeks to formally assess for the expected improvement in outcomes for elderly patients under the care of the EGS team. We expect data collection to be completed in August 2025.

Keywords: Emergency surgery, older adults, frail

Emergency Surgical Complications

OP-228

MANAGEMENT OF OBSTETRIC ANAL SPHINCTER INJURIES: A 10-YEAR SINGLE-CENTER EXPERIENCE

Elif Dilara İzbudak, Muhammed Oğuz Çelikkaya, Zeynep Şevval Aliş, Gültekin Hoş, Aylin Acar, Tolga Canbak, Adnan Özpek

Sağlık Bilimleri Üniversitesi Ümraniye Eğitim ve Araştırma Hastanesi , Genel Cerrahi Kliniği , İstanbul, Türkiye

Background: Obstetric anal sphincter injuries (OASIS), including third- and fourth-degree perineal lacerations, are rare but serious complications of vaginal delivery. They can result in anal incontinence and long-term morbidity if not promptly diagnosed and effectively managed. This study aims to evaluate the clinical characteristics, surgical management strategies, and outcomes of patients diagnosed with OASIS over a ten-year period at a single-center.

Methods: We retrospectively analyzed the medical records of patients who were diagnosed with obstetric anal sphincter injuries between January 2015 and June 2025. Patients with 3rd or 4th-degree perineal lacerations during vaginal delivery were included. Data regarding injury classification, timing of diagnosis, type of surgical repair, ostomy creation, and postoperative outcomes were collected and evaluated.

Results: A total of 28 patients with obstetric anal sphincter injuries were identified. Primary surgical repair was performed in 25 patients (89.3%). Among them, 2 patients (7.1%) developed persistent anal incontinence following primary repair and subsequently underwent diverting ostomy procedures. One patient presented late with an unrecognized sphincter injury; in this case, primary repair and ostomy were performed simultaneously during the same surgical session. Thus, ostomy was required in 3 cases overall (10.7%).

Conclusion: Our 10-year experience suggests that early diagnosis and primary repair of obstetric sphincter injuries are associated with a high success rate and favorable outcomes. Nonetheless, in cases where primary repair fails or diagnosis is delayed, anal incontinence may develop, necessitating further surgical intervention such as diverting ostomy. Routine postpartum perineal examination remains crucial for timely recognition of sphincter injuries. Surgical repair should be undertaken by experienced clinicians to minimize the risk of functional complications. Secondary interventions should be considered in patients with persistent symptoms to optimize continence and quality of life.

Keywords: Obstetric anal sphincter injury, Perineal laceration, Primary repair, Ostomy, Anal incontinence, Maternal morbidity

Hernia

OP-231

FOURNIER'S GANGRENE DEVELOPING AFTER GIANT SCROTO-INGUINAL HERNIA REPAIR: A RARE CASE SUCCESSFULLY MANAGED WITH LEFT ORCHIECTOMY AND VAC THERAPY

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Department of General Surgery, Bursa City Hospital

Objective: Fournier's gangrene is a rapidly progressive type of necrotizing fasciitis with a high mortality rate, affecting the perineogenital region. It is commonly associated with systemic risk factors such as diabetes mellitus, advanced age, and immunosuppression. Although rare, it may develop following surgical interventions, and early diagnosis with a multidisciplinary approach is essential for a favorable prognosis. In this case report, we present a rare case of Fournier's gangrene that developed after the repair of a giant scroto-inguinal hernia, aiming to raise clinical awareness.

Case Presentation: A 56-year-old male with a medical history of type 2 diabetes mellitus, chronic heart failure, and cardiac arrhythmia presented to the general surgery outpatient clinic with a long-standing giant scroto-inguinal hernia. Preoperative evaluation revealed a high surgical risk, and the patient was classified as ASA Class IV. Elective hernia repair was performed using the Lichtenstein technique. The early postoperative period was uneventful, and the patient was discharged without complications.

On postoperative day 14, he was admitted to the emergency department with complaints of high fever, fatigue, altered mental

status, severe scrotal pain, foul-smelling discharge, and blackish discoloration of the scrotal skin. Physical examination revealed marked scrotal edema, widespread erythema, necrotic tissue, and crepitus. Laboratory tests showed leukocytosis (14,360/mm^3), elevated CRP (262 mg/L), hyperglycemia (235 mg/dL), and increased creatinine. The patient was urgently taken to surgery with a clinical diagnosis of

Fournier's gangrene. Intraoperative exploration revealed advanced necrosis of the left testis, and a left orchiectomy was performed. All necrotic tissues were debrided, and negative pressure wound therapy (VAC) was initiated. Empirical broad-spectrum antibiotics (meropenem and linezolid) were administered. During hospitalization, the patient underwent three additional VAC changes and local debridement procedures. After the formation of healthy granulation tissue, the wound was closed with secondary suturing. The patient was discharged in good condition on postoperative day 12 following the second operation.

To evaluate disease severity and guide treatment, the Fournier's Gangrene Severity Index (FGSI) was calculated. The score was ≥9, indicating a high mortality risk and supporting the need for aggressive and timely intervention.

Conclusion: Fournier's gangrene following inguinal hernia repair is a rare but life-threatening complication. The risk increases significantly in patients with advanced age, diabetes mellitus, heart failure, and a high ASA score. In our case, the development of infection was likely facilitated by the patient's inability to maintain personal hygiene during the postoperative period, in combination with systemic comorbidities. Early diagnosis, prompt surgical debridement, appropriate antibiotic therapy, and negative pressure wound management led to a successful outcome. In high-risk patients, careful surgical planning and close postoperative monitoring with a multidisciplinary approach are essential to prevent such severe complications.

Keywords: Fournier's gangrene, Scroto-inguinal hernia, VAC therapy, Postoperative complication

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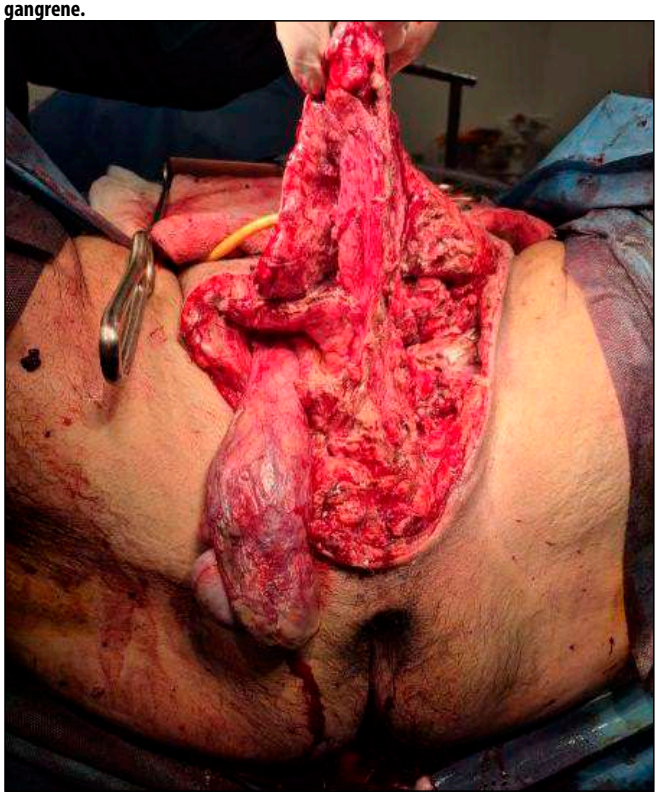
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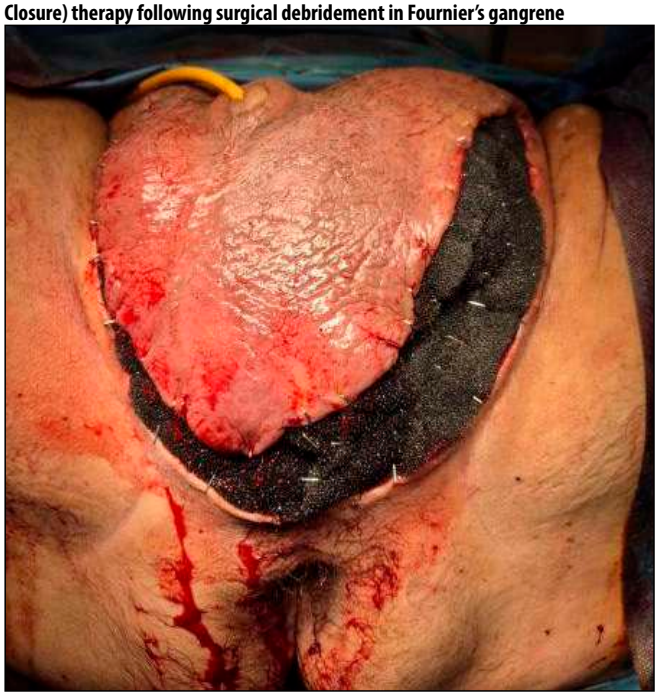
Preoperative image demonstrating extensive scrotal necrosis and tissue discoloration due to Fournier's gangrene



Post-debridement and orchiectomy intraoperative view in a case of Fournier's gangrene.



Intraoperative view showing the initial application of VAC (Vacuum-Assisted Closure) therapy following surgical debridement in Fournier's gangrene



Postoperative day 3 appearance of the wound following secondary suturing after VAC therapy



Hernia

OP-233

SHIELD PROJECT (STUDY OF HERNIA INTERVENTIONS AND EVALUATION OF LENGTH OF STAY AND COMPLICATIONS) - A MULTICENTRE, RETROSPECTIVE,COHORT STUDY.

Mehmet Ergisi[1,2], Evie Banham[1,2], Georgios Karagiannidis[1,2]

[1]Imperial College London
[2]Ipswich Hospital Aim

Incisional hernia repair is one of the most frequently performed surgeries,yet the factors that influence patient outcomes—in regards to complications and length of hospital stay—are not fully understood.This study delves into the demographic,surgical and post-operative variables that shape recovery following incisional hernia repair.

Methods: Data from 146 patients and 8 hospitals who underwent an incisional hernia repair were analysed, including age,BMI,comorbidities,hernia type,surgical technique,mesh type,antibiotic prophylaxis and post-operative complications. Results: The cohort consisted of 53.4% females and 46.6% males.A significant proportion of patients had BMI values in the overweight (25-30, 54.8%)or obese(>30, 39.0%)categories.Most hernias were midline (76.0%) and small to moderate in size (<5 cm: 54.1%; 5-10 cm: 32.9%).Open surgical repair was predominant (97.3%) and antibiotic prophylaxis was used in 41.1% of cases. Statistical analysis revealed significant associations between hernia size and repair type (p =0.038),while no significant relationships were observed for drain usage with post-operative complications(p >0.05). Complications were influenced by patient and surgical factors.Recurrence rates were higher in larger hernias (>10cm:10.5%),suture repairs (14.3%) and patients with elevated ASA scores(ASA ≥3).Older patients and those with higher BMIs had longer hospital stays and laparoscopic approaches were associated with shorter durations of stay.

Conclusion: This study identifies significant variations in outcomes influenced by hernia size,patient comorbidities and surgical techniques,highlighting the dominance of open synthetic mesh repairs.These findings underscore the urgent need for a multicentre national study to standardise best practices.

Keywords: incisional, surgery, complications

Education for Emergency Surgery

OP-234

GENERAL SURGERY EMERGENCIES POST-OPERATIVE RESULTS SINGLE CENTER 1-YEAR RESULTS

Mehmet Hanifi Çanakcı, Deniz Kütük, Said Buğra Taşkın, Seda Çiçekdal, Muhammed Enes Köseoğlu, Gürkan Değirmencioğlu

Ankara Etlik City Hospital

Introduction: Emergency general surgery patients have an important place in current general surgery practice. Especially in high-volume centers, emergency general surgery practice includes many disease groups such as trauma, ileus, perforation, and treatment methods and results vary. Ankara Etlik City is one of the largest general surgery clinics in Türkiye and an average of

200 emergency general surgery patients are evaluated per day. Some of these patients receive surgical treatment.

Purpose: To evaluate the characteristics, mortality and subgroups of patient groups who were consulted and operated at our hospital's emergency general surgery clinic between 2024-2025

Method: 8405 patients who were consulted at the emergency general surgery clinic between 2024- 2025 were retrospectively examined. Non-operated patients were excluded from the study. The demographic data of the patients, their diagnoses, and operation types were prepared in subgroups, and a total of 3603 patients were evaluated. Statistical analysis was performed with SPSS 2022 (USA) program. In the analysis of subgroups, chi-square test was used for categorical data, and OR (odds ratio) was used to determine the mortality risk of the groups. $p<001$ was considered statistically significant.

Findings: In this study, 50 different operation types belonging to 3603 patients were evaluated. 2036 of the patients were male and 1567 were female. The average age was 56.7, the total number of mortality was 306. The overall mortality rate was approximately 8.49%; The lowest rates were observed in acute appendicitis (0.13%) and benign superficial infections (e.g. breast abscess, hemorrhoidal bleeding, foreign body ingestion; 0.00%), while the highest rates were observed in diseases with advanced mortality risk such as toxic megacolon (100%), GI bleeding (100%) and acute mesenteric ischemia (46.03%). It was observed that mortality rates were significantly higher especially in groups with ischemic and perforative pathologies. Patients were evaluated in 3 categories as low, moderate and high risk groups. There were 2382 patients (66.1%) in the LRO group, 782 patients (21.7%) in the MRO group and 439 patients (12.2%) in the HRO group. Mortality rates in each group were calculated as: LRO: 0.50%, MRO: 10.6%, HRO: 41.2%, respectively. As a result of the Chi-Square test, a statistically significant difference was found between these three groups in terms of mortality ($\chi^2 = 642.8$, $p < 0.001$). The risk of death in the HRO group was approximately 145 times higher compared to the LRO group (OR: 145.2; 95% CI: 91.5–230.4). The risk of death in the MRO group was approximately 25 times increased compared to LRO (OR: 24.7; 95% CI: 17.3–35.4).Conclusion: Our study covers the data of our hospital's general surgery clinic for the last year. In the emergency general surgery practice, patients who were operated on were separated according to their risk groups and mortality groups, and the results are reported in accordance with the current literature. Conditions such as acute mesenteric ischemia and colon perforation have high mortality. The evaluation of patient groups should be done separately within disease groups.

Keywords: Emergency ,General Surgery.postoperative Outcomes

Table 1

Operation Type	*Number of the patient*	*Mortality*	*Mortality rate*
Acute Appendicitis	1571	2	%0,13
Acute Cholecystitis	95	4	%4,21
Trauma	39	5	%12,82
GUNSHOT WOUNDS	19	1	%5,26
DKAY	62	3	%4,84
Brid Ileus	82	16	%19,51
Tumor Ileus	126	18	%14,29
Sigmoid Volvulus	25	9	%36
Bezoar Ileus	9	0	%0
Gallstone Ileus	2	1	%50
Meckel's Diverticulum	4	0	%0
Intussusception	15	3	%20
İnternal herniasyon	17	3	%17,65
Closed Loop Obstruction	17	5	%29,41
Gastric Perforation	102	30	%9,41
Small Bowel Perforation	57	19	%33,3
Colon Perforation	57	20	%35,09
Anastomosis Leak	32	13	%0,63
Acute Mesenteric Ischemia	63	29	%46,03
Postop Exploration	34	10	%29,41
Incarcerated Umb. Hernia	49	3	%6,12
Incarcerated Incisional Hernia	37	0	%0
Incarcerated Inguinal Hernia	68	7	%10,29
Incarcerated Ventral Hernia	98	3	%3,06
Intra-abdominal Abscess	11	2	%18,18
Enterocutaneous Fistula	4	1	%25
Eventration	10	2	%20
Evisceration	17	3	%17,65
Wound Complication	13	3	%23,08
Mesh Reaction	3	0	0%
Obstructive Gastric Cancer	5	3	%60
GIS Bleeding	5	5	%100
Necrotizing Pancreatitis	2	1	%50
Esophageal CA	1	0	%0
Liver Cyst Hydatid Rupture	3	0	%0
Nutrition Gastro/Jejunostomy	7	5	%71,43
Fournier Gangrene	63	8	%12,7
Necrotizing Fasciitis	17	7	%41,18
Perianal Abscess	86	2	%2,33
Breast Abscess	11	0	%0
Hemorrhoidal Bleeding	7	0	%0
Decubitus Wound	4	0	%0
Perianal Trauma	4	1	%25
Bleeding Right Breast CA	1	0	%0
Foreign Body Ingestion	6	0	%0
Ostomy Revision	10	3	%30
Rectovaginal Fistula	2	0	%0
Toxic Megacolon	2	2	%100
Ischemic Colitis	2	1	%50
Intra-abdominal Hemorrhage	4	2	%50
Diagnostic Laparotomy	6	2	%33,3

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Organ-Specific Emergencies

OP-235

POINT-OF-CARE ULTRASOUND OF A SEVERE EYE INJURY CAUSED BY A LARGE TYRE BLAST

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Introduction: Rupture of large tyres may cause severe eye blast injuries which are difficult to examine clinically. Hereby, we report such a case in which Point-of-Care Ultrasound (POCUS) has proven to be accurate and useful when CT scan and MRI could not be done.

Case report: A 34-years-old man sustained severe craniofacial injury, following an explosion of a 6-wheel large tyre. The patient was unconscious, intubated, and managed in the ICU. The eyes were severely swollen and could not be examined. Ruptured eye globes were suspected. Trauma CT scan showed multiple faciomaxillary fractures associated with right brain contusion. On day 8, a multi-disciplinary team explored the injury. An ophthalmologist concluded that there was no eye globe penetration. The faciomaxillary surgeons performed a pan-facial reconstruction. Since the patient could not be moved to have a thin slice CT scan of the orbit or an MRI during the acute stage, a bedside POCUS was performed to evaluate both eyes. The right eye globe was distorted and the posterior chambre had multiple hyperechoic densities mixed with hypoechoic areas indicating organized bleeding; the left eye was normal. The patient became fully conscious and was discharged home on day 37. A follow up MRI confirmed the POCUS findings. Eight months after the injury, the patient had complete loss of vision of the right eye while the left eye was normal.

Conclusions: POCUS was very useful and accurate in evaluating a severe eye blast injury caused by a large tyre explosion when both CT scan and MRI could not be done.

Keywords: Blast injury, Diagnosis, Eye, POCUS, Rupture globe, Tyre, Ultrasound

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Emergency Surgical Complications

OP-236

APPENDICECTOMY: THE MOST COMMON EMERGENT SURGICAL PROCEDURE, NOT ALWAYS THE MOST STRAIGHTFORWARD

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Introduction: A 67-year-old female with a history of insulin-treated diabetes mellitus, obesity, hypertension, and dyslipidemia presented to the Emergency Department with right iliac fossa abdominal pain that had evolved over five days. She was hemodynamically stable but febrile, with generalized abdominal tenderness, more pronounced in the right iliac fossa, with guarding and a positive Blumberg sign. Laboratory tests showed elevated inflammatory markers and acute kidney injury. A CT scan revealed acute appendicitis complicated by an anterior abdominal wall abscess. The patient initially underwent laparoscopic appendectomy with abscess drainage on February 20, 2023.

Methods: The patient initially underwent laparoscopic appendectomy with abscess drainage under general anesthesia on February 20, 2023, without complications.

Results: On the 5th postoperative day, due to clinical and analytical worsening, a CT scan was requested, revealing abscess recurrence in the muscle planes with subcutaneous tissue densification. She again underwent laparoscopic abscess drainage, with drainage to the right flank. On the 11th postoperative day, new sudden worsening with progression of abdominal wall phlegmon and fever prompted a CT scan, which revealed gas inside a new abdominal wall collection. She was re-intervened via laparotomy, which confirmed necrotizing fasciitis of the oblique and transverse abdominal muscles. Debridement and negative pressure wound therapy were performed. Despite initial favorable evolution under antibiotic therapy and continuous dressing changes, with tissue granulation and fascial approximation with a prosthetic mesh, on April 3, dehiscence of the appendicular stump with a cecal-atmospheric fistula was observed. Despite several attempts to manage the fistula, including floating ostomies, multiple complications eventually led to the need for a terminal ileostomy. Short- term complications of the ileostomy and eventual need for debridement of new foci of necrotizing fasciitis arose. The patient ultimately died more than one month after the initial surgery due to refractory sepsis.

Discussion: This entire clinical picture stemmed from an initially benign and easily treatable pathology, motivating the team to seek a cure. Even after the development of necrotizing fasciitis, there was hope for healing with the evolution of the initial dressings. The therapeutic failure was frustrating and unconsciously led to therapeutic futility, evident in the last surgical interventions. Reflection on this case raises several questions for us. Should the intervention have been earlier when signs of abdominal wall inflammation appeared? What is the role and time window for adjuvants (e.g., prostheses) and what are their complications? Would early fecal diversion and a period without oral nutrition have been beneficial?

Keywords: Appendicitis; General Surgery; Fistula; Necrotizing fasciitisFigure :

Debridement



Mesh-mediated laparosotomy



Fasciitis CT



Oriented cecal fistula



Floating stoma



Education for Emergency Surgery

OP-237

FUTILITY IN EMERGENCY GERIATRIC SURGERY

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Introduction: As life expectancy increases, emergency surgeries such as laparotomies are being performed more frequently on elderly patients, who face elevated risks of poor outcomes. In this context, the concept of surgical futility—an intervention offering little chance of meaningful benefit—has gained relevance. However, definitions remain inconsistent, and existing risk assessment tools often fail to reflect outcomes highly valued by patients, such as functional recovery, independence, and quality of life.

Objectives: This review explores how surgical futility is currently defined and assessed in the context of emergency surgery for elderly patients. It evaluates the limitations of existing risk prediction tools in capturing long-term, patient-centred out-

comes and examines the ethical and cultural factors influencing decision-making. The aim is to identify strategies that support a more holistic, patient-centred approach to evaluating surgical appropriateness in high-risk populations.

Methods: A narrative review was conducted using PubMed and Google Scholar to identify relevant literature published in the past 10 years. Studies were selected based on their contributions to defining surgical futility, quantifying risk, and exploring ethical and cultural considerations.

Results: Futility is often defined quantitatively as death within 48–72 hours postoperatively, yet this excludes qualitative outcomes. Risk prediction tools such as NELA and ACS NSQIP focus on short-term mortality but inadequately assess long-term recovery. Frailty, a key predictor of poor outcomes, is underutilised in risk stratification. Moreover, the term "futility" can appear dismissive and may hinder shared decision-making, particularly in culturally diverse populations. Studies highlight communication gaps, decisional regret, and ethical challenges in aligning clinical decisions with patient values.

Conclusion: A broader, patient-centred framework is needed to assess surgical futility, incorporating frailty, long-term outcomes, and individual goals. Clearer definitions, improved decision- making tools, and culturally sensitive communication strategies are essential to support ethical, value-aligned care for elderly surgical patients.

Keywords: Surgical futility, Emergency laparotomy, Geriatric surgery, Frailty, Risk assessment, Clinical Frailty Score, NELA score, Shared decision-making, Ethical considerations, Palliative care, Quality of life, Patient-centred outcomes, Surprise question, Health economics, NoLap population

Organ-Specific Emergencies

OP-240

SPLENIC ABSCESS AND ASYMPTOMATIC GASTRIC FOREIGN BODY IN CONJUNCTION WITH A SIGMOID MASS: DIAGNOSTIC AND THERAPEUTIC CHALLENGES

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Aim: This report aims to highlight the importance of systematic intraoperative exploration in elderly patients undergoing emergency splenectomy, the potential for unexpected chronic foreign bodies, and the multidisciplinary management required for such complex presentations.A splenic abscess is a localized infection within the splenic capsule, typically presenting with fever and leukocytosis.[1] Although rare, with an incidence of 0.1% to 0.7%, it carries high morbidity and mortality, often necessitating prolonged antimicrobial therapy and hospitalization.

Case Presentation: An 89-year-old male with a medical history of cerebrovascular accident, chronic obstructive pulmonary disease, hypertension, atrial fibrillation, and prior inguinal hernia repair presented to the emergency department on June 28, 2025, with acute abdominal pain. Contrast-enhanced abdominopelvic computed tomography demonstrated an 82×97 mm (AP×TR) hypodense lesion within the spleen containing intrinsic and peripheral air foci, suggestive of abscess formation; focal wall thickening of the cecum; and a linear radiopaque density at the distal stomach adjacent to its superior border. Laboratory evaluation revealed leukocytosis (21×10^9/L) and markedly elevated procalcitonin (24 μg/L).

The patient underwent emergency laparotomy. Upon entry into the peritoneal cavity, purulent material was encountered and aspirated for microbiological analysis. The source was identified as a splenic abscess, for which splenectomy was performed. Further exploration revealed a metallic nail protruding from the posterior gastric wall, which was carefully extracted. Palpation of the sigmoid colon identified a non-obstructing mass, prompting segmental sigmoid resection with end sigmoidostomy.

Conclusion: This case underscores the complexity of diagnosing and managing acute abdominal conditions in elderly patients and illustrates the potential for coexisting, unrelated pathologies—some of which may be clinically silent for decades. The concurrent detection of malignancy, suspected perforation, and a chronic gastric foreign body emphasizes the necessity for surgeons to maintain a broad differential diagnosis and perform meticulous preoperative and intraoperative evaluation.

Keywords: adenocarcinoma, splenic abscess, asymptomatic intragastric foreign body References

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Prehospital Trauma Management and Acute Care

OP-241

EVALUATION OF COMBAT MEDICS' PROFICIENCY IN JUNCTIONAL TOURNIQUET USE: THE EFFECT OF TRAINING ON APPLICATION TIME AND SUCCESS RATE

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Background: Junctional hemorrhage is a major cause of preventable death in combat and civilian trauma, where conventional tourniquets are ineffective. This study evaluates the effect of training on combat medics' ability to apply two junctional tourniquet systems—the SAM® Junctional Tourniquet (SJT®) and the Tactical Abdominal Junctional Tourniquet (T-AJT®)—in terms of success rates and application times (ATs).

Methods: This prospective, randomized, crossover, single-blinded study included 40 combat medic trainees undergoing a 12-week course. Each participant applied both SJT® and T-AJT® before and after structured training. Success was defined as arterial occlusion confirmed via Doppler ultrasound. Application time, pain scores (VAS), and subjective survey data were collected and statistically analyzed.

Results: Training did not significantly improve overall application success rates (T-AJT®: 65% to 75%, SJT®: 55% pre- and post-training; $p>0.05$). However, training significantly reduced AT for T- AJT® (from 93.8±2.9 to 79.2±17.5 seconds; $p=0.005$). SJT® showed a non-significant AT reduction (from 55±11.8 to 49±22.6 seconds; $p=0.17$). Pain scores were higher in successful applications, particularly for T-AJT® (median VAS

7 vs. 6 for SJT®; $p<0.05$). Participants rated SJT® as more practical, effective, and less painful.

Conclusion: Although training improved application times, it did not significantly enhance success rates, particularly for the more technically demanding SJT®. This is the first efficacy study of T-AJT® and the first junctional tourniquet trial conducted in Türkiye. Findings highlight the need for further research to improve training efficacy and device design for real-world applicability.

Keywords: Hemorrhage, Tourniquets, Combat Medics, Wounds and Injuries, Military Medicine, Doppler Ultrasonography

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Organ-Specific Emergencies

OP-242

MASSIVE NONPARASITIC SPLENIC CYST PRESENTING WITH GASTROINTESTINAL SYMPTOMS: A CASE REPORT

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Introduction: Primary nonparasitic splenic cysts (PNSCs) are rare benign lesions of the spleen, typically congenital in origin, and lined with squamous or epithelial cells. They are often asymptomatic but may cause symptoms when they enlarge and exert pressure on surrounding organs. Cysts larger than 15 cm are defined as "giant," and they may require surgical intervention due to compression-related symptoms or risk of rupture. We present the largest known case of a giant primary epithelial splenic cyst in the literature, measuring 40×30×10 cm.

Case Report: A 31-year-old woman presented with left upper abdominal pain, early satiety, fullness, and vomiting. Physical examination revealed a large palpable mass. Laboratory results, including tumor markers (CEA, CA 19-9) and Echinococcus serology, were normal. CT imaging demonstrated a huge unilocular cystic lesion occupying the left upper abdomen, displacing the stomach, pancreas, kidney, and diaphragm. Due to the massive size and compressive symptoms, an open total splenectomy was performed. Intraoperative findings included dense adhesions to surrounding structures. The cyst was excised en bloc with the spleen. Histopathological examination confirmed a benign epithelial (epidermoid) cyst. The patient recovered uneventfully and was discharged on postoperative day five.

Discussion: PNSCs typically present in the second or third decade of life and are more common in females. Although most are incidentally diagnosed, giant cysts may present with symptoms such as abdominal pain, nausea, vomiting, and palpable mass due to mass effect. In rare cases, complications such as infection, hemorrhage, or rupture may occur. Imaging modalities like CT or MRI are crucial for preoperative assessment. Definitive diagnosis relies on histopathological confirmation. While spleen-preserving surgeries are increasingly preferred, especially in children and young adults, total splenectomy remains the treatment of choice in large, centrally located, or densely adherent cysts. In this case, due to the cyst's extraordinary size and its effect on adjacent organs, total splenectomy was both necessary and effective.

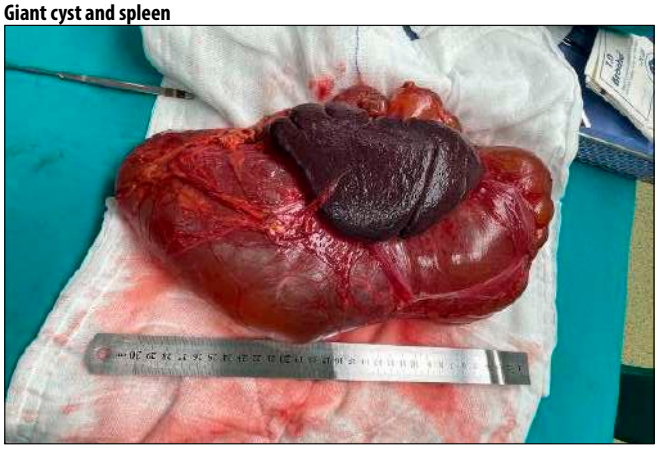
Conclusion: This case represents the largest primary epithelial splenic cyst reported to date. Though benign, such cysts may simulate abdominal emergencies and require prompt surgical management, making them relevant within the broader context of organ-specific emergencies. Surgeons should consider these rare entities in the differential diagnosis of upper abdominal masses and apply individualized surgical strategies based on size, location, and symptoms.

Keywords: Epithelial cyst, Giant abdominal mass, Nonparasitic, Organ-specific emergency, Splenic cyst, Splenectomy

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Giant cyst and spleen



Organ-Specific Emergencies

OP-243

OUR CLINICAL APPROACH TO GRADE 3-4-5 RENAL TRAUMA

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Kidney injuries occur in approximately 8-10% of high-energy abdominal trauma cases. Kidney injuries are significant genitourinary emergencies that occur after blunt abdominal trauma and can lead to serious consequences. In this study, we aimed to share the renal trauma cases followed at our center.

Methods: Patients diagnosed with renal trauma at Sanko University Hospital between 2020 and 2024 were included in the study. Patients' age, gender, etiology, severity of trauma (AAST classification), treatment method, extra-organ injury, length of hospital stay, complications, type of trauma, treatment methods applied, and complications were retrospectively investigated.

Results: The study included 16 patients. Two of these patients had grade 3 renal lacerations, eight had grade 4 renal lacerations, and six had grade 5 renal lacerations. Three of the patients with grade 4-5 renal lacerations underwent nephrectomy. The findings are shown in Table 1.

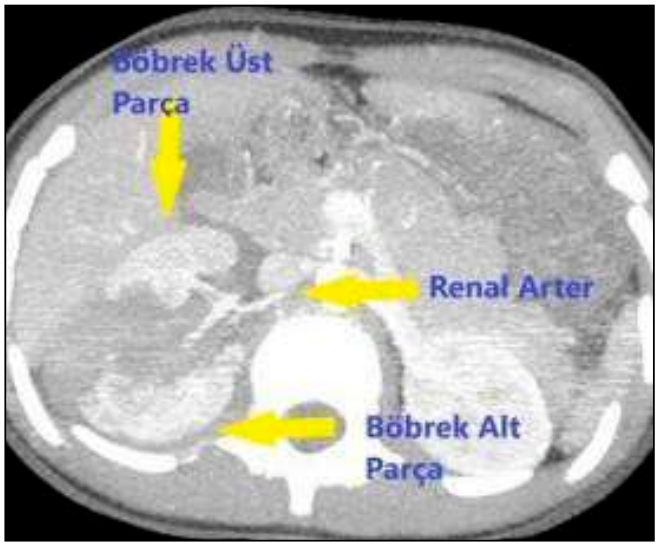
CONCLUSION: Renal trauma is particularly common in young men and presents with high-grade lesions. While the surgical cure rate in our study was high, renorrhaphy and organ-sparing surgical approaches were effective in selecting appropriate patients. As noted in the literature (Önder, 2024), hematuria may not always correlate with the severity of the trauma; therefore, advanced imaging methods such as CT scans should be used. Despite complications such as urinary fistula and ileus, no mortality was observed. In high-grade trauma, organ-sparing approaches should be employed whenever possible.

Keywords: Renal Trauma, kidney autotransplantation, renoraphi, Horseshoes Kidney İnjury

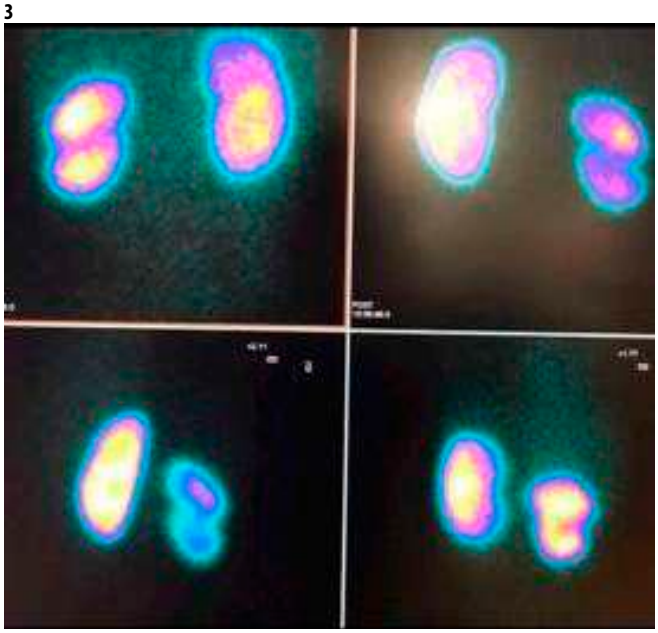
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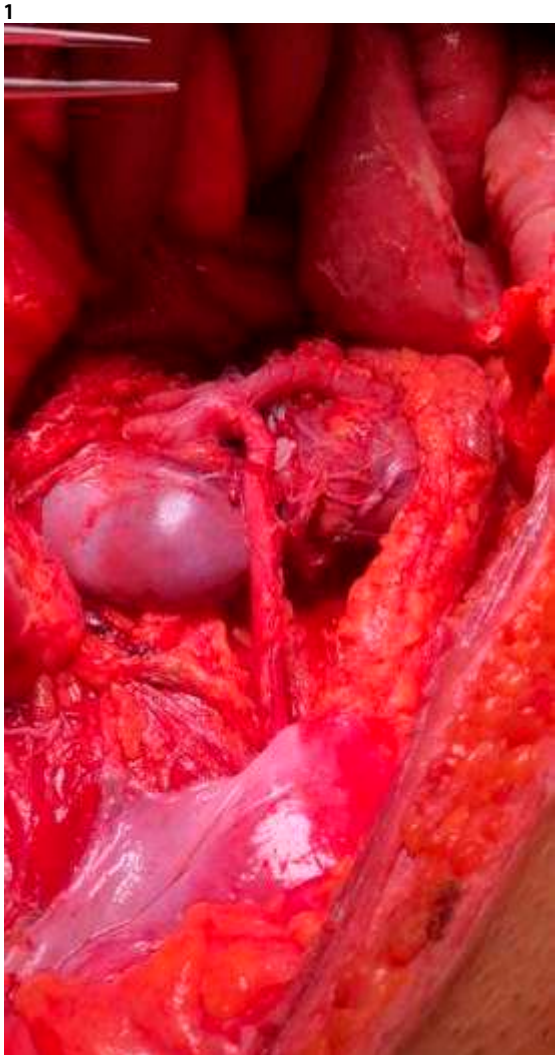


Table 1.

Patients Name	Age	Gender	Etiology	Grade	Additional Organ Injury	Treatment	Complications	Urine Fistule	Hospitalization day day
1	17	Male	Motorcycle accident	5	Liver laceration	Nephrectomy	No	No	8
2	21	Male	Motorcycle	4	No	Renorrhaphy +	No	No	4
			accident, Horsesho e kidney			Calyx/ureter repair			
3	25	Male	Car traffic accident	5	No	Auto-transplantati on	No	No	11
4	21	Female	Translant ed kidney iatrogenic	5	No	Renorrhaphy + calyx/ureter repair	No	Yes	13
5	8	M	Fall From height	5	No	Renorrhaphy + calyx/ureter repair	No	No	15
6	42	M	Car traffic accident	5	Liver laceration	Renorrahph	Ileus	No	8
7	16	F	Motorcyc le accident	3	No	Observation / conservative	No	No	6
8	32	M	Blunt trauma	4	No	Renorrhaphy + calyx/ureter repair	No	No	9
9	45	M	Gunshot Wound	5	Splenic+liver laceration	Nephrectomy	No	Yes	11
10	64	M	Car traffic accident	4	No	Renorrhaphy + calyx/ureter repair	No	No	7
11	23	F	Fall From height	4	No	Renorrhaphy +	No	No	12
						Calyx/ureter repair			
12	31	M	Motorcyc le	3	No	Observation / conservative	No	No	5
13	36	M	Motorcyc le accident	4	No	Renorrhaphy + calyx/ureter repair	No	No	10
14	39	M	Motorcyc le accident	4	No	Renorrhaphy + calyx/ureter repair	No	No	16
15	29	F	Motorcyc le accident	5	Liver hematom	Renorrhaphy + calyx/ureter repair	No	No	18
16	52	M	Fall From height	4	Splenic hematom	Renorrhaphy + calyx/ureter repair	No	No	14

Prehospital Trauma Management and Acute Care

OP-244

ENHANCING EMERGENCY RESPONSE: DRONE-DELIVERED JUST-IN-TIME RESUSCITATION WITH REMOTE TELEMENTORING

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Background: Remotely Piloted Aircraft System (RPAS) technology, or drones, have been extensively deployed in warfare but have incredible potential for humanitarian good, demonstrated by their use as delivery vehicles for medical supplies and equipment to otherwise inaccessible locations. However, the full impact of this delivery mode on human survival from catastrophic injury or illness is limited if there is no expertise to utilize potentially life-saving equipment that has been delivered into naïve care-givers hands. To realize the full potential of this paradigm, TMUSMI and CIRUS have been collaborating to remotely support naïve caregivers to potentially conduct life saving measures after just in time drone-delivery of medical `supplies.

Methods: TMUSMI has been remotely guiding inexperienced care givers for over 20 years since collaborating with NASA on solutions for just-in-time emergency care delivery in challenging environments including outer space. CIRUS has been investigating technology, techniques, and regulatory requirements to support remote communities such as the Canadian Indigenous Communities for nearly a decade. Since 2020, however these entities have collaborated to deliver pre-registered telementoring equipment as part of a drone equipment payload, followed by studies in how to unpack and thereafter conduct potentially lifesaving care. Multiple drones have been used with both fixed-mount and winch-based payload delivery systems, carrying payloads ranging from 2 to 45 kg. Custom payload containers containing payload packages have included specific resuscitation modules to allow i) pulmonary tele-ultrasound, ii) hemorrhage control, iii) general respiratory distress resuscitation.

Results: Our research program has repeatedly demonstrated that procedure-naïve first responders and non-medical volunteers can be successfully mentored using handheld smart-phone technologies to conduct buddy and self-care on themselves and on simulators. Procedures have included remotely mentored self-performed lung ultrasound examination, mentored simulated extremity hemorrhage control with wound packing, clamping, and tourniquet application, and simulated evaluation and management of respiratory distress and tension pneumothorax with physiologic assessment, ultrasound diagnosis, and mentored tube thoracostomy placement. Such a paradigm relies on combining drone delivery with remote telementoring, while also accounting for environmental and climatic factors, and the regulatory framework. Nuances in Drone delivery include landing the drone and having operators recover the payload manually or winching the payload vertically into the hands of the responders with the drone remaining in flight. Critical factors in successfully mentoring procedure-naïve responders include leveraging a custom, accessible payload container along with simplifying technical terminology and breaking otherwise complex tasks into simple step by step procedures with real-time correction and trouble-shooting of each step.

Conclusions: The collaboration has recruited a world-class consortium with many published "firsts" in this area. This technical integration presents a unique opportunity to establish drone-based medical–digital technologies and therapeutic delivery, effectively bringing physicians and surgeons to the patient's location, anywhere, at any time, and stands on the cusp of a revolutionary paradigm for remotely saving lives.

Keywords: Drones, Remotely Piloted Aircraft Systems, Telemedicine, Telementoring, Resuscitation

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Education for Emergency Surgery

OP-247

SURGEONS' PERSPECTIVES ON ACADEMIC GLOBAL EMERGENCY SURGERY IN LOW- AND MIDDLE-INCOME COUNTRIES: A CROSS-SECTIONAL SURVEY

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Introduction: Global emergency surgery partnerships between high-income countries (HICs) and low- and middle-income countries (LMICs) have expanded over the past decade, largely driven by the Lancet Commission on Global Surgery's agenda. While these collaborations have advanced academic careers for many HIC-based surgeons, LMIC surgeons' perspectives on research priorities, barriers, and equity in academic emergency surgery remain underexplored.

Methods: We designed a cross-sectional survey of 14 structured questions, will be disseminated via Google Forms to emergency surgeons worldwide. The survey planned to disseminated by WSES newsletter globally. Inclusion criteria encompassed all practicing emergency surgeons. The survey captured demographic data, professional background, research capacity, institutional policies, funding challenges, collaboration experiences, and views on locally relevant research priorities. Both quantitative and qualitative responses will be collected.

Results: Data collection planned to start early September to the end of December. Study results would like to be presented in 2026 in WSES Congress and published in high rank journals such as Lancet Global Health, WJES.

Conclusion: Understanding LMIC surgeons' perspectives is essential for creating balanced, sustainable academic partnerships in global emergency surgery. This study will inform strategies to ensure equitable collaboration, strengthen research capacity, and align international efforts with locally relevant priorities.

Keywords: LMICs, Educational Activities, survey

Prehospital Trauma Management and Acute Care

OP-249

IMPACT OF ABDOMINAL FAST-TRACK ON THE TREATMENT EFFICIENCY AND PROGNOSIS OF ACUTE ABDOMEN

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Objective: To evaluate the impact of the Abdominal Fast-Track (AFT), implemented in March 2023 at our institution, on treatment efficiency and clinical outcomes in acute abdomen (AA) patients. Methods: A retrospective analysis was conducted based on outcomes of 513 AA patients admitted from June 2021 to April 2024. Patients were grouped according to their admitted time into the pre-AFT group (June 2021-February 2023, n = 197) in which patients were managed under conventional consultation protocols, or the AFT group (March 2023-April 2024, n = 316). Baseline characteristics, time intervals (from emergency department [ED] arrival to admission, admission to surgical request, surgical request to surgery initiation, operative duration and length of hospital stay), postoperative complications, and 30-day mortality rates were compared between two groups. Results: The AFT group demonstrated a 39.8% reduction in median time from ED arrival to surgery initiation (19.25 h vs. 11.58 h, $P<0.001$) and a 10.8% decrease in admission to surgery request time (0.83 h vs. 0.74 h, $P=0.047$) than those of the pre-AFT group. Total hospitalization duration of the AFT group was reduced by 42.6% (7.95 vs. 4.56 days, $P<0.001$), with concomitant declines in postoperative pneumonia (3.6% vs. 0.6%, $P=0.031$) and intra-abdominal infections (5.6% vs. 1.6%, $P=0.011$). Severe complications (Clavien-Dindo grade ≥3) decreased from 16.8% to 5.1% ($P<0.001$). The AFT increased nighttime surgical interventions (18:00-08:00) from 44.7% to 67.1% ($\chi^2=25.118$, $P<0.001$) and elevated the proportion of surgeries performed by attending physicians/junior surgeons under senior supervision from 74.0% to 89.9% ($\chi^2=50.783$, $P<0.001$). Conclusion: The impact of AFT can shorten preoperative waiting time and improve overall outcomes in AA patients.

Keywords: Acute Abdomen; Acute Care Surgery; Time-sensitive Diseases

Surgical Infections

OP-250

EPIDEMIOLOGY, ANTIMICROBIAL RESISTANCE, AND OUTCOMES OF INTRA-ABDOMINAL INFECTIONS IN CHINA (PRIME): A MULTICENTER, PROSPECTIVE, OBSERVATIONAL STUDY

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Purpose: This study aims to delineate the epidemiological characteristics and current management strategies of intra-abdominal infections (IAIs) in China. The goals include looking at the clinical features, pathogen distribution, and antimicrobial resistance patterns; checking how well source control measures are

being used; and finding out the death rates and risk factors that are linked to IAIs to better manage them.

Methods: We conducted a nationwide, multicenter, prospective cohort study, enrolling both ICU and non-ICU adult patients diagnosed with intra-abdominal infections. The primary outcome was 28-day mortality, while secondary outcomes included length of hospital stay and ICU stay. We employed univariate and multivariate logistic regression analyses to identify independent risk factors for mortality in patients with IAI. Latent class analysis (LCA) was used to explore population subtypes of IAIs.

Results: A total of 2,565 patients were enrolled, with 1,620 currently included in the analysis. Of these, 50.93% had community-acquired IAIs, and 49.07% had hospital-acquired IAIs. Significant differences ($P < 0.001$) were observed between the two groups in disease severity, use of mechanical ventilation, application of continuous renal replacement therapy (CRRT), and hospital stay. The most common etiologies were cholecystitis (30.2%), appendicitis (23.6%), and gastrointestinal perforation (15.3%), with secondary peritonitis occurring in 52.4% of cases with gastrointestinal perforation. The overall antimicrobial resistance rate was 11.11% in community-acquired IAIs and 41.22% in hospital-acquired IAIs, with Gram-negative bacteria showing the highest resistance rate (22.1%). 99.81% of patients implemented source control, and 59.75% underwent surgical intervention. Among those receiving source control, 94.50% achieved successful control by day 14, evidenced by the absence of persistent inflammation or organ dysfunction. The overall mortality rate was 8.83%, rising to 22.4% among patients with severe IAIs. Independent risk factors for mortality included infection source, malignancy, hypertension, mechanical ventilation, renal replacement therapy, and drug-resistant infections. LCA identified four IAI subtypes: Types A and B were mild with lower mortality, whereas Types C and D were critical subtypes with higher mortality and distinct clinical characteristics.

Conclusion: This large multicenter cohort study provides a comprehensive description of the clinical and microbiological characteristics of IAIs in China. Gram-negative drug-resistant bacteria are the predominant pathogens. Effective source control combined with appropriate antimicrobial therapy improves patient outcomes, while identification of key mortality risk factors facilitates prognostication and informs clinical management strategies.

Keywords: Intra-abdominal infection, Multidrug resistance, Mortality, Latent class analysis, Risk factors

Minimal Invasive Emergency Surgery

OP-251

INITIAL RESULTS OF THE IMPLEMENTATION OF AN EMERGENCY ROBOTIC SURGERY PROGRAM

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Introduction: The exponential adoption of robotic surgery within our specialty has been confined to elective procedures. However, to date, experience using this approach in the treatment of urgent pathology has been practically limited to sporadic cases, and no fully accessible clinical programs have been developed in our setting.

Objectives: To describe the initial clinical and structural experience obtained in our center after implementing an emergency robotic surgery (ERS) program.

Material and Methods: Prospective observational study describing both the clinical characteristics of the operated patients and the procedures performed, as well as aspects related to the program implementation process.

Results: Prior to launching the ERS program, surgeons and nursing staff completed robotic surgery training over a 6-month period, during which specific protocols for 6 clinical scenarios and standardized workflows for Anaesthesiology were developed. Between November 2024 and May 2025, a total of 82 urgent robotic surgeries were performed using the DaVinci® platform. The two most common procedures were appendectomies (37) and cholecystectomies (32), three of which included bile duct exploration. Three reoperations were performed (duodenal stump leak after gastrectomy, chylocervix after thoracic duct injury during thyroidectomy, and recurrent hiatal hernia). Other procedures included: complicated hiatal hernia repair (5) and incarcerated inguinal hernia repair (2), gastric ulcer perforation suture (2), right hemicolectomy for obstructive colon cancer (1), and exploratory laparoscopy for stab wound (1). The median patient age was 58 years (IQR 33), with 44 men and 38 women, most with ASA I–II. The median surgical time was 61 minutes for appendicitis and 120 minutes for cholecystitis, with a mean docking time of 9.65 minutes. No patient required conversion to laparoscopic or open surgery. Postoperative pain during the first 48 hours, measured with the VAS scale, had a median score of 0. Median hospital stay was 2 days for appendicitis and 3 for cholecystitis. Four patients developed a 90-day complication (1 choledocholithiasis after cholecystectomy, 1 intraabdominal collection after cholecystitis, and 2 after appendicitis).

Conclusions: Implementing an ERS program is feasible if a dedicated platform is available and supported by a carefully designed implementation plan. The notably low postoperative pain and short hospital stay suggest that patients may benefit from faster recovery. Nonetheless, it is necessary to increase the number of cases as much as possible to achieve a more detailed analysis and stronger conclusions to support its use.

Keywords: Robotic Surgery, Emergency Surgery, Minimal Invasive Surgery, Cholecystectomy, Appendectomy

Organ-Specific Emergencies

OP-252

PERCUTANEOUS CHOLECYSTOSTOMY IN OCTOGENARIANS WITH ACUTE CHOLECYSTITIS: BRIDGE TO SURGERY OR DEFINITIVE SOLUTION?

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Background: Acute cholecystitis is a prevalent cause of emergency surgeries globally, particularly challenging in octogenarian patients due to their higher risk of comorbidities and surgical complications. This study aims to evaluate the efficacy and safety of percutaneous cholecystostomy as both a bridging and

definitive treatment for acute cholecystitis in patients aged 80 and above.

Methods: A retrospective analysis was conducted on 182 octogenarian patients treated for acute cholecystitis between 2017 and 2022. Patients were divided into two groups: those who underwent percutaneous cholecystostomy (n=107) and those who received medical treatment (n=65). Clinical, laboratory, and demographic data were analyzed. Statistical tests, including the Mann-Whitney U test and chi-square test, were used to compare the outcomes between the groups.

Results: Out of 182 patients, 10 were excluded due to undergoing emergency cholecystectomy. Percutaneous cholecystostomy was performed on 107 patients (58.8%), while 65 patients (35.7%) received medical treatment. The percutaneous cholecystostomy group showed significantly higher CRP levels ($p<0.01$), neutrophil counts ($p=0.046$), and neutrophil-to- lymphocyte ratios ($p=0.007$). The survival time was longer in the medical treatment group (18.74±18.79 months vs. 10.77±13.0 months, $p=0.03$). However, the overall mortality rate was lower in the percutaneous cholecystostomy group (48.6% vs. 64.6%, $p=0.041$).

Conclusion: Percutaneous cholecystostomy appears to be a viable and safe alternative to cholecystectomy in octogenarian patients with acute cholecystitis, serving not only as a bridge treatment but also as a potential definitive solution. Given the advanced age and comorbidities of these patients, the likelihood of a second cholecystitis attack is minimal, supporting the use of percutaneous cholecystostomy as a long-term management strategy. Future large-scale studies are necessary to confirm these findings and further refine treatment protocols for this vulnerable patient population.

Keywords: Percutaneous cholecystostomy, acute cholecystitis, octogenarians, geriatric surgery, non-surgical treatment

Hernia

OP-253

OUR EXPERIENCE WITH INCARCERATED HERNIA INCARCERATED HERNİA, UMBİLİCAL, INCISIONAL, INGUİNAL

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Objective: To evaluate the demographic characteristics, clinical presentation patterns, surgical techniques, and postoperative outcomes of incarcerated hernia cases.

Materials and Methods: A retrospective review was conducted of incarcerated hernia cases in patients over 18 years of age who underwent emergency surgery at our clinic between January 2019 and July 2025.

Findings: Total number of patients: 265 patients. Mean age: 58.92 years (18-96 years). Gender distribution: Male: 134 patients, Female: 131 patients. Hernia types: Inguinal: 103 patients, Umbilical: 80 patients, Incisional: 82 patients. Concomitant procedures: Bowel resection: 25 patients,

Omental resection: 73 patients, Small bowel reduction: 103 patients.

Conclusion: Incarcerated hernias are surgical emergencies that can lead to high morbidity and mortality. Early diagnosis and surgical intervention reduce complication rates. The need for bowel resection is a significant factor increasing the risk of mortality. Increasing awareness and encouraging early referral in emergency surgery practice can improve patient outcomes.

Keywords: incarcerated hernia, umbilical, inguinal, incisional

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Emergency Surgical Complications

OP-255

CANNULATED SCREW FIXATION IN PEDIATRIC FEMORAL NECK FRACTURES: OUTCOMES AND COMPLICATION PREDICTORS

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Introduction and Aim: Pediatric femoral neck fractures are rare, but they carry a high risk for serious complications such as avascular necrosis, coxa vara, premature physeal closure, and nonunion. The aim of this study is to evaluate the radiological and functional outcomes of pediatric femoral neck fractures treated with cannulated screw fixation and to identify the predictors of postoperative complications. Materials and Methods: A total of 28 pediatric patients treated with closed reduction and cannulated screw fixation in an inverted triangle configuration between June 2020 and December 2024 at a single institution were retrospectively reviewed. Fractures were classified according to the Delbet– Colonna and Garden systems. Outcomes were evaluated based on radiographic union, complications, and Harris Hip Score. Results: The mean follow-up period was 30.9 months. Radiographic union was achieved in 92.9% of cases. The overall complication rate was 42.9%, with the most common complications being coxa vara (17.8%), avascular necrosis (14.3%), premature physeal closure (10.7%), and nonunion (7.1%). Right-sided fractures, higher Garden classifications, and non-anatomical reductions were significant predictors of complications. The mean Harris Hip Score was 83.7, with 67.9% of patients achieving good to excellent results.

Conclusion: Cannulated screw fixation is an effective method of treating pediatric femoral neck fractures, but severe initial fracture displacement and poor reduction quality are associated with high complication rates. Anatomical reduction and careful surgical technique are crucial for improving outcomes.

Keywords: pediatric femoral neck fracture, cannulated screw fixation, coxa vara, avascular necrosis, premature physeal closure, nonunion

Minimal Invasive Emergency Surgery

OP-257

ENDOSCOPIC CLIPPING OF GASTRIC PERFORATION DUE TO GUNSHOT INJURY

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Introduction: Gastric perforation due to gunshot injuries is usually treated surgically. However, in selected cases, endoscopic clip application may serve as a minimally invasive alternative to surgery. Particularly in hemodynamically stable patients with small, easily accessible gastric injuries, successful hemostasis and perforation closure have been achieved using endoscopic clips (1). In a previously reported case, a 0.5 cm penetrating gastric wall injury caused by a stab wound was successfully closed with three endoscopic clips, and the patient recovered without requiring surgery. The authors emphasized that this method is safe with early diagnosis and appropriate patient selection (1).

case Report: A 46-year-old male was admitted to the emergency department after being shot with an air rifle. On initial evaluation, he was conscious, oriented, and cooperative, with stable vital signs. A 0.5 cm entry wound was observed in the 3rd–4th intercostal space above the left nipple, with no exit wound. On physical examination, tenderness was noted in the upper abdominal quadrants.

Abdominal CT revealed the presence of a pellet within the stomach, and emergency endoscopy was planned (Figure 1 and 2). However, bedside echocardiography revealed a 7 mm pericardial effusion, raising suspicion for cardiac injury and tamponade. The patient was taken to the operating room by the cardiovascular surgery team for urgent surgical intervention.

Following successful repair of the left ventricular apex by cardiovascular surgeons, the general surgery team proceeded intraoperatively. The entry site of the pellet in the gastric fundus was closed using two endoscopic clips (Figure 3 and 4).

On postoperative day 4, the patient resumed oral intake and was discharged on day 6 without any complications during follow-up.

Discussion: Gastric injuries are commonly encountered in penetrating abdominal trauma (1). In most cases, urgent laparotomy is required to control bleeding and contamination. These patients often present with hemodynamic instability and physical examination findings suggestive of peritonitis. Non-operative management of abdominal gunshot wounds is increasingly preferred only in carefully selected, stable patients without signs of peritonitis (4).

Although endoscopic clips are primarily used for closing iatrogenic perforations during endoscopic procedures, they may also be effective in treating traumatic gastric injuries (1,2,3). Moreover, endoscopic techniques have been shown to reduce morbidity and mortality, accelerate recovery, and shorten hospital stays (3,5). However, this approach is suitable only for small, localized, and stable injuries. Surgery remains the standard of care for large or complicated injuries (4). Proper patient selection can prevent unnecessary laparotomies and their associated complications (4).

In conclusion, endoscopic clipping may offer a safe and effective alternative to surgery in selected patients with gastric perforation due to gunshot injuries. Nonetheless, appropriate patient selection and a multidisciplinary approach are essential (1,3,5).

Keywords: Gunshot injury, Endoscopic interventions, Minimally invasive surgery

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Emergency Surgical Complications

OP-258

POSTOPERATIVE BLEEDING AFTER LAPAROSCOPIC CHOLECYSTECTOMY

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Introduction & Aim

Laparoscopic cholecystectomy (LC) is the gold standard for treating symptomatic cholelithiasis. Bleeding occurs in 0.1–2% of cases, with sources including trocar sites (0.3– 1.5%), cystic artery, liver bed or other intra-abdominal structures. Trocar-related hemorrhage, though uncommon, is often under-recognized and potentially preventable. Bleeding risk increases in patients requiring therapeutic anticoagulation (25–31%). This study presents three cases of post-LC bleeding treated in our Surgical Department.

Methods: We conducted a retrospective review of patients who developed postoperative bleeding following elective laparoscopic cholecystectomy in our surgical department between July 2022 and July 2025. In total, 518 patients underwent elective laparoscopic cholecystectomy using a standard four-trocar technique. Three cases were noted to have post-operative bleeding. Patients' demographic data, comorbidities, perioperative course, anticoagulation status, source of bleeding, management strategies, and outcomes were collected from medical records.

Results: All three patients developed postoperative bleeding following LC and were evaluated through clinical examination, laboratory tests, and imaging, as indicated. Management was individualized based on hemodynamic stability and bleeding source. All required blood transfusions. Patient A underwent surgical exploration for active bleeding from the inferior epigastric vessels. Patient B, hemodynamically stable with no identifiable source of bleeding, was managed conservatively with transfusion support only. Patient C developed diffuse intra- abdominal bleeding related to early resumption of therapeutic anticoagula-

tion, requiring reoperation for hemostasis. All patients recovered fully, with no mortality or long-term complications.

Conclusion: Postoperative bleeding following LC is an uncommon but potentially serious complication. While most laparoscopic cholecystectomies are conducted without significant bleeding, clinicians should remain vigilant for trocar-related hemorrhage and bleeding associated with early anticoagulant therapy. Prompt recognition and careful clinical monitoring are key to effective management, allowing most bleeding complications to be addressed without late morbidity. Meticulous surgical technique and tailoring anticoagulation resumption are vital to minimizing bleeding risk.

Keywords: Laparoscopic Cholecystectomy, Port Site Bleeding, Anticoagulation Resumption

Hernia

OP-259

FROM ELECTIVE TO EMERGENCY ABDOMINAL WALL HERNIA REPAIR

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Background & Aim: Abdominal wall hernia repair is a common elective procedure in general surgery. Nevertheless, a proportion of patients still present to Accident & Emergency Departments (A&E) due to strangulation, a life-threatening surgical emergency condition linked to bowel ischemia and increased morbidity. This study aims to determine the percentage of strangulated hernias among all operated cases in our department.

Materials and Methods: We retrospectively analyzed all patients undergoing surgery for abdominal wall hernias between January 2024 and July 2025 in our surgical department. All abdominal hernias were included in our analysis, more specifically: incisional, inguinal, femoral, umbilical, and Spigelian hernias. Data collected included demographic characteristics, comorbidities, operative findings, and elective or emergency surgery.

Results: A total of 311 hernia repairs were performed. Fourteen (4.5%) were emergency operations due to strangulation of hernia content. An equal distribution between men and women was observed, with a mean age of 66.3 years and 61.6 years respectively. The most frequent strangulated types were inguinal hernias (36%), umbilical (35%), femoral (22%) and Spigelian (7%). The most common comorbidities were hypertension (46%) and type 2 diabetes mellitus (31%). Bowel resection due to necrosis was required only in one emergency case (7%).

Conclusion: While hernia repair is predominantly elective, a measurable proportion still presents as emergencies due to strangulation of hernia content. The incidence observed in our study was 4.5%, marginally lower than typically reported in the literature ranging from 5–10%. Early recognition and intervention remain crucial to preventing severe complications. Ongoing public awareness and early clinical evaluation are essential to further reduce the burden of emergency hernia repair and its associated complications.

Keywords: abdominal wall hernia, bowel strangulation, bowel resection, emergency hernia repair

Endocrine and Breast Surgery

OP-260

MANAGEMENT OF BREAST ABSCESS PATIENTS AT SAKARYA TRAINING AND RESEARCH HOSPITAL GENERAL SURGERY CLINIC: EXPERIENCES AND OUTCOMES

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Background: Breast abscess is a localized purulent inflammatory condition that usually develops as a result of progression of mastitis during the lactation period but can also occur in non-lactating women. Without early diagnosis and effective treatment, it may lead to complications such as chronicity, fistula formation, and recurrence.

Objective: To evaluate the demographic, clinical, laboratory, microbiological, and histopathological features of patients diagnosed with breast abscess at the General Surgery Clinic of Sakarya Training and Research Hospital, to describe the treatment approaches applied, and to compare the findings with the literature.

Methods: Medical records of 26 patients diagnosed with breast abscess between July 2022 and July 2025 were retrospectively reviewed. Data collected included age, sex, laboratory results (CRP, WBC), imaging findings, culture and antibiogram results, histopathology reports, and treatment modalities. Results were expressed as percentages (%).

Results: The mean age of the study group was 35.1 years, with most patients in the young adult age group. Control ultrasonography was performed in 50% of cases. The mean CRP was 51 mg/L, and mean WBC was 11.4 × 10^9/L. Staphylococcus aureus was the most frequently isolated pathogen (30.8%) in culture results. Corynebacterium species (7.6%) and other bacteria were observed at lower rates. No growth was observed in 38.5% of cultures. Histopathological examination most commonly revealed "suppurative active chronic inflammation" (23.1%). All patients underwent surgical drainage, and antibiotic therapy was initiated empirically and then adjusted according to culture/antibiogram results.

Conclusion: In breast abscess management, a multidisciplinary approach, culture-based antibiotic selection, appropriate drainage techniques, and regular follow-up protocols improve treatment success. Routine use of control ultrasonography may help prevent recurrences.

Keywords: Breast abscess, surgical drainage, Staphylococcus aureus, histopathology, antibiotic therapy

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Emergency Surgical Complications

OP-264

MANAGEMENT OF SURGICAL COMPLICATIONS: OPEN ABDOMEN APPROACH AND MAINTENANCE OF ENTERAL NUTRITION VIA DOUBLE-BARREL ENTEROSTOMY

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Objective: In this study, we present a patient with a history of gastrojejunostomy who developed an anastomotic injury during bezoar surgery. A double-barrel enterostomy was performed, and the patient was managed with prolonged vacuum-assisted closure (VAC) therapy to control the open abdomen. The primary aim was to maintain adequate nutrition without caloric loss by closely monitoring the intake–output from the double-barrel enterostomy.

Case Presentation: A 68-year-old male patient, with no known comorbidities ,reported a history of gastric surgery performed in 1978, the indication for which was unknown. The patient presenting to the emergency department after long-standing abdominal pain and recurrent episodes of vomiting were accompanied by a decrease in the passage of flatus and stool.

Abdominal direct radiography (ADBG) revealed air–fluid levels, prompting an oral and intravenous contrast-enhanced computed tomography (CT) scan, which demonstrated the presence of a gastric bezoar.

During the surgical procedure, it was determined that the patient had undergone a gastrojejunostomy in 1978. Intraoperative exploration revealed a mass measuring approximately 10 × 10 cm in the stomach, suspected to be a bezoar, as well as a second bezoar located about 20 cm proximal to the ileocecal valve. After manually fragmenting the bezoar at the ileocecal valve, it was pushed into the colon using milking maneuvers. A gastrotomy was performed via the greater curvature to remove the gastric bezoar, which was then sent for pathological examination. The surgical procedure was concluded.

During the patient's follow-up in the intensive care unit, bilious discharge was noted from the incision site, prompting a planned return to the operating room. Intraoperative exploration revealed the presence of widespread bilious fluid throughout all four quadrants of the abdomen. In the patient, who was tolerating oral intake, food residues were observed to have leaked from the stomach into the abdominal cavity. It was then noted that the previous gastrotomy had been performed over the gastrojejunostomy anastomosis, and leakage had occurred due to disruption of the prior anastomosis. The residual gastric bezoar was extracted. A gastric remnant was created using two 75 mm GIA staplers, leaving the old gastrojejunostomy loop distally. The disrupted intestinal loop was exteriorized. The intestinal loop coming from the stomach was matured as the afferent limb starting approximately 15 cm from the ligament of Treitz. The distal loops remaining from the previous anastomosis were matured to the skin as the efferent limb of the double-barrel enterostomy.

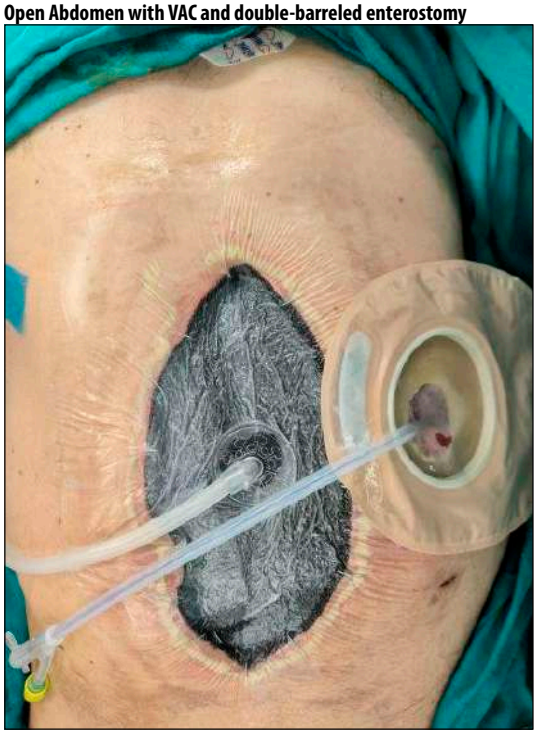
Subsequently, due to the contaminated abdominal cavity and the edematous intestinal loops, the abdomen could not be closed. The open abdomen was managed with a vacuum- assisted closure (VAC) system, with organ-protective coverage, a Malecot catheter (Pezzer tube) was placed into the efferent limb to enable reinfusion of all enteral contents from the stoma back into the intestinal tract using a syringe.and the operation was concluded. After the patient resumed oral intake, all enteral contents from the stoma were collected in a container and reinfused through the Pezzer tube using a syringe, ensuring the continuity of enteral nutrition.

Keywords: Bezoar , double-barreled enterostomy , open abdomen , Vacum-assisted-closure ,

Bezoar



Open Abdomen with VAC and double-barreled enterostomy



Minimal Invasive Emergency Surgery

OP-265

ENDOSCOPIC REMOVAL OF FOREIGN BODIES: OUR CLINICAL EXPERIENCE

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Ingestion or lodgment of foreign bodies within the gastrointestinal tract is a significant reason for emergency department visits. It is particularly common among children, the elderly, psychiatric patients, and individuals in high-risk occupational groups. Foreign bodies may lead to serious complications such as mechanical obstruction, perforation, and bleeding. In this study, we present the characteristics of cases admitted to our clinic within a specified period due to foreign body ingestion and managed by endoscopic or surgical intervention.

Methods: Between 2022 and 2025, a total of 19 patients who presented to our emergency department due to foreign body ingestion and were managed at our clinic were retrospectively reviewed. Demographic data, type of ingested foreign body, treatment method, length of hospital stay, and complications were evaluated.

Results: A total of 19 patients were included in the study.

- Mean age: 38.0 years (range: 16–82)
- Most common foreign body types: food residues, bone fragments, razor blades, and sewing pins
- **Treatment:** Endoscopic removal was performed in most cases; laparotomy was required in only one patient
- **Hospitalization status:** 7 patients were discharged on an outpatient basis, 2 patients refused the recommendation for hospitalization, and the remaining patients were hospitalized for 1–5 days
- **Complications:** No serious complications were observed except in the laparotomy case

Discussion: Foreign body ingestion is a condition frequently encountered in clinical practice. Literature indicates that in adults, most foreign bodies are ingested accidentally; however, intentional ingestion rates are higher in psychiatric patients, suicide attempts, and forensic cases. In our series, both accidental and intentional ingestions were detected across various age groups.

The most common foreign bodies identified were food residues and bone fragments, consistent with previous studies. Endoscopic removal was successful in most cases, with laparotomy required in only one patient.

Our low hospitalization duration and complication rates emphasize the importance of early diagnosis and prompt intervention. Particularly in cases involving sharp or pointed objects, the risk of perforation is high, which can increase the need for surgical intervention.

In conclusion, early diagnosis, appropriate imaging, endoscopic expertise, and surgical support when necessary are critical for patient safety in foreign body ingestion cases. Larger patient series and further studies are needed to identify specific risk factors and establish the most appropriate treatment algorithms.

Conclusion: Foreign body ingestion can occur in all age groups, but with early diagnosis and appropriate management, recovery without complications is achievable. Although endoscopic removal is successful in most cases, surgical intervention may rarely be required. Clinical experience and rapid intervention are crucial for reducing morbidity.

Keywords: Keywords: Foreign body, Endoscopy, Case series, Gastrointestinal tract,

Suisid sonrası gastroskopi ile çıkarılan piller



Education for Emergency Surgery

OP-266

CONSULTATION CLINIC WORKFLOW IN THE EMERGENCY DEPARTMENT: AN EIGHT-DAY CROSS-SECTIONAL ANALYSIS OF TRIAGE-LEVEL SURGICAL YIELD AND TIMELINESS

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Background: In hospitals where general surgery provides care exclusively via consultations (without ED in-house shifts), the yield and timeliness of consultations across triage zones remain unclear. We evaluated consultation "surgical yield" and response times in a consultation-only workflow.

Methods: We performed a cross-sectional study of all ED consultations requested from general surgery between 1–8 July 2025. Variables included patient demographics, triage zone (green/yellow/red), major pre-diagnosis, final major diagnosis, and consultation time (minutes). Primary outcome was surgical yield—the proportion with an acute surgical pathology. Secondary outcomes included pre- vs final major agreement and time differences across triage zones and by yield status. Chi-

square tested proportions, Kruskal–Wallis/Mann–Whitney tested non-parametric times (α=0.05).

Results: We analyzed 162 consultations (median age 47.0 ± 19.7 years; 89 males [54.9%], 73 females [45.1%]). Overall surgical yield was 64.2% (NASP 35.8%). Yield by triage was similar: green 63.8% (67/105), yellow 64.3% (18/28), red 65.5%(19/29); p=0.986. Pre- to final-major agreement was 63.0% overall, highest for trauma (92.9%) and lowest for acute abdomen (55.0%). Median consultation times were 143 (green), 166 (yellow), and 156 (red) minutes, with no significant difference (Kruskal–Wallis p=0.823). Times were also similar for surgical vs NASP cases (169 vs 122 min; p=0.871).

Conclusions: In a consultation-only general surgery workflow, surgical yield is ~64% and does not differ by ED triage level. Diagnostic agreement is high for trauma but modest for acute abdomen, indicating a potential target for refining consultation indications. Consultation timeliness is comparable across triage zones, suggesting system performance is uniform at the zone level.

Keywords: General Surgery, Emergency Service, Hospital, Triage, Consultation, Cross-Sectional Studies, Time Factors, Diagnostic Accuracy, Acute Abdomen

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Vascular Emergencies

OP-267

THE IMPORTANCE OF TIME IN ABDOMINAL AORTIC RUPTURE

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Background: Abdominal aortic aneurysm is a common and life-threatening disease. Up to 50% of patients with aortic aneurysms experience aneurysm rupture as the primary outcome. Abdominal aortic aneurysm rupture is a fatal emergency. The signs and symptoms of Abdominal aortic aneurysm can often resemble those of other diseases. For this reason, diagnosis can be difficult in emergency rooms. In this study, we tried to present the importance of rapid diagnosis in ruptured aortic aneurysms presented to the emergency department.

Methods: Twelve patients who consulted our hospital's cardiovascular surgery clinic through the emergency department within the past year with a diagnosis of ruptured abdominal aortic aneurysm were included in this study. The average time these patients were consulted after arriving at our clinic was 8.2 hours (range, 5 to 24 hours). Three patients presented with abdominal pain, four with syncope, three with leg numbness, and two with gastrointestinal complaints. Five of these patients consulted the general surgery clinic, three with the neurosurgery clinic, and four with the internal medicine clinic. Patients identified during the examinations were consulted at our clinic and taken to emergency care.

Results : Four patients underwent EVAR, and eight underwent open surgery. Three of these patients died during surgery, and three died in the intensive care unit from other causes.

Conclusions: Up to 50% of patients with aortic aneurysms experience aneurysm rupture as the primary outcome. Mortality for patients with ruptured aortic aneurysms is difficult to predict, but mortality is reported to be as high as 90% and as high as 75% with current surgical modalities. Patients may present to the emergency department with syncope, abdominal pain, or ischemic symptoms. The signs and symptoms of abdominal aortic aneurysms can often resemble those of other diseases. It should not be forgotten that the timing of diagnosis and intervention is important in mortality, even in asymptomatic patients.

Keywords: abdominal aortic rupture vascular Surgery EVAR

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Perioperative, Critical Care & TICU, SICU

OP-268

TRAUMA ANALYSIS OF OCTOGENARIANS

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Introduction: Traumatic injuries in older adults present unique challenges due to age-related physiological changes and preexisting medical conditions. This population has a higher risk of morbidity and mortality following trauma, as factors such as cognitive impairment, cardiovascular disease, and multi-organ insufficiency contribute to overall frailty. This study aims to perform a demographic analysis of geriatric patients presenting with trauma to the Hacettepe University Hospital.

Methods: This study included patients aged 80 years and older who presented to Hacettepe University Hospital between 2021 and 2024 with traumatic injuries. Data on sociodemographic characteristics, comorbidities, mechanism of trauma, time from trauma to admission, mortality rates, and Glasgow Coma Scale (GCS) scores were obtained from the hospital's electronic medical records and patient files.

Results: Thirteen of 280 patients with trauma (4.6 %) over the age of 80 were admitted to the Emergency Department during the study period, of whom nine were female (69 %). The median age was 86 years. The most common mechanism of injury was a ground-level fall. Extremities were the most frequently affected body regions. The most prevalent comorbidities were cardiac disorders, such as atrial fibrillation, and neurological conditions, such as dementia. The mean ISS of 28 among 13 trauma patients reflects severe injury burden. Mortality was 15.4%, entirely attributable to intracranial hemorrhage.

Conclusion: The elderly population is increasing rapidly both in Turkiye and worldwide. Therefore, preventing geriatric trauma and ensuring multidisciplinary management from the point of emergency admission are of critical importance. Mortality which was entirely attributable to intracranial hemorrhage, highlights the need for early neuroprotective strategies in octogenarian population.

Keywords: Keywords: trauma, geriatrics, emergency medicine

Minimal Invasive Emergency Surgery

OP-269

OVERCOMING ALTERED ANATOMY: LAPAROSCOPY-ASSISTED ERCP AFTER ROUX-EN-Y GASTRIC BYPASS – A CASE REPORT

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[2]*Van Başkale State Hospital, General Surgery Department*

Background: Endoscopic retrograde cholangiopancreatography (ERCP) is the standard intervention for choledocholithiasis. However, altered gastrointestinal anatomy after bariatric surgery poses significant technical challenges to conventional ERCP due to the inaccessibility of the papilla via standard duodenoscopy. Laparoscopy-assisted ERCP (LA-ERCP) has emerged as a viable alternative, enabling direct access to the excluded stomach for biliary interventions.

Case Presentation: A 39-year-old female presented in December 2023 with abdominal pain and jaundice. Magnetic resonance cholangiopancreatography (MRCP) revealed a distal common bile duct (CBD) stone. ERCP with sphincterotomy was performed, and due to an impacted stone, a 7F, 11 cm plastic stent was placed. Post-ERCP pancreatitis developed, which resolved with medical management. During the same admission, laparoscopic cholecystectomy was performed.

In May 2025, the patient underwent gastric bypass surgery for obesity. In August 2025, she presented again with abdominal pain, and laboratory tests revealed elevated cholestatic enzymes. MRCP demonstrated calculi both proximal and distal to the existing CBD stent.

Given her altered anatomy, LA-ERCP was planned.

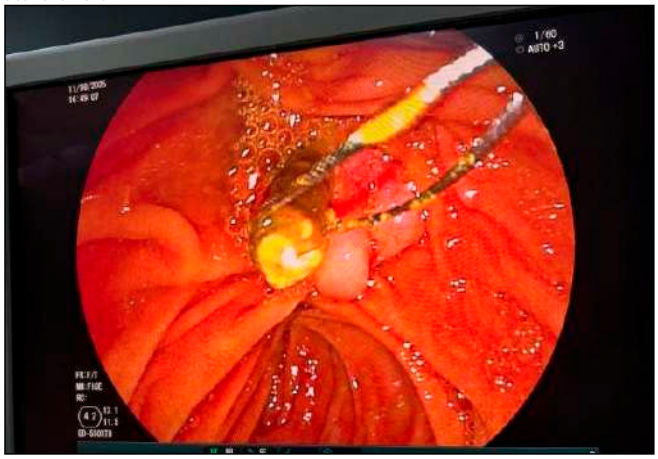
During laparoscopy, the remnant stomach was identified and anchored to the anterior abdominal wall with two sutures. A gastrotomy was created, and a transgastric trocar was inserted, allowing the introduction of a conventional duodenoscope via the remnant stomach. The ampulla was visualized; the old stent was removed, sphincterotomy was extended, and the CBD was swept with basket and balloon. One stone was extracted. The gastrotomy was closed with a 45 mm stapler.

The patient was started on oral intake in the early postoperative period. Her postoperative course was uneventful, and she was discharged on postoperative day 3.

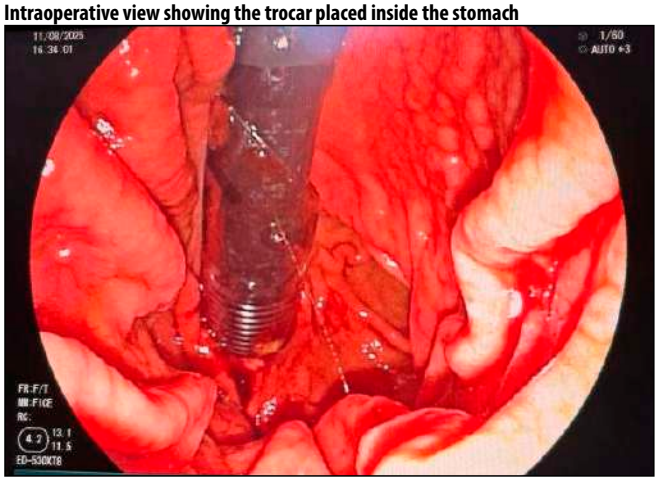
Conclusion: In patients with altered anatomy after gastric bypass, LA-ERCP offers a safe and effective approach for the management of CBD stones. This technique provides direct access to the papilla, allowing the use of standard ERCP maneuvers. Reported technical and clinical success rates in the literature are high, and this case supports LA-ERCP as a valuable option in complex post-bariatric surgery scenarios.

Keywords: Laparoscopy-assisted ERCP ,bariatric surgery

Stent removal



Intraoperative view showing the trocar placed inside the stomach



Education for Emergency Surgery

OP-271

RETROSPECTIVE ANALYSIS OF ONE YEAR OF EMERGENCY DEPARTMENT EXPERIENCE

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Objective: The General Surgery Department of Ankara University of Health Sciences Gülhane Training and Research Hospital is one of the busiest surgical centers in Türkiye, serving a wide and diverse patient population. This high volume of cases plays a vital role in the clinical development of our surgeons and ensures the application of effective, up-to-date patient management strategies. In this study, we aimed to retrospectively analyze emergency general surgery cases referred to our clinic over a one-year period and to evaluate our clinical approach and decision-making processes in surgical emergencies.

Methods: Between January 2024 and January 2025, data of patients referred from the emergency department to the General Surgery Clinic were retrospectively reviewed using the hospital information system. The clinical course, surgical or medical interventions, operative techniques, and patient outcomes were recorded and analyzed.

Results: During the study period, 9,572 patients were consulted from the emergency department to the General Surgery

Clinic. Of these, 551 patients were hospitalized, and 459 underwent emergency surgical intervention.

The most common diagnoses and procedures were as follows:

- 263 patients were diagnosed with acute appendicitis; 206 underwent laparoscopic and 57 open appendectomy.
- 12 patients with perforated peptic ulcer underwent primary repair with modified Graham patch omentoplasty.
- 43 patients with acute cholecystitis were managed medically; 6 required percutaneous cholecystostomy.
- 109 patients presented with ileus; 69 were surgically treated, while 40 were managed conservatively.
- 17 patients with penetrating trauma (gunshot or stab wounds) were admitted; 14 underwent surgery, and 3 received medical management.
- 21 patients with incarcerated inguinal hernia underwent herniorrhaphy with polypropylene mesh.
- 17 patients with incarcerated incisional hernia and 7 with umbilical hernia received similar surgical repair.
- 20 patients were treated for Fournier's gangrene; 17 underwent laparoscopic loop colostomy, debridement, and VAC, while 3 underwent debridement and VAC only.
- 12 trauma patients from motor vehicle accidents were operated emergently.
- 9 patients with diverticulitis were hospitalized; 6 received conservative treatment, and 3 underwent surgery.

The average length of hospital stay was calculated as 7.3 days. The overall postoperative complication rate was 17%. All patients were followed according to clinical protocols, and most were discharged in good health.

Conclusion: In our clinic, emergency surgical decisions are based on clinical assessment, imaging findings, and hemodynamic status, allowing for timely and effective interventions. Being one of the most active general surgery departments in Türkiye, the diverse case spectrum we encounter significantly contributes to the professional growth of our surgical team.

Moreover, we participate in monthly academic meetings with other hospitals in Ankara, where we share noteworthy cases and clinical experiences. We believe that such collaborative platforms foster collective learning and clinical excellence. As the saying goes, a wise person is not one who learns solely from personal experience, but one who also learns from the experience of others.

Keywords: Emergency general surgery, Acute care surgery, Surgical emergencies

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Education for Emergency Surgery

OP-273

TROMS (TRAINEE REPORTED OUTCOME MEASURES) IN EMERGENCY SURGERY: THE NEW ERA IN SURGICAL TRAINING. PRELIMINARY STUDY RESULTS.

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Introduction: In modern surgery, the analysis of techniques increasingly considers not only surgical outcomes but also patient-centered symptom or complication perceptions, known as PROMs (Patient Reported Outcome Measures). Current surgical training in many healthcare systems does not systematically evaluate residents' perceptions of the training received, or if it does, it is periodic, sparse, and not procedure-focused.

Objective: To validate and analyze preliminary results in in Emergency Surgery from the creation of a digital instant evaluation tool for surgical training. This tool standardizes steps for abdominal wall surgery and customizes the teaching received, evaluating both resident and instructor satisfaction through a web app in the General Surgery Department of a University Hospital.

Material and Methods: A digital tool (web app) based on REDCAP was created, dividing the main surgical procedures into five steps. A questionnaire was developed for resident evaluation by their instructor and for the resident's self-assessment. Both parties record their perception of the completion of various steps performed, with the resident's questionnaire responses sent anonymously through the software after the procedure. All consecutive procedures from 1st of April of 2024, to 31 of July 2025, in which a resident or fellow participated as the lead surgeon were included.

Results: A total of 1062 procedures were registered in TROMs database, from these 287 procedures were performed into the Emergency Surgery Unit, from these 217 had all data compiled for analysis. A total of 13 trainees and 22 trainers participated.

Most common procedure performed was laparoscopic appendectomy n=113(52%), laparoscopic cholecystectomy n=40 (18,4%), abscess debridement n= 32(18,8%). Mean surgical time was 83,8 minutes.

In analyzing the percentage of steps completed, there was an average disparity of 3% favoring the trainees. Perceptions of procedure execution matched in 58 % of cases.

Regarding evaluations, residents' perceptions closely aligned with those of the instructors on average (average dispersion = 0), though dispersions ranged from (-70, +70) per question and (-29, 18) for questionnaire averages. Agreement on knowledge perception was observed when average of matching punctuation was done however in only 8.7% of cases there was real agreement.

Conclusions: Residents and trainees perception in steps completion is aligned. Real alignment is observed because in more than half of the procedures agreement in perceptions is showed.

Residents tend to slightly overestimate their knowledge, and there is minimal alignment in knowledge perception between instructors and residents.

TROMS is an easy-to-apply tool with significant potential to provide specific perceptions by procedure, resident, and instructor, enabling the design of personalized training curricula

Keywords: TROMS, Emergency Surgery

Surgical Infections

OP-274

CAMEL BITE-RELATED HUMAN RABIES: PROTOCOL FOR A SYSTEMATIC REVIEW

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Background: Rabies is a major public health threat transmitted by saliva from the bite of infected animals. It is still a major cause of death in developing countries. Although camels can be infected by rabies, data on camels' bites transmitting rabies to humans is lacking. We aim to systematically study whether camel bites can cause rabies.

Methods: Our protocol and final review will be reported in accordance with the PRISMA guidelines. A comprehensive, preliminary search was conducted in PubMed in July 2025. The final search will be conducted in six biomedical databases: PubMed, Embase, MEDLINE, Scopus, Web of Sciences and Cochrane Library from their inception to October 2025. Additional sources for grey materials will be included. Studies in English, French, Italian, and Arabic languages will be considered for the review. The screening and selection process will be performed in Covidence systematic review software by two independent reviewers. The quality of the individual studies will be assessed by two individual reviewers with the help of tools from the National Heart, Lung, and Blood Institute and Cochrane Collaboration. Data from eligible studies will be extracted based on the pre-set inclusion and exclusion criteria.

Protocol registration: Prospero (CRD42021287987)

Expected outcome: The protocol and the results of the final review will be publicly available online in an open access peer-reviewed journal and will be presented at regional and international conferences.

Keywords: Camel bites, Rabies; Humans, Epidemiology, Infectious diseases, Systematic review

Acute Abdominal and Gastrointestinal Emergencies

OP-275

PREDICTIVE VALUE OF THE PDW/MPV RATIO FOR POSTOPERATIVE MORBIDITY AND MORTALITY IN EMERGENCY ABDOMINAL SURGERY: A RETROSPECTIVE COHORT STUDY

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Introduction: Emergency abdominal surgery carries high morbidity and mortality and requires rapid decision-making. Prognostic tools are important for surgical planning and intensive care utilization. Hematological parameters have recently gained attention in this context. Platelet distribution width (PDW) and mean platelet volume (MPV), reflecting platelet activation and inflammation, have been reported to carry prognostic value in abdominal surgery . Other inflammatory markers, including neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and C-reactive protein (CRP), have also been studied . However, data on the predictive role of the PDW/MPV ratio in emergency abdominal surgery remain limited. This study aimed to evaluate the performance of PDW/MPV ratio, NLR, PLR, and CRP in predicting postoperative morbidity and 30-day mortality.

Materials and Methods: This retrospective cohort study included 145 adult patients who underwent emergency abdominal surgery between December 2022 and November 2024. Data were obtained from electronic medical records, including demographics, preoperative laboratory parameters (PDW, MPV, PDW/MPV ratio, leukocyte, neutrophil, platelet, NLR, PLR, CRP), and surgical diagnoses. Thirty-day mortality was determined from hospital and follow-up records.

Postoperative morbidity was assessed using the Clavien–Dindo classification, with complications defined as Clavien–Dindo >1. Continuous variables were expressed as mean ± standard deviation or median (minimum–maximum). Group differences were analyzed using the Mann–Whitney U test or Student's t-test, while categorical variables were compared with the chi-square test. Predictive performance was assessed with ROC curve analysis, and cut-off values were determined with the Youden Index.

Results and Conclusion: A total of 145 patients were included (female: 64, 44%; male: 81, 56%; mean age: 57.8 ± 20.0 years). Thirty-day mortality occurred in 56 patients (38.6%), with significantly higher mean age in non-survivors (65.5 ± 17.0 vs. 53.1 ± 21.2 years; $p < 0.001$). Only CRP values were significantly higher in the mortality (+) group (171.7 vs. 77.4; $p < 0.001$), while PDW, MPV, PDW/MPV ratio, NLR, and PLR showed no significant differences ($p > 0.05$). ROC analysis identified CRP as the strongest predictor of mortality (AUC = 0.73; cut-off: 47.5; sensitivity: 72.7%; specificity: 65.9). Postoperative morbidity (Clavien–Dindo >1) was observed in 75 patients (50.3%), with no biomarker differences between morbidity groups ($p > 0.05$). These findings suggest that only CRP provides meaningful predictive value for 30-day mortality in emergency abdominal surgery, whereas other hematological parameters do not. CRP may therefore serve as a practical prognostic marker, though validation with prospective large- scale studies is needed.

Keywords: Emergencies, General Surgery, Postoperative Complications, Mortality, C-Reactive Protein, Biomarkers

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Emergency Surgical Complications

OP-276

PROGNOSTIC ROLE OF THE EMERGENCY SURGERY SCORE (ESS) IN PREDICTING MORBIDITY AND MORTALITY IN EMERGENCY GENERAL SURGERY

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Introduction: Emergency general surgery carries high morbidity and mortality and requires rapid decision- making. Prognostic tools are valuable for anticipating outcomes and optimizing care. The

Emergency Surgery Score (ESS), based on age, comorbidities, and laboratory parameters, estimates 30-day mortality and complications. Previous studies and systematic reviews have reported its prognostic accuracy, but data from our country remain limited. This study aimed to evaluate the performance of ESS in predicting morbidity and mortality in emergency general surgery patients.

Materials and Methods: This retrospective cross-sectional study included adult patients presenting to our emergency department who underwent surgical interventions between January 2023 and January 2025. Data were retrieved from electronic medical records. Demographic characteristics, comorbidities, laboratory parameters, and surgical procedures were recorded. ESS was calculated for each patient, and its association with 30-day mortality and complications was analyzed. Morbidity was defined according to the Clavien–Dindo classification. Categorical variables were assessed with chi-square tests, continuous variables with parametric or non- parametric tests, and predictive performance with ROC curve analysis.

Results and Conclusion: A total of 149 patients were included (Female: 65, 44%; Male: 84, 56%; mean age: 58.4 years). Thirty-day mortality occurred in 57 patients (38.6%). The mean ESS was 4.36 ± 1.20 in non-survivors vs. 2.46 ± 1.36 in survivors ($p < 0.001$). Patients with complications also had higher ESS values (4.08 vs. 2.35; $p < 0.001$). ROC analysis showed an AUC of 0.85; with a cut- off of ESS ≥ 4, sensitivity was 76.8% and specificity 80.9%. ESS is a strong prognostic tool for predicting morbidity and mortality in emergency general surgery. A score ≥ 4 identifies high- risk patients with meaningful accuracy and may aid surgical decision-making, intensive care planning, and communication with families.

Keywords: Emergencies, General Surgery, Postoperative Complications, Mortality, Prognosis

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Acute Abdominal and Gastrointestinal Emergencies

OP-277

EMERGENCY MANAGEMENT OF ILEUS DUE TO OBSTRUCTIVE COLONIC TUMORS: EXPERIENCES FROM A TERTIARY MEDICAL CENTER

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Introduction: Initial presentation of colon cancer is obstruction in approximately 10-18% of the patients. Emergency surgery is indicated in patients with ileus due to obstructive colon tumors. Although there's been great advancements in the operational as well as colonoscopy techniques and instruments such as the use of equipment like self-expanding colonic stents, morbidity and mortality rates remain still high. This study aims to investigate the management of colonic obstruction and perforation due to obstructive colonic tumors and factors associated with complications at emergency settings.

Methods: Patients who were diagnosed with and treated for ileus due to obstructive colonic tumors consecutively at the general surgery clinics of the Ankara Gülhane Research and Training Hospital between 01.01.2018 and 30.06.2025 at emergency settings were included in the study. Patient data such as preoperative laboratory parameters, type of the operation, tumor-associated pathological parameters as well as complications were collected from patient files retrospectively.

Results: Sixteen female and twenty-three male patients with a median age of 66 (IQR 57) who were diagnosed with and treated for ileus due to obstructive colonic tumors consecutively were included in the study. Thirty-eight patients had Charlson comorbidity indices >2. Twenty-four of the patients were treated with Hartmann procedure, eight of the patients were treated with right or left hemicolectomies, four patients with total or subtotal colectomies and the rest of the patients were treated with sigmoidectomy, anterior or low anterior resections. Diverting colostomies were performed in twenty-eight (71.8%) and ileostomies (12.8%) were performed in five of the patients. Eleven (28.2%) of the patients required anastomosis during the operation. Pathology reports revealed that 6/39 (15.4%) of the tumors were T3 and 84.6% of them were T4. 61.5% of the patients (24/39) had indeed tumors totally occluding the colonic lumen and 46.2% (18/39) of tumors were perforated into the abdomen. Preoperative laboratory values, tumor diameters, resected colon lengths, the duration of intensive care unit stay or the duration of hospitalization and in-hospital mortality rates were all indifferent between the patients with totally occluding tumors and patients with incomplete obstruction. The number of metastatic lymph nodes were higher in patients with complete obstruction (1 IQR 7 vs 6.5 IQR 3, p=0.11). Twelve (30.8%) patients later developed > Grade 2 (serious) postoperative complications according to the Clavien Dindo Classification System.

Conclusion: Bowel dilatation, edema of the colonic mucosa and subsequently impaired blood flow to the colon are the major consequences of mechanical colonic obstruction, resulting in a distended colon loaded with fecal contents, ischemic lesions and

serosal tears. The risk of ischemia and perforation is further increased with a competent ileoceal valve.

Treatment decision in emergency settings should be made depending on the initial presentation of the patient and patient-related risk factors. The use of self-expanding colonic stents might help the procurement of elective settings in certain patients. Incorporation of neoadjuvant chemotherapy in those selected patients might help to effectively control the systemic disease. Nevertheless, long-term outcomes call for individually-tailored treatment approaches and diagnostic methods to monitor treatment responses.

Keywords: Tumor ileus, obstructive colonic tumors, emergency management, colectomy, diverting colostomy, diverting ileostomy.

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Acute Abdominal and Gastrointestinal Emergencies

OP-278

EMERGENCY MANAGEMENT OF GASTRIC AND DUODENAL PERFORATIONS DUE TO PEPTIC ULCERS

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Introduction: Gastric perforations due to peptic ulcers are surgical emergencies that require appropriate initial management to bypass potentially complicated problems and redundant gastrectomies. Explorative laparotomy and closure with an omental patch is a well-accepted treatment of choice in those patients. This study aimed to investigate the management and outcome of patients with gastric or duodenal perforations undergoing emergency laparotomy.

Methods: Patients who were diagnosed with and treated for gastric or duodenal perforation and who underwent emergent laparotomy consecutively at the general surgery clinics of the Ankara Gülhane Research and Training Hospital between 01.01.2020 and 30.06.2025 at emergency settings were included in the study. Patient data such as preoperative laboratory parameters, type of the operation, pathological parameters as well as complications were collected from patient files retrospectively.

Results: Thirteen female and forty-nine male patients with a median age of 49 (IQR 65) who were diagnosed with and treated for gastric or duodenal perforation due to peptic ulcer consecutively were included in the study. Seven patients had Charlson comorbidity indices >2. Similarly, seven of 62 patients were presented with ileus signs and symptoms. Thirty- three of the patients were treated with simple suturing, while 24 of the patients underwent modified Graham repair and in 5 patients subtotal gastrectomy was necessary. In thirty-eight (61.3%) of the patients, anterior part of the prepyloric antrum was the perforation site, whereas 11 (17.7%) patients demonstrated duodenal perforations, 8 (12.9%) patients had perforations on the lesser curve, 3 on posterior prepyloric antrum and 2 on corpus. Median perforation diameter was 1 cm (IQR 6.7). Six patient required anastomosis and 5 patient needed relaparotomy during their hospitalization. Pathology reports revealed that only 1 patient (1.6%) was diagnosed with malignancy. Median hospitalization was 8 days (IQR 58) and postoperative 30-day mortality was 8% (5/62). Nine (14.5%) patients later developed mild to moderate postoperative complications, whereas in 3 patients (4.8%) > Grade 2 (serious) complications developed according to the Clavien Dindo Classification System.

Discussion: Peptic ulcers were presented with gastric or duodenal perforation in 10-15% of all cases. Although the incidence of the diagnosis of a cancer is extremely low in duodenal ulcers, malignant conditions were shown to underlie in 6-14% of all gastric perforations due to peptic ulcers. Therefore, a decision for a simple patch with biopsy, local excision or resection and reconstruction has to be made by the surgeon. Although the traditional approach has dictated to perform a wedge resection or even a formal resection at the initial operation in case a malignancy is suspected, a more conservative initial approach has recently been accepted, which consists of an index non-radical resection and biopsy, followed by the later curative operation and lymphadenectomy. Follow-up endoscopy is mandatory in these group of patients to secure healing and eliminate the risk of malignancy.

Keywords: Peptic ulcer, gastric perforation, duodenal perforation, emergency surgical management, modified Graham repair.

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Burn Management

OP-279

EPIDEMIOLOGICAL ANALYSIS OF A TERTIARY BURN CARE FACILITY: A RETROSPECTIVE CHART REVIEW OF SURGICAL VOLUME, PATIENT CHARACTERISTICS AND OUTCOMES

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Tertiary burn care facilities manage some of the most complex cases of burn trauma requiring significant institutional resources and expertise. A precise understanding of patient demographics, injury patterns and resulting clinical demands is not just an academic endeavour but an essential part of planning, improvement and resource allocation. This review analyses the workload of our unit over the course of 2 years to outline the relationship between injury characteristics, surgical burden, and patient outcomes. We conducted a chart review for all acute burn admissions from September 2023 to August 2025. We excluded patients handled solely as outpatients or hospitalized by other departments. The data pull focused on demographic details, burn mechanism, total burn surface area, operative procedures, ICU stays, complications, and overall length of stay.

Standard descriptive statistics were applied to the dataset. Our centre admitted 647 patients with acute burns during the two-year period. The median age at hospitalization was 27 years, with burns covering an average of 14.7% of their body surface area. Scald injuries (41%) and flame burns (34%) were the leading causes, followed by electrical (14%) and chemical (11%) injuries. Management was mostly surgical. In total, 2235 operations were performed, with every inpatient requiring at least one procedure. On average, each patient underwent 3–4 surgeries, most commonly related to staged grafting, partial/total graft loss, donor-site issues, or infection-related reoperations. Over the two-year period, about 12% of patients required ICU admission. The overall average length of stay was 11.6 days. Complications were almost evenly split between surgical (47%) and non-surgical (53%) causes. Surgical complications were predominantly graft-related, including partial graft loss or failure (21% of all complications) and donor-site complications (37%). Non-surgical complications were mostly infection-related, with septicaemia (18%), pneumonia (13%), urinary tract infections (9%), and wound infections (13%) comprising the majority. In total, approximately 14% of patients experienced at least one complication during their hospital stay. The most common serious complication was septicaemia, which developed in 6% of inpatients. The mortality rate for the cohort was less than 1%. Our two-year review underscores the workload faced by a tertiary burn care centre. Most of the patients were young adults, with scalds and flame burns being the leading causes of injury. The surgical demand was considerable. Every inpatient required at least one procedure, and many underwent several. The average hospital stay was roughly 12 days. Complications were nearly evenly split between surgical and infectious origins. Despite these challenges, overall mortality remained under 1%. Our two-year review underscores the workload faced by a tertiary burn care centre. Most of the patients were young adults, with scalds and flame burns being the leading causes of injury.

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Keywords: burn, epidemiology, tertiary burn care

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Damage Control Surgery

OP-280

A NON-INVASIVE APPROACH FOR SUBCONDYLAR MANDIBULAR FRACTURES: ULTRASOUND-GUIDED BOTULINUM TOXIN INJECTION INTO THE LATERAL PTERYGOID MUSCLE

Abdullah Karapınar, Mehmet Evleksiz, Alp Öksüz, Şahin Atakan Bayır

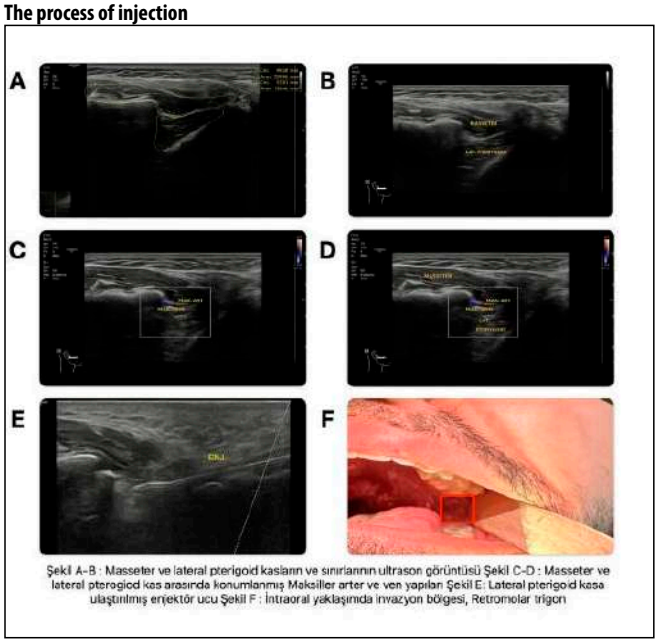
Gülhane Research and Training Hospital, Plastic, Reconstructive and Aesthetic Surgery Department

Mandibular fractures at the condylar and subcondylar levels are tradionally challenging to manage as conventional fixation techniques may result in functional deficits. The lateral pterygoid muscle plays a central role in mandibular movement and its non-invasive modulation may offer an alternative to classical fixation methods. Between June 2024 and June 2025, 11 patients (4 female, 7 male; mean age: 34.25 years) with subcondylar mandibular fractures were treated with ultrasound-guided transmucosal onabotulinumtoxinA injections into the lateral pterygoid muscle. In cases with additional mandibular fractures, conventional fixation techniques were applied before injection.

Patients were assessed postoperatively for trismus, occlusion, and complications. All eleven patients demonstrated satisfactory postoperative outcomes without trismus. Occlusion was maintained (Angle Class I), and no complications were observed. Ultrasound guidance allowed for safe access to the anatomically complex lateral pterygoid region, minimizing risks associated with the procedure. Ultrasound-guided onabotulinumtoxinA injection into the lateral pterygoid muscle represents a non-invasive and effective adjunct in the management of subcondylar mandibular fractures. This technique offers an alternative to conventional fixation strategies, reducing functional issues while maintaining procedural safety.

Keywords: mandibular fracture, trauma, botulinum toxin, conservative

The process of injection



Şekil A-B : Masseter ve lateral pterigoid kasların ve sınırlarının ultrason görüntüsü Şekil C-D : Masseter ve lateral pterigoid kas arasında konumlanmış Maksiller arter ve ven yapıları Şekil E: Lateral pterigoid kasa ulaştırılmış enjektör ucu Şekil F : İntraoral yaklaşımda invazyon bölgesi, Retromolar trigon

Surgical Infections

OP-281

"NECROTIZING FASCIITIS FOLLOWING BOTULINUM TOXIN INJECTION FOR CHRONIC ANAL FISSURE: A RARE CASE REPORT"

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Prof. Dr. Cemil Taşcıoğlu City Hospital, Department of General Surgery, Istanbul, Türkiye

Background: Chronic anal fissure is a common benign anorectal disorder. Botulinum toxin injection is considered a safe, minimally invasive alternative to lateral internal sphincterotomy in high- risk patients. Severe complications are rare, and necrotizing fasciitis has been reported only in isolated cases.

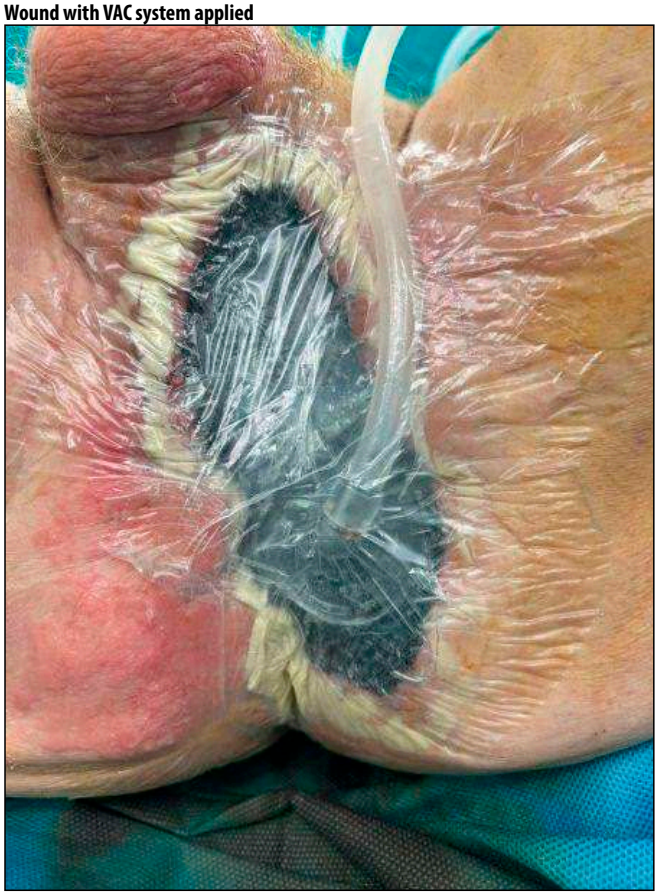
Case Presentation: We report a 72-year-old male with multiple comorbidities (myeloproliferative disorder, ischemic stroke, coronary artery disease on dual antiplatelet therapy, hypertension) who underwent botulinum toxin injection for chronic anal fissure. Two weeks post-procedure, he developed severe perianal pain, swelling, and systemic infection. Examination revealed extensive perianal necrotizing fasciitis.

Management: Emergency surgical debridement, seton placement, and laparoscopic loop colostomy were performed. Despite repeated debridements and extension to the scrotum, infection progressed until a vacuum-assisted closure (VAC) system was applied. After infection control, plastic surgery performed successful skin grafting. The patient recovered with permanent stoma.

Conclusion: Necrotizing fasciitis after botulinum toxin injection for anal fissure is exceedingly rare but potentially fatal. This case underscores the need for vigilance in high-risk patients, highlighting the importance of early recognition, aggressive surgical management, fecal diversion, and multidisciplinary collaboration for survival.

Keywords: Necrotizing fasciitis, Botulinum toxin, Anal fissure, Case report, Perianal infection

Wound with VAC system applied



Post-debridement wound



Video Presentations

Acute Abdominal and Gastrointestinal Emergencies

VP-02

EMERGENCY ALTEMEIER PROCEDURE IN INCARCERATED RECTAL PROLAPSE: A CASE

Yiğitcan Çelik, Atakan Erdoğan, Ünal Dağlı, Hasan Tok, Fazıl Sağlam, Seracettin Eğin

Professor Doctor Cemil Taşçıoğlu City Hospital

Objective: This study aims to demonstrate the effectiveness of the Altemeier procedure as an emergent surgical option in patients with incarcerated rectal prolapse accompanied by mucosal ischemia.

Case Presentation: A 38-year-old male patient presented to the emergency department on October 25, 2024, with a one-week history of painful defecation, a palpable anal mass, and anal discomfort. Following physical examination and initial evaluation, the patient was diagnosed with incarcerated rectal prolapse and underwent emergency surgery after completing preoperative preparations. Under general anesthesia and in the lithotomy position, epinephrine was injected proximal to the prolapsed segment to minimize intraoperative bleeding. A full-thickness circumferential incision was made approximately 1 cm proximal to the dentate line using cautery, in preparation for a coloanal anastomosis. The rectum was mobilized in the extraperitoneal plane, and the peritoneum was entered. The sigmoid colon was identified and mobilized. Dissection of the sigmoid mesentery was performed meticulously using LigaSure®. The vessels supplying the sigmoid colon and rectum were ligated with silk sutures and divided. The rectum and distal sigmoid colon were resected using a 55 mm linear stapler. Hemostasis was achieved. The sigmoid colon was then anchored to the proximal aspect of the dentate line using 3.0 PDS sutures in preparation for the coloanal anastomosis. The bowel loop was opened with cautery, and coloanal anastomosis was completed using additional 3.0 PDS sutures. The operation was concluded without complications. On postoperative day 2, oral liquid intake was initiated. The patient was discharged uneventfully on day 6. At the 1-month and 1-year follow-up visits, no complaints or signs of recurrence were observed.

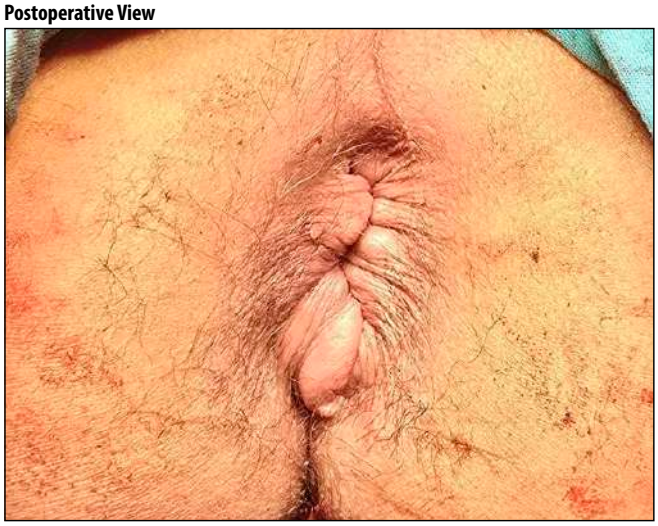
Conclusion: The Altemeier procedure consists of six key steps:

1. Circumferential full-thickness incision approximately 1 cm proximal to the dentate line,
2. Extraperitoneal mobilization of the rectum,
3. Entry into the peritoneal cavity,
4. Careful dissection of the sigmoid mesentery to facilitate mobilization,
5. Levator muscle plication (not performed in this case),
6. Resection and coloanal anastomosis.

In this case, all steps were performed successfully except for levator plication. The Altemeier procedure is an effective and safe option with low morbidity and short hospital stay, applicable across all age groups. This case demonstrates its feasibility and favorable outcomes, even in younger patients.

Keywords: Incarcerated rectal prolapse, Altemeier procedure, emergency colorectal surgery

Postoperative View



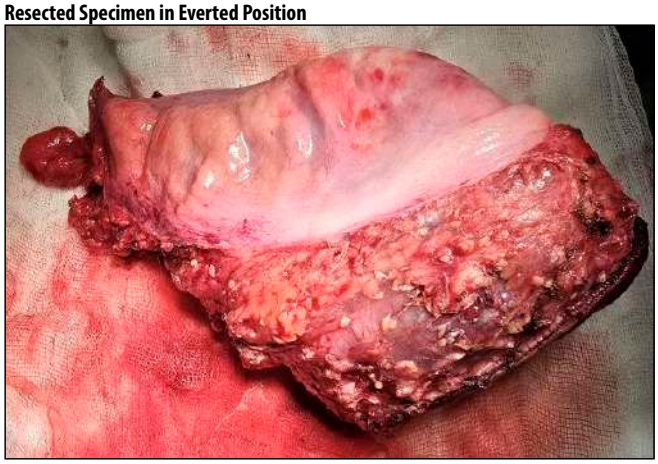
Preoperative Frontal View



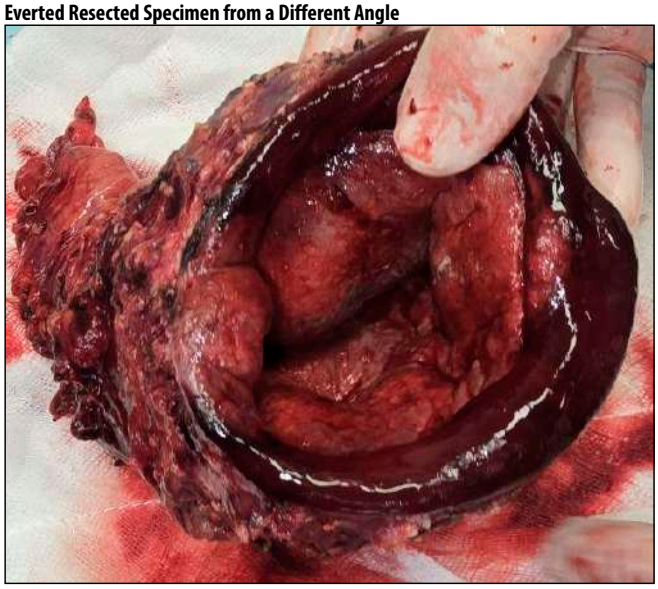
Preoperative Superior View



Resected Specimen in Everted Position



Everted Resected Specimen from a Different Angle



Acute Abdominal and Gastrointestinal Emergencies

VP-04

EARLY LAPAROSCOPIC REPAIR OF TRAUMATIC DIAPHRAGMATIC HERNIA

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King's College Hospital

Background: Traumatic diaphragmatic hernias (TDHs) are uncommon but potentially life-threatening injuries following blunt or penetrating trauma, with an incidence of 0.8–8% in blunt cases. Delayed diagnosis can lead to visceral herniation, strangulation, and respiratory compromise. While open approaches have traditionally been favoured, laparoscopy is increasingly recognised in trauma surgery for both diagnostic and therapeutic purposes.

Case Presentation: A 65-year-old male pedestrian was struck by a vehicle at high speed. He was intubated at the scene and bilateral thoracostomies were performed. CT imaging revealed a left-sided TDH with herniation of the stomach, colon, and omentum. Despite polytrauma, including orthopaedic injuries, he remained haemodynamically stable. Laparoscopy confirmed a large, complex diaphragmatic defect extending obliquely from the left margin of the caval hiatus to the left costophrenic angle, traversing the central tendon and exposing the heart and pericardium. Herniated contents were reduced, and a tension free repair of the diaphragmatic defect was performed with non-absorbable sutures. No other intra-abdominal injuries were identified. The patient was extubated the following day and recovered without complications.

Conclusion: In diaphragmatic injuries, laparoscopy offers a high diagnostic sensitivity and specificity, surpassing CT and any other imaging modality. It is also highly effective for identifying peritoneal breaches and evaluating bowel and mesenteric trauma. When performed by experienced surgeons, laparoscopy can reduce the incidence of non-therapeutic laparotomies by up to 50%, contributing to improved patient outcomes and reduced morbidity.

Keywords: Diaphragmatic Hernia, Trauma, Laparoscopy

Acute Abdominal and Gastrointestinal Emergencies

VP-05

ISOLATED CECAL NECROSIS: A RARE CAUSE OF ACUTE ABDOMEN

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Isolated cecal ischemia is a rare cause of acute abdomen but carries a significant risk of morbidity and mortality. Its clinical presentation often mimics acute appendicitis, colitis, or other right lower quadrant pathologies, making accurate preoperative diagnosis challenging. Due to its terminal vascular supply, the cecum is highly susceptible to arterial hypoperfusion and thromboembolism. Most reported cases in the literature occur in elderly patients with cardiovascular comorbidities.

We present the case of a 71-year-old male with a history of coronary artery disease and heart failure, admitted with a 48-hour history of right lower quadrant pain and absence of bowel movements. Laboratory analysis revealed leukocytosis (14,000/mm^3) and elevated CRP (162 mg/L). Contrast-enhanced abdominal CT demonstrated cecal wall edema and inflammation, while ultrasonography showed a retrocecal appendix measuring 8 mm. With a preoperative diagnosis of acute appendicitis, laparoscopic exploration was performed, revealing segmental necrosis of the cecum. Appendectomy and wedge resection of the cecum were carried out using a laparoscopic linear stapler. The postoperative course was uneventful, and the patient was discharged in good condition on postoperative day 5.

This case highlights that isolated cecal ischemia can be successfully managed with early surgical intervention and an experienced laparoscopic surgical team, even in high-risk patients.

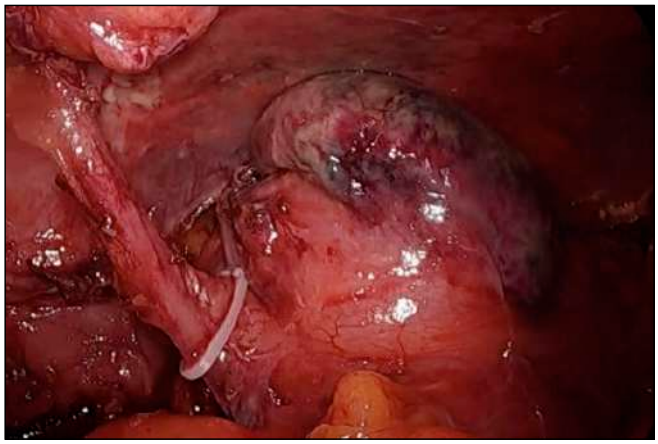
Keywords: cecal necrosis, acute abdomen, laparoscopy, wedge resection

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APPENDIX AND ISCHEMIC CECUMA



Acute Abdominal and Gastrointestinal Emergencies

VP-06

EMERGENCY MANAGEMENT OF ACUTE RECTAL PROLAPSE WITH LAPAROSCOPIC ANTERIOR MESH RECTOPEXY

Berk Yılmaz, Şükrü Enes Mollahamzaoğlu, Adil Koyuncu, Fazilet Erözgen, Muzaffer Akıncı

Istanbul Haseki Training and Research Hospital

Rectal prolapse can be defined as the full-thickness protrusion of the rectum or the rectum together with the sigmoid colon through the anal canal. It is generally a condition seen in elderly female patients. Patients with rectal prolapse present to the hospital with abdominal pain, a sensation of incomplete evacuation, mucus and/or stool leakage during defecation, and protrusion of the bowel through the anus. As the prolapse progresses, a history of straining during defecation, incomplete evacuation, and digital assistance to facilitate evacuation may develop.

The diagnosis of rectal prolapse is typically made through clinical evaluation. The most common finding is a full-thickness rectal protrusion, which may be intermittent. The concentric rings of the prolapsed rectum protruding from the anus are the hallmark feature of rectal prolapse. This finding is best demonstrated by asking the patient to perform the Valsalva maneuver or to "strain" in a simulated defecation position. Treatment options include abdominal surgical approaches and perineal approaches. In this video presentation, laparoscopic anterior mesh rectopexy was performed on a 32- year-old male patient with no comorbidities or history of surgery, who presented to the emergency department with complete rectal prolapse after difficult defecation.

The patient reported that for the past two years, his bowels had prolapsed after every defecation, and he manually pushed them back in with his fingers. Upon presentation to the emergency department, he stated that he had defecated two hours earlier and was unable to push his bowels back in. Laboratory tests at presentation revealed a white blood cell count of 10.4 × 10^9/L, CRP of 39 mg/L, and lactate of 1.3 mmol/L. Computed tomography showed no pathology other than rectal prolapse. Under sedation, rectal prolapse reduction was performed. Colonoscopy revealed only edema and hyperemia in the sigmoid colon, with no other pathological findings. Due to recurrence of the prolapse during defecation the following day, an urgent surgical decision was made. Laparoscopic anterior mesh rectopexy was performed on the patient.

Keywords: rectal prolapse,anorectal emergencies,mesh rectopexy,

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Preop exam-



Hernia

VP-10

A RARE SURGICAL INDICATION IN PREGNANT PATIENTS: DIAPHRAGMATIC HERNIA

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Introduction: Diaphragmatic hernias are the displacement of intraabdominal organs into the thorax due to congenital or acquired diaphragm defects. Acquired types often result from traumas while congenital types occur due to failed pleuroperitoneal fold closure. Posterolateral defects called Bochdalek and substernal defects are named Morgagni hernias(1). Congenital hernias are usually diagnosed prenatally and treated neonatally. Undiagnosed cases may present during early childhood or seldom in adults,often incidentally(2). On fewer cases,increased intraabdominal pressure may trigger symptoms during pregnancy,-causing ischemia, necrosis and perforation, with high maternal and fetal morbidity and mortality (2,3,4). Early diagnosis and surgery are crucial. We present a case of diaphragmatic hernia-related gastric volvulus and perforation and splenic torsion in a 21-yrs- old female at 22 weeks of gestation.

Case: 22 wks pregnant patient presented to the ED with epigastric pain radiating to the back,without trauma. On PE, there was no sign of surgical acute abdomen but only epigastric tender-

ness. Labs showed elevated pancreatic enzymes, USG revealed edema in pancreas, medialized spleen and perihepatic and perisplenic free fluid. Preliminary admitted by Gastroenterology department with acute pancreatitis, she developed desaturation and absent breath sounds on left on the second day of hospitalization. Recommended by Thoracic Surgery department,a chest X-ray was performed, revealing tension pneumothorax;a chest tube was inserted. Persistent desaturation and gastrointestinal content in tube drainage prompted MRI; revealing a 4 cm left posterolateral diaphragmatic defect with herniation of stomach, bowel loops,omentum,splenic hilum and part of pancreas, along with left lung atelectasis and splenic infarction (Fig 1,2,3). Emergent laparoscopic exploration showed entire stomach, first part of duodenum and splenic hilum had herniated after twisting on their axes;the omentum fully and pancreas partially herniated. Irreversible ischemia of the spleen, gastric volvulus and perforation were observed (Fig 4). Initial pancreatitis diagnosis attributed to hernia-related inflammation. Splenectomy,primary repair of stomach and diaphragm and mesh reinforcement were performed. Patient discharged at 24 weeks of gestation in good maternal and fetal condition.

Conclusion-Discussion: Bochdalek hernias are more common than Morgagni hernias(3). Pregnancy can unmask small,-silent defects due to increased intraabdominal pressure and progesterone-related relaxation of soft tissues(6). Symptoms include vomiting,abdominal pain, dyspnea, shoulder pain,palpitations,chest pain and hypotension. Complications include obstruction,strangulation,necrosis and cardiopulmonary collapse. X-ray is first-line; CT is the gold standard, while MRI is preferred in pregnancy to avoid radiation and contrast risks.Limited imaging and therapeutic options during pregnancy can delay diagnosis,as in this case, where initial management was for pancreatitis and then for tension pneumothorax. In pregnancy,diaphragmatic repair is performed emergently with signs of obstruction or infarction; otherwise,electively in the 1st–2nd trimester or during caesarean in the 3rd, as vaginal delivery is not advised postoperatively(7). This case underscores the importance of considering diaphragmatic hernia in pregnants with abdominal pain and respiratory symptoms, to prevent fatal outcomes due to delayed diagnosis, especially when imaging options are limited.

Keywords: Hernias, Diaphragmatic, Congenital, Pregnancy, Magnetic Resonance Imaging, Stomach Volvulus, Splenic Infarction, Pancreatitis

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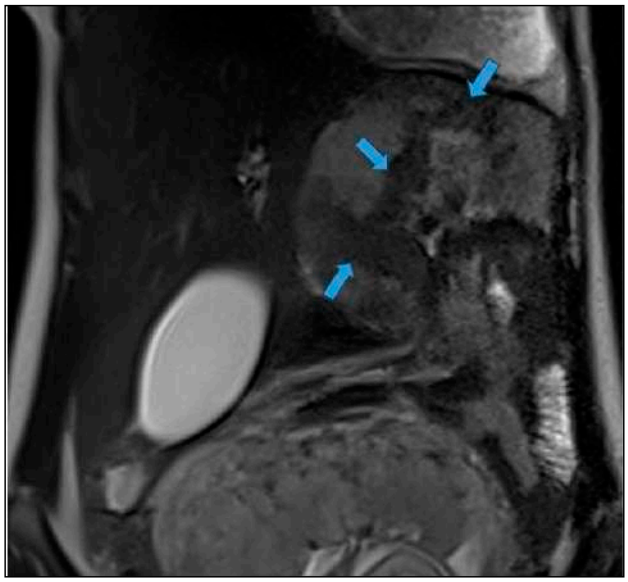
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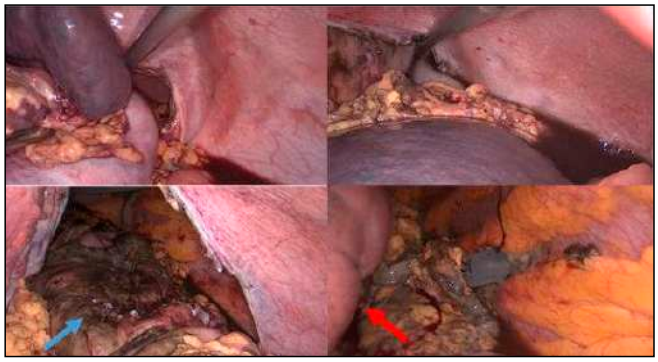
On coronal T2-weighted MRI imaging, herniation of the stomach, intraabdominal fatty planes, and bowel loops into the left hemithorax is observed. There is a totally atelectatic appearance of the left lung (blue arrow).



On coronal fat-suppressed T2-weighted imaging, a diaphragmatic defect (red arrow) and herniated intraabdominal structures into the left hemithorax are observed.



On coronal T2-weighted image, infarct areas in the splenic parenchyma are observed as hypointense (blue arrows).



On laparoscopic exploration, diaphragmatic defect, enlarged spleen due to ischemia caused by torsion, gastric volvulus, gastric perforation, particulated free fluid and atelectatic left lung are shown.

Minimal Invasive Emergency Surgery VP-11

LAPAROSCOPIC MANAGEMENT OF RUPTURED HEPATIC HYDATID CYST; CYSTOSTOMY AND UNROOFING

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Hydatid cyst is a zoonotic parasitic disease caused by Echinococcus granulosus. In approximately 70% of cases, hydatid cysts are located in the liver.

One of the most serious complications, intraperitoneal rupture, is a rare but potentially mortal complication, resulting in the spread of cyst contents into the peritoneal cavity. The incidence of rupture is reported to be between 1% and 8% in the literature. It has been shown that anaphylactic reactions may also occur in approximately 12.5% of intraperitoneal

rupture cases. Therefore, intraperitoneal hydatid cyst rupture may require emergency surgical management.

Rupture usually is spontaneous, but it can also be caused by trauma or iatrogenic factors in rare cases. The clinical picture can be dramatic, with sudden onset of abdominal pain, hypotension, and systemic reactions such as anaphylaxis. Therefore, it should be remembered that rupture of a hydatid cyst is a complex condition that requires early diagnosis, emergency surgical management, and anaphylaxis management.

The case we will present in this report is a 76-year-old female patient who presented to the emergency department with complaints of abdominal pain that had been present for 15 days and had suddenly increased. Generalized tenderness was detected on physical examination. Laboratory tests showed mild eosinophilia and elevated CRP. In abdominal CT imaging, a cyst measuring approximately 7 cm in diameter with an irregular wall and contents opening into the free peritoneal space was observed in segment 6 of the liver, and a cyst measuring approximately 10 cm in diameter with a regular wall, consistent with a hydatid cyst, was observed in segment 5. Laparoscopic surgery was planned. A ruptured cyst was observed in segment 6 of the liver during laparoscopy.The intraperitoneal cyst contents aspirated.

Performed a cystostomy. Unroofing was performed on the intact cyst located in segment 5. The peritoneal cavity was washed with plenty of physiological saline and 0.04% chlorhexidine. The operation was completed by performing omentoplasty on the area in segment 6. Postoperatively, the patient was started on albendazole. Patient was discharged without complications.

Ruptured hydatid cyst is a rare but serious clinical condition that needs quick diagnosis and emergency surgery. Careful cavity cleaning and optimal antiparasitic treatment during surgery can lower the risk of death and recurrence. Our video presentation shows our minimally invasive approach to managing this rare emergency.

Keywords: Hepatic Hydatid Cyst, Cystostomy, Unroofing, Minimal Invasiva Surgery

Organ-Specific Emergencies

VP-12

DIFFICULT NECROTIC CHOLECYSTECTOMY: LAPAROSCOPIC MANAGEMENT OF CYSTIC DUCT AND GALLBLADDER WALL NECROSIS

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Introduction: Cystic duct obstruction can lead to increased intraluminal pressure and microvascularperfusi on in the gallbladder, resulting in ischemia and patchy necrosis. The resultingchallenging anat omy, particularly in the Calot triangle, significantly increases the risk of biliary tract injuries. In this setting, imaging is crucial for diagnosis and early laparoscopicc holecystectomy is the standard treatment approach.[1,2] In this video presentation, we present a case of a safety- oriented, structured laparoscopic approach to necrotic cholecystitis andmanagement of necr otic cholecystitis and cystic duct necrosis.

Case Report: A 58-year-old male patient presented with right upper quadrant pain and fever for five days. Physical ex amination revealed positive Murphy test results. WBC: 8×10^9/L, CRP: 326 mg/L; other biochemistry findings were within normal limits. USG and CT findings were consistentwith acute

calculous cholecystitis. A surgical exploration was planned. Pneumoperitoneumwas established with an optical trocar from the umbilicus, and a standard three-port systemwas used for dissection and retraction. Exploration revealed that the gallbladder was coveredby the omentum, transverse colon, and duodenum. The gallbladder was remove d after carefuladhesiolysis. Patches of necrotic areas, edema, and intense inflammation were present on thegallbladder wall, and the appearance was consistent with gangrenous necrotic cholecystitis. Dissection was perfor med using standard laparoscopic cholecystectomy principles. Owing toinflammation in the C alot triangle, a Critical View of Safety (CVS) could not be fullyachieved. The cystic duct was identified to be difficult and necrotic. It was securely co ntrolledand divided using polymer (Hem-o-lok) clips to prevent thermal spread near the hepatocystictriangle. There were no intraoperat ive complications and no bile leakage was observed. Postoperative antibiotic treatment was a dministered, and the patient was dischargeduneventfully within 72 hours. The final patholog y result was consistent with gangrenouscholecystitis.

Discussion: Gangrenous and necrotic cholecystitis are among the most difficult cholecystectomy cases, in creasing the operative difficulty and the risk of biliary tract injury. Proper managementrequires early surgical timing, meticulous exposure (adhesiolysis), strict adherence to CVS criteria, and surgeon experience when CVS cannot be achieved safely. 3-5Although completeCVS was not achieved in our case, standard cholecystectomy was comple ted with carefulidentification of the cystic duct and safe ligation with a clip, avoiding thermal damage. In thisvideo, we present the management and technical details of a difficult case of necroticcholecystitis and cystic necrosis.

Keywords: gallbladder, cholecystectomy, Gangrenous, necrotic

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Organ-Specific Emergencies

VP-13

INFERIOR SPLENIC LOBE PERFORATION DURING ROBOTIC SPLENECTOMY FOR HYPERSPLENISM IN HEREDITARY SPHEROCYTOSIS

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Robotic splenectomy is the gold standard in elective settings, especially in cases where medical therapy has failed for certain haematological disorders such as hereditary spherocytosis, anaemia, thalassemia, polycythaemia vera, and autoimmune thrombocytopenia, as well as in cases of splenomegaly associated with compressive symptoms. A multidisciplinary approach is essential to prevent infectious and thromboembolic complications. We present a video of a 21-year-old male patient who underwent robotic splenectomy for hypersplenism due to hereditary spherocytosis, with a maximum splenic diameter of approximately 22 cm. The patient presented with compressive symptoms and haemolytic crises requiring frequent blood transfusions. The procedure began with the opening of the gastrocolic ligament and the isolation and clipping of the splenic artery at the superior margin of the pancreas. During the dissection, a perforation of the lower pole of the spleen occurred due to the Vessel Sealer located in arm 3, causing mild intraoperative bleeding. The lesion was identified and managed with aspiration. The operation continued with the isolation and transection of the splenic vein, followed by spleen removal. There was no occurrence of massive intraoperative haemorrhage, as the splenic artery had already been isolated and clipped. In our experience, bleeding is best prevented and controlled by first isolating the vessels, securing them with a loop, and subsequently applying clips before transection. Nevertheless, as reported in the literature, uncontrolled massive haemorrhage remains a clear indication for conversion. The total operative time was approximately four hours, with an estimated blood loss of 300 ml. The patient was discharged on postoperative day three in good condition. This case demonstrates that robotic splenectomy could be a safe and effective approach, even in patients with markedly enlarged spleens.

Keywords: robotic splenectomy, hereditary spherocytosis, hypersplenism, splenomegaly, minimally invasive surgery, intraoperative bleeding, surgical complications

Vascular Emergencies

VP-14

THROMBOSIS OF THE INFERIOR VENA CAVA IN A PATIENT WITH HEPATOCELLULAR CARCINOMA: A CASE STUDY

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Background: Hepatocellular carcinoma (HCC) is the most common primary liver malignancy (75–80% of cases), typically associated with chronic liver disease. Major risk factors include alcohol use, HBV/HCV infection, NAFLD/NASH, obesity, diabetes, aflatoxin exposure, hemochromatosis, and alpha-1-antitrypsin deficiency. HCC is often asymptomatic early but may present with right upper quadrant pain, weight loss, jaundice, ascites, variceal bleeding, or liver decompensation. A hallmark of HCC is vascular invasion, often involving the portal vein, hepatic veins, and in advanced cases, the inferior vena cava (IVC), with possible extension into the right atrium.

Materials and Methods: We report the case of a 70-year-old male with known HCC, complicated by a tumor thrombus extending into the right atrium, IVC, and middle hepatic vein. The patient underwent anatomical resection of segment IVa with en bloc removal of the middle hepatic vein and thrombectomy of the IVC and right atrium. The procedure was performed via sternotomy under cardiopulmonary bypass and a subcostal incision.

Results: Abdominal and thoracic drains were removed on postoperative day 4. During recovery, the patient experienced a single episode of high-rate atrial fibrillation (190 bpm), successfully treated with medical cardioversion. Histopathology confirmed poorly differentiated hepatocellular carcinoma (WHO grade 3, pT4NxM1).

Conclusions: Radical surgical resection with atriocaval thrombectomy under cardiopulmonary bypass is feasible in selected cases of advanced HCC with intracardiac extension. A multidisciplinary diagnostic and therapeutic approach remains essential to define the most appropriate and beneficial treatment strategy.

Keywords: Hepatocellular carcinoma, Hepatectomy, Inferior vena cava thrombosis, Intracardiac tumor thrombus.

Minimal Invasive Emergency Surgery

VP-16

NECROTIZING PANCREATITIS AND WALLED-OFF NECROSIS: CASE-BASED APPROACH AND ENDOSCOPIC MANAGEMENT

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Nekrotizan pankreatit, acil karın cerrahisinde en zorlu durumlardan biri olmaya devam etmekte olup, genellikle dinamik ve multidisipliner bir yaklaşım gerektirmektedir.

Necrotizing pancreatitis remains one of the most challenging conditions in emergency abdominal surgery, often requiring a dynamic and multidisciplinary approach. Infected necrosis, in particular, requires timely intervention to prevent systemic deterioration and

organ failure. This video presentation demonstrates our endoscopic treatment of a 58-year- old male patient with WON, a condition characterized by nausea and vomiting, who developed WON due to necrotizing pancreatitis and infected retroperitoneal deposits.

Initially, the metal stent we placed endoscopically became blocked by WON particles, and we then placed a colonic stent endoscopically. This left the cystogastrostomy open, and we evacuated the cyst contents through this stent. We cleaned the necrotic areas within the cyst. Thus, the patient recovered within 3 months without major surgery.

Keywords: ERCP, cystogastrostomy, walled-off necrosis, colonic stent

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Poster Presentations

Acute Abdominal and Gastrointestinal Emergencies

PP-001

FROM DIAGNOSIS TO DECISION: A PREDICTIVE MODEL FOR RUPTURED APPENDICITIS IN SURGICAL EMERGENCIES

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Objective: This study aims to identify risk factors for ruptured appendicitis in patients presenting with right lower quadrant (RLQ) pain, determine its prevalence at Lampang Hospital, and develop predictive factors for perforation.

Methods: This retrospective cross-sectional study was conducted at Lampang Hospital. Patients aged 15 years or older, diagnosed with appendicitis, presenting with RLQ pain, and admitted between October 1, 2023, and September 30, 2024, were included. Data were collected using a structured Google Form. Statistical analysis included Fisher's exact test, an independent t-test, and a rank-sum test for group comparisons. Multivariable logistic regression identified risk factors for perforated appendicitis.

Results: Among 443 patients, 153 (34.54%) had ruptured appendicitis. Multivariable logistic regression identified five independent predictors: male sex (adjusted odds ratio [OR] = 3.05, $p < 0.001$), age >60 years (adjusted OR = 2.41, $p < 0.001$), presence of systemic inflammatory response syndrome (SIRS) (adjusted OR = 1.96, $p = 0.003$), and longer symptom onset-to-hospital duration (adjusted OR = 1.01, $p < 0.001$). Conversely, greater height was protective (adjusted OR = 0.95, $p = 0.003$). The coefficients of all independent predictors were used to calculate area under the curve and form the equation by Stata Program. The predictive model incorporating these factors demonstrated an accuracy of 75.87%.

Conclusion: This predictive model provides a percentage-based risk assessment for ruptured appendicitis, aiding clinicians in surgical decision-making.

Keywords: Perforated Appendicitis, Ruptured appendicitis, Appendectomy, Predictive Scores

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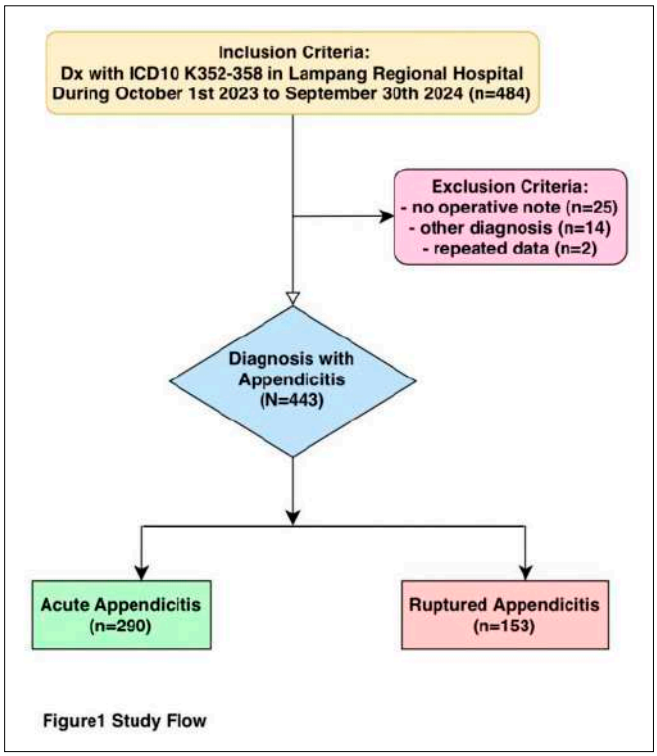


Figure 1. Study Flow

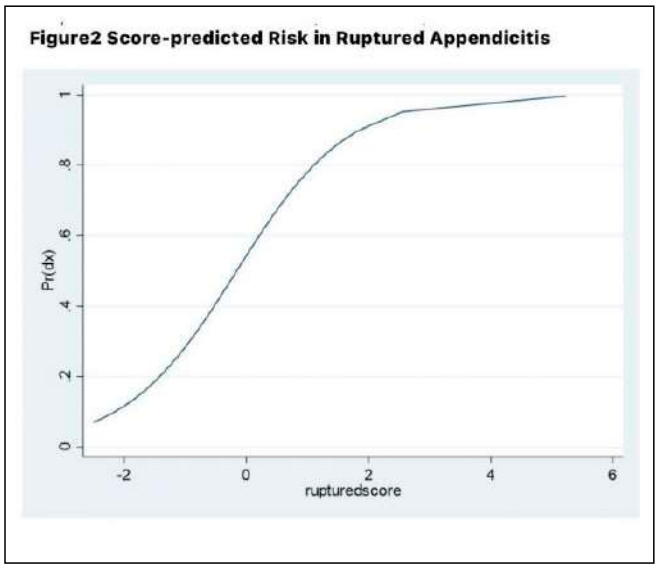


Figure 2. Score Predicted Risk in Ruptured Appendicitis (RUC)

Table1. Logistic Regression Analysis of Risk Factors Associated with Ruptured Appendicitis

Risk Factors	*Adjusted Odds Ratio*	*95% CI*	*p-Value*
Sex (Male)	3.05	1.71-5.42	< 0.001
Age > 60 yrs	2.41	1.49-3.91	< 0.001
Height (cm)	0.95	0.92-0.98	0.003
Onset (>12hrs)	1.01	1.01-1.02	< 0.001
SIRS (Present)	1.96	1.26-3.03	0.003

Acute Abdominal and Gastrointestinal Emergencies

PP-003

EARLY OR DELAYED? COMPARING OUTCOMES OF LAPAROSCOPIC CHOLECYSTECTOMY IN UK PRACTICE: A SYSTEMATIC REVIEW.

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Background: In 2025, emergency surgical services in the UK are under increasing stress, and ELC is not being uniformly undertaken despite good guideline support. Early laparoscopic cholecystectomy (ELC) is favoured by both NICE and WSES guidelines for acute calculous cholecystitis. Nonetheless, the adoption of ELC in NHS emergency surgery is patchy because of restricted theatre resources and a bottleneck in the allocation of theatre lists. It was our intent to assess clinical outcome from, and the effect on systems of care of, ELC compared with Delayed laparoscopic cholecystectomy in the UK.

Methods: A systematic search of PubMed, Europe PMC, ScienceDirect, and Cochrane Library was conducted (2000–2025) to include UK-based studies comparing ELC (within 72 hours of admission or between 7 and 10 days of symptom onset) with DLC or conservative management. We identified 11 UK retrospective cohort studies (95 000 patients). ELC was defined as operation within 72 hours of admission. The outcomes were conversion to open surgery, complications (bile leak, drain use), length of stay (LOS), and 30-day readmission. Bed-day cost savings were calculated with an NHS reference cost (£465 per day).

Results: The result of ELC was superior in all parameters. Median LOS (~3–5 vs 6–9 days) and 30-day readmission (~2% vs up to 30%) both favored early surgery, and overall complications were similar or less. A few studies reported slightly more use of intraoperative drains or minor bile leaks with ELC, without an increase in LOS or readmission. Conversion to open was higher in some ELC series (to ~20% vs <10% in DLC), this was likely related to severity of acute inflammation rather than timing. A single large study demonstrated the least number of complications and conversions with surgery performed in 72 hours. Delayed surgery on the other hand, resulted in more recurrent biliary symptoms and a higher overall hospital workload. On the basis of differences in LOS, ELC achieved savings of approximately £1–2k per patient, translating to ~£15–30 million per year in national savings (15 000 cases/y).

Conclusion: Early cholecystectomy is safe, successful and cost-effective in the UK emergency setting. It reduces length of stay in hospital and decreases readmissions, while slightly increasing conversion risk. A wider use of ELC by means of dedicated "hot gallbladder" lists and priority for emergency theatre would be of benefit to outcome, as well as assisting with the pressure on the system. These data provide evidence for uptake of WSES guidance in the NHS

Keywords: Cholecystitis, Acute [MeSH], Cholecystectomy, Laparoscopic [MeSH], early cholecystectomy, delayed cholecystectomy, emergency surgery, postoperative complications, patient readmission, treatment outcome, United Kingdom

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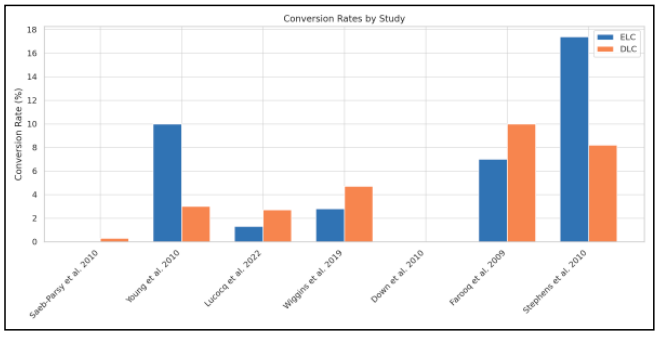
Quality appraisal of included studies using News Castle Ottawa scale

Table 2: Quality Appraisal of Included Studies

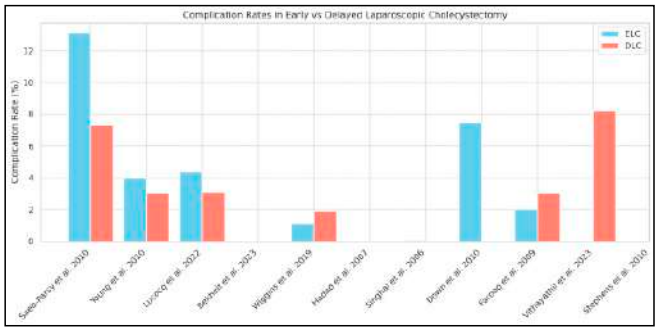
Study	Selection	Comparison	Outcome	Overall
Saeb-Parsy et al.2006. [12]	★★★★	★★	★★★	9 out of 9
Young et al. 2010 [13]	★★★★	★★	★★★	9 out of 9
Lucocq et al. 2022 [14]	★★★★	★★	★★★	9 out of 9
Bekheit et al. 2023 [15]	★★★★	★★	★★★	9 out of 9
Wiggins et al. 2019 [16]	★★★★	★★	★★★	9 out of 9
Haclad et al. 2007 [17]	★★★	★★	★★★	8 out of 9
Singhal et al. 2006 [18]	★★★★	★	★★★	8 out of 9
Down.S et al. 2010 [19]	★★★★	★	★★★	8 out of 9
Farooq et al. 2009 [20]	★★★★	★★	★★★	9 out of 9
Vithayathil M *et al.* 2025 [21]	★★★★		★★★	7 out of 9
Stephens MR et al. 2010 [22]	★★★★		★★★	7 out of 9

Table 2. Quality appraisal of included cohort studies

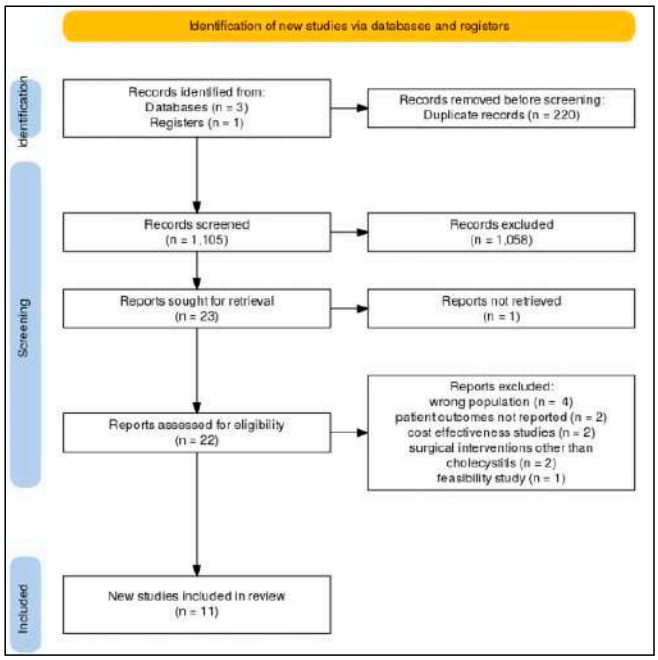
Note: NOS permits four stars (*) for selection, two for comparability and three for outcome. Total scores range between zero and nine. NOS: Newcastle Ottawa Scale.



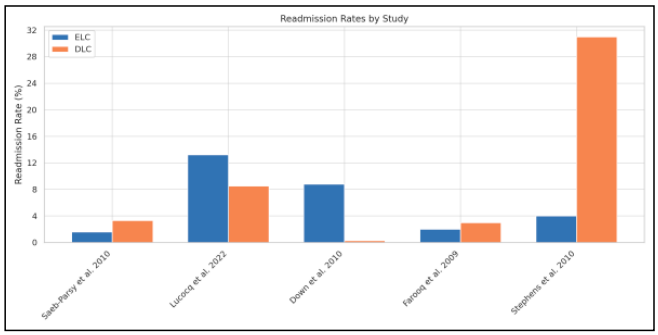
This figure compares rates of conversion to open surgery between ELC and DLC. While conversion rates were higher in some early surgery cohorts (e.g., Young et al. 2010 and Stephens et al. 2010), the majority of studies (e.g., Lucocq et al. 2022, Wiggins et al. 2019) show similar or modest differences. These results suggest that while conversion risk may increase slightly with early surgery, the rates remain acceptable and often reflect case severity rather than surgical timing alone.



This bar chart compares complication rates (%) between early laparoscopic cholecystectomy (ELC) and delayed laparoscopic cholecystectomy (DLC) across multiple UK studies. Most studies show either similar or slightly higher complication rates with ELC. Notably, Saeb-Parsy et al. (2010) reported the highest complication rate for ELC (~13%), which included minor issues. In contrast, studies like Wiggins et al. (2019) and Singhal et al. (2006) reported very low complication rates in the early group, reinforcing the safety of ELC in selected patients.



The review was conducted in accordance with the PRISMA guidelines, as illustrated in Figure 1. A total of 11 cohort studies were included in the analysis.



This chart illustrates the 30-day readmission rates for ELC and DLC groups. Across most studies, ELC is associated with lower or comparable readmission rates. A clear outlier is Stephens et al. (2010), where the DLC group had an exceptionally high readmission rate (>30%), reflecting the burden of delayed management. Lucocq et al. (2022) and Down et al. (2010) also demonstrated better readmission outcomes with early surgery.

Acute Abdominal and Gastrointestinal Emergencies

PP-004

PREDICTORS FOR APPENDICECTOMY SEVERITY AND OUTCOMES

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Kettering General Hospital Nhs Foundation Trust

Aim: This retrospective analysis aimed at evaluating appendicectomy outcomes in view of in-hospital delay and identifying predictive factors for complicated appendicitis.

Methods: Data collection of consecutive appendicectomies over eight months period was executed. Primary outcome was the impact of in-hospital (decision to incision) delay on severity of operative findings, operative time, length of hospital stays (LOS) and morbidity. Secondary outcomes included possible predictors for complicated operative findings.

Patients were categorised into 3 groups: <8 hours, 8-24 hours, and >24 hours. Widespread peritoneal pus, gangrene and perforation of appendix were considered as complicated findings.

Results: 198 patients were included, with 74% diagnosed by CT, 5% by USS/MRI and 21% by clinical examination. Appendicectomy was delayed for <8 hours in 38% of patients, 8-12 hours in 52%, and >24 hours in 9%. There was no statistically significant difference between the 3 groups in operative findings, escalated CT to operative findings, operative time or early complications. Similarly, no notable difference was found in 30-day readmissions or complications rates. Despite the evident increased LOS with longer delay (2, 2.57, 2.61 in respective groups), this impact was statistically non-significant (P=0.077).

The presence of fever and raised CRP above 100 were significantly correlated to complicated operative findings (P<0.0001). Isolated hyperbilirubinemia (P=0.004) and imaging confirmed complicated findings (P<0.0001) were also strong predictors.

Conclusion: Appendicectomy can be delayed safely to facilitate effective theatre prioritisation, bearing in mind clinical context and WSES 2020 recommended safe 24-hour delay. Patients with positive predictor criteria should be prioritised for surgery.

Keywords: Appendicectomy delay, postoperative complications, Appendicitis severity.

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Table 1. Primary outcomes: Impact of in-hospital delay in appendicectomy

Variables	*<8 Hours*	*8-24 Hours*	*>24 Hours*	*Statistical P Value*
Complicated Operative Findings	22 (29%)	33 (32%)	2 (11%)	0.432
Escalated CT to Operative Findings	10 (37%)	16 (59%)	1 (4%)	0.641
Operative Time (Mean In Minutes)	74.3	84.1	85.5	0.271
Early Complications	5 (63%)	2 (25%)	1 (12%)	0.541
Hospital Stays (mean In days)	2	2.57	2.61	0.077
30 Day Readmissions	4 (44.5%)	4 (44.5%)	1 (11%)	0.717

Table 2. Secondary outcomes: Predictors for complicated operative findings

Variables	*Uncomplicated Operative Findings*	*Complicated Operative Findings*	*Statistical P-Value*
Tachycardia	89 (72%)	34 (28%)	0.871
Fever	20 (47%)	23 (53%)	<0.0001
WCC <15	101 (77%)	31 (23%)	0.081
15-20	33 (65%)	18 (35%)	
20-25	8 (57%)	6 (43%)	
>25	0 (0%)	1(100%)	
CRP <50	112 988%)	16 (12%)	<0.0001
50-100	14 (56%)	11 (44%)	
100-200	11 (44%)	14 (56%)	
>200	5 (25%)	15 (75%)	
Isolated Hyperbillirubinemia	6 (32%)	13 (68%)	0.004
Complicated Imaging Findings	6 (22%)	21 (78%)	<0.0001

Organ-Specific Emergencies

PP-005

THE RELATIONSHIP BETWEEN INJURY SEVERITY AND FRACTURE OF THE FIRST AND/OR SECOND RIBS IN BLUNT CHEST TRAUMA

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Introduction: The anatomically well-protected first and second ribs require a high-energy trauma to be fractured. This trauma can cause serious injuries to the chest and other extra-thoracic body regions (1). We aim to study fractures of the first and/or second ribs in blunt chest trauma (BCT) patients and their relation to injury severity and mortality.

Methods: We retrospectively collected data from all patients who were admitted to Al Ain Hospital with blunt chest trauma from December 2014 through January 2017. The Injury details of all BCT patients were retrieved from Al Ain hospital trauma registry. Data included demography, mechanism of injury, vital signs, Glasgow Coma Score (GCS) on admission, injured body regions, management, Injury Severity Score (ISS), New Injury Severity Score (NISS), and outcome including length of hospital stay (LOS), and mortality. A comparison between BCT patients who sustained first and/or second ribs fracture and other patients without fracture was performed.

Results: During the study period, there were 4779 patients included in the Trauma Registry of Al-Ain Hospital, 669 (13.9%) patients had blunt chest trauma. Fractures of first and/or second ribs were present in 49 (7.3%) of blunt chest trauma patients. The group consisted of 42 (85.7%) males and 7 (14.3%) females; the majority were due to motor vehicle collisions in 36 (73.5%) patients (Table 1). Upper extremity injury was significantly associated with patients with first and/or second rib fractures compared to other patients without fractures (P<0.001, Pearson Chi-Square) (Figure 1). Flail chest and surgical emphysema and pneumothorax were significantly higher in patients with fractured first and/or second ribs compared to others (P=0.011, Fisher's Exact Test, P=0.010, and P<0.001, Pearson Chi-Square; respectively).

Injury severity parameters such as ISS, NIS, and ICU admission were significantly higher (P=0.007, P=0.035, and P=0.05, Pearson Chi-Square; respectively)

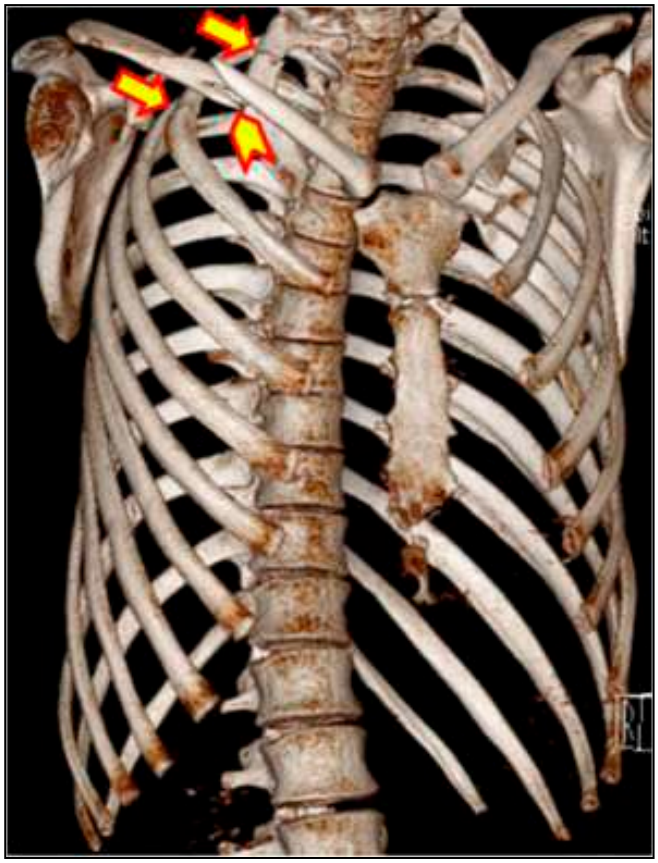
The mean (Std. Deviation) of hospital length of stay in patients with fractured first and/or second ribs was 7 (7.7) days which was not significantly significant compared to others (P=0.246 Pearson Chi-Square). One patient died with first and/or second rib fractures (overall mortality 2%) compared with 14 (2.3%) patients without fractures which was not statistically significant (p=1.0 Fishers exact test).

Conclusion: First and/or second rib fractures in blunt chest trauma indicate a high-energy type of trauma. Meticulous evaluation should be paid to avoid missing other serious injuries.

Keywords: Blunt trauma, Chest, Injury severity, Rib fracture

References

1. Fokin A, Wycech J, Picard E, Weisz R, Puente I. Is First Rib Fracture a Culprit or a Sign of Injury Severity? It Is Both. J Orthop Trauma. 2018 Aug;32(8):391-396. doi: 10.1097/BOT.0000000000001189.



27-year-old male, fall from more than two-meter height. 3D reconstructed CT image showing right 1st and 2nd ribs fracture (arrow) and right clavicle fracture (arrowhead).

Table 1. Mechanism of injury in patients who had fractures of the first and/or second ribs in blunt thoracic trauma patients, Al-Ain Hospital, UAE (n=49)

Mechanism	*Frequency*	*Percent*
Motor Vehicle Collisions	36	73.5%
Falls from more than one meter	7	14.3%
Falls from less than one meter	2	4.1%
Hit by falling objects	1	2.0%
Others	3	6.1%
Total	49	100%

Acute Abdominal and Gastrointestinal Emergencies

PP-006

FROM MISDIAGNOSIS TO LIFESAVING EMBOLIZATION: A CASE OF RUPTURED HEPATIC ARTERY ANEURYSM PRESENTING AS PANCREATITIS

Abdelbari Gdeh[1], Tariq Ben Khadra[1], Nikhil Bassi[1], Hesham A El Beialy[1], Natasha Aghtarafi[2], Martin Sinclair[1]

[1]Ipswich Hospital Nhs Foundation Trust, General Surgery Department
[2]Ipswich Hospital Nhs Foundation Trust, Radiology Department

Introduction: Hepatic artery aneurysms (HAAs) are rare, comprising 0.01–2% of all arterial and 20% of splanchnic aneurysms[1,2]. Typically asymptomatic and incidentally detected, their rupture can lead to life-threatening haemorrhage. Prompt diagnosis and intervention are essential. This case details a ruptured HAA that initially mimicked acute pancreatitis and was successfully managed by emergency angio-embolisation.

Methods: A 64-year-old female presented to Ipswich Hospital with two days of epigastric pain and vomiting. Blood tests revealed amylase 1101 μ/L, ALT 387 μ/L, and bilirubin 74 μmol/L. Within six hours, she suffered a cardiac arrest and was resuscitated with direct current (DC) shock. Dual-phase CT imaging showed a 1 cm right hepatic artery aneurysm with subcapsular hematoma, liver hypoperfusion, and pelvic hemoperitoneum. Urgent angiography identified a pseudoaneurysm in a distal right hepatic artery branch. Selective embolisation using micro-coils was performed.

Results: Post-procedural angiography confirmed complete occlusion of the aneurysm with preservation of hepatic branches. The patient remained in ICU for four days due to ongoing sepsis and pyrexia. Follow-up CT demonstrated infarction in liver segments VII and VIII, which evolved into a liver abscess. Targeted antibiotic and antifungal therapy was administered. Imaging over two weeks showed resolving hemoperitoneum and evolving infarcts. The patient was discharged in stable condition with hepatobiliary follow-up.

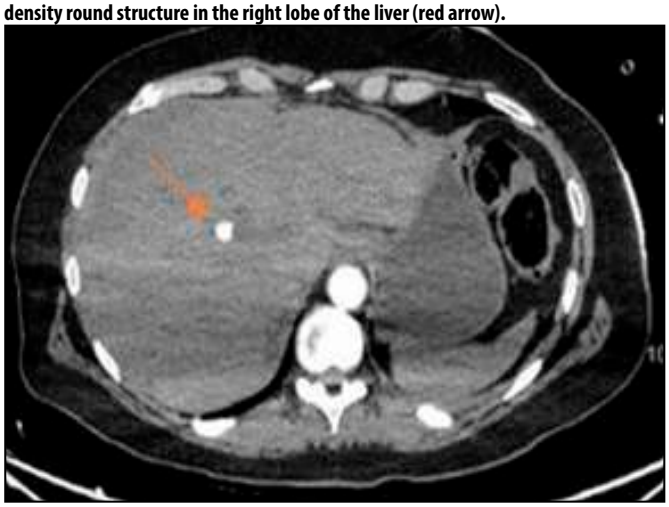
Conclusion: Although rare, ruptured HAAs must be considered in acute abdomen with rapid deterioration. CT angiography is crucial for diagnosis, and angio-embolisation offers a minimally invasive, life-saving treatment [3,4]. This case highlights the value of early recognition and multidisciplinary care in managing hepatic vascular emergencies.

Keywords: Hepatic artery aneurysm (HAA) Rupture Acute abdomen Angio-embolization CT angiography Pseudoaneurysm Liver infarction Interventional radiology Emergency surgery Hepatobiliary

References

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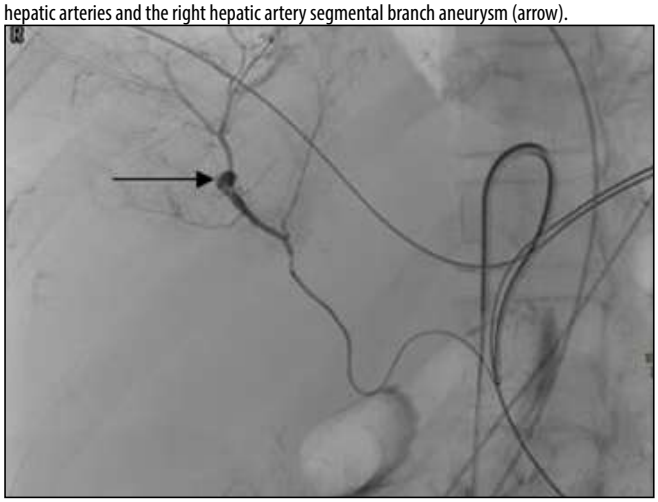
Presentation of an axial slice from an arterial phase CT scan showing a high-density round structure in the right lobe of the liver (red arrow).



Presentation of an axial slice from a portal venous phase CT scan showing a subcapsular fluid collection (red arrow) and a heterogeneous appearance of the liver, indicating hypoperfusion (black arrow).



Pre-embolization angiogram. Digital subtraction angiography showing angiogram of the hepatic arteries and the right hepatic artery segmental branch aneurysm (arrow).



Post-embolization angiogram. Digital subtraction angiography showing coils within the hepatic artery aneurysm sac and neck (arrow) and occlusion of the feeding vessel.



Abdominal Trauma

PP-007

MULTIDISCIPLINARY APPROACH TO A PATIENT WITH PENETRATING HEPATIC AND SUPRAHEPATIC INFERIOR VENA CAVA INJURY

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Division of Trauma Surgery, Department of Surgery, Chonnam National University Hospital, Gwangju, S Korea

Introduction: Combined hepatic and Inferior vena cava (IVC) injuries of penetrating abdominal injury are rarely reported, and remain extremely lethal despite advances in resuscitation and critical care. Important factors determining treatment outcomes are the hemodynamic status of the patient at presentation, the level and extent of injury, and the presence of associated injuries.

Objectives: The objective of this study was to show the role of multidisciplinary approach accomplished by trauma team and experienced trauma and liver surgeons in the management of combined hepatic and Inferior vena cava (IVC) injuries.

Patients & methods: A 30-year-old male presented to our emergency department after a stab wound with knife on right lower chest, one hour prior to arrival. The patient was in hypovolemic shock with the blood pressure of 90/60 mmHg, weak peripheral pulses at the rate of 120 per minute, cold peripheries, abdomen was tense and an entry wound was observed on on right lateral axillary line ten centimeters below nipple. Focused Assessment with Sonography for Trauma(FAST) was positive for free fluid in perihepatic area, Abdomianl CT findings showed penestrating wound in upper segment of right hepapatic lobe with arterial extravasation and the wound extended to suprahepatic IVC. Transcatheter arterial embolization(TAE) was conducted to stop active bleeding from right hepatic artery. Then emergency operation was performed. Abdomial midline incision and median sternotomy was performed. Diaphragm, hepatic injury and the confluence of the IVC and the right atrium injury were repaired. Damage control surgery was performed with perihepatic packing and placed temporary abdominal closure dressing. The second-look laparotomy performed 36 h after the first surgery. The postoperative course was uneventful.

Conclusion: Injury to the supra-hepatic IVC is very rare and challenging to treat with high motality. Multiple factors have contributed to the patient's favorable outcome, including rapid transfer and trauma response, relatively good health prior to injury and mutidisplinary therapeutic approach. Timely intervention and damage control surgery can stabilize and save these patients.

Keywords: abdominal trauma, liver, inferior vena cava, penetrating injury

Acute Abdominal and Gastrointestinal Emergencies

PP-008

SHORT BOWEL SYNDROME COMPLICATING EMERGENCY BOWEL RESECTION DUE TO EXCESIVE ISCHEMIA.

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[1]General Hospital of Katerini
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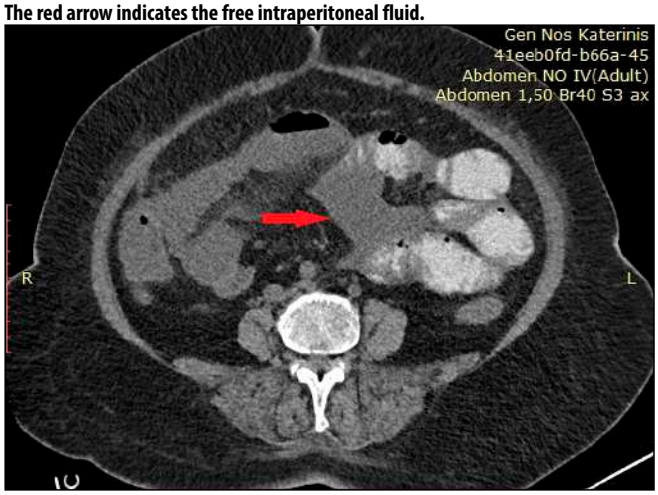
Aim: With our case report we intend to present the difficulties in the management of a patient with short bowel syndrome after excessive resections in emergency surgeries.

Case presentation: A 62-year-old female presented at the Emergency Department of the General Hospital of Katerini, in Greece, complaining of abdominal pain, fever, and general discomfort. Laboratory tests indicated elevated White Blood Cell count and C-Reactive Protein levels. Imaging via Computer Tomography scan revealed dilated small bowel loops and free intraperitoneal fluid. Upon laparotomy, excessive small and large bowel ischemia and necrosis were discovered, and a resection of the small bowel and the right colon was performed, leaving the patient with only 90 centimeters of small bowel and a jejuno-colic anastomosis. The postoperative management of the patient was particularly challenging, requiring a multidisciplinary approach with an intensive care unit stay, reoperations due to anastomotic leaks, constant parenteral nutrition and electrolyte management, and strong antibiotic treatments due to persistent bacterial infections. This case report highlights the importance of appropriate management of this life-threatening complication of excessive bowel resection.

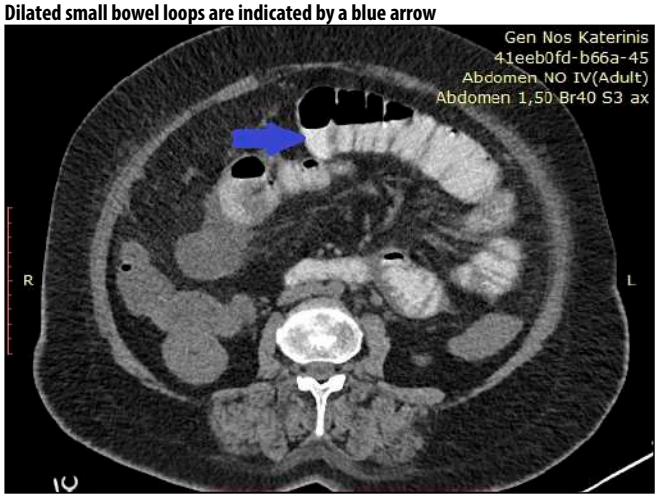
Conclusions: This case report aims to raise awareness among surgeons regarding the difficulties in managing patients with short bowel syndrome after excessive bowel resections. Because of the many complications of this pathology, surgeons should be particularly careful in situations where excessive resections are deemed necessary and aim to maintain as much bowel as possible. Due to the complexity of this clinical, when managing patients with short bowel syndrome, a multidisciplinary approach is essential.

Keywords: acute abdomen, mesenteric ischemia, short bowel syndrome, excessive bowel resection

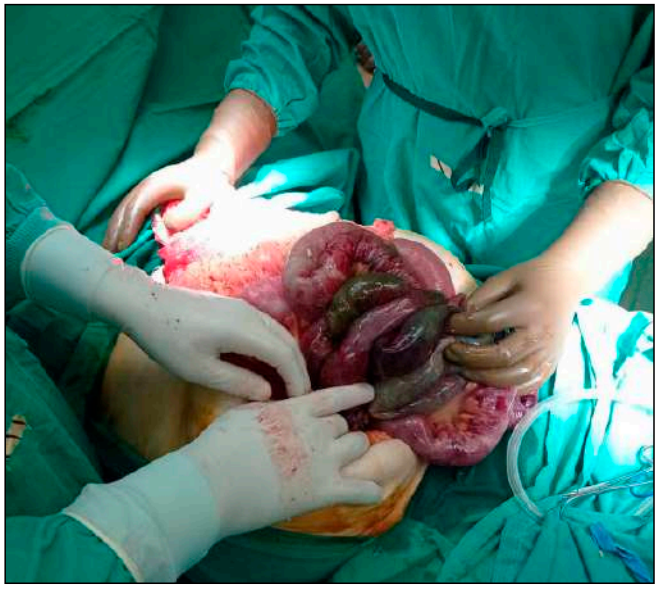
The red arrow indicates the free intraperitoneal fluid.



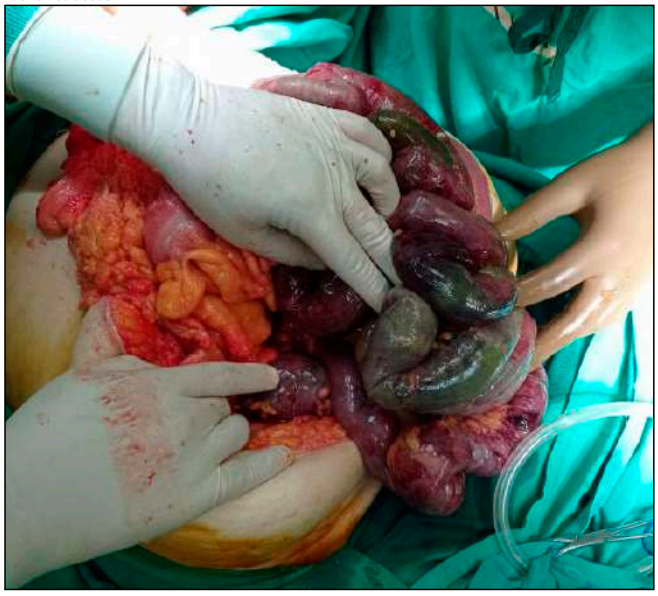
Dilated small bowel loops are indicated by a blue arrow



The ischemic bowel with the necrotic areas that were considered non-viable and were resected



The ischemic bowel with the necrotic areas that were considered non-viable and were resected



The ischemic bowel with the necrotic areas that were considered non-viable and were resected



Acute Abdominal and Gastrointestinal Emergencies

PP-009

PERFORATED TUBERCULOUS APPENDICITIS AS A RARE COMPLICATION OF DISSEMINATED TUBERCULOSIS: A COMPREHENSIVE CASE REPORT AND LITERATURE REVIEW

Mohamed Said Ghali, Raed M Al-Zoubi , Ahmad Zarour
Hamad Medical Corporation

Background: Perforated tuberculous appendicitis poses significant diagnostic and therapeutic challenges, especially in regions with high tuberculosis prevalence. Its nonspecific symptoms often delay diagnosis, increasing morbidity and mortality. Surgical management via appendectomy is essential to control

the infection and prevent complications, but its atypical presentation can lead to misdiagnosis or delayed treatment. Postoperative antitubercular therapy is crucial to prevent recurrence and ensure complete eradication.

Case presentation: This case report presents a 41-year-old male who initially showed pulmonary symptoms of tuberculosis. While undergoing treatment, he developed diffuse abdominal pain consistent with disseminated abdominal TB. Subsequently, he experienced acute abdominal pain, and imaging suggested a perforated appendix. Conservative management failed, necessitating an appendectomy. Final histopathology confirmed tuberculous appendicitis. This case underscores the importance of early diagnosis and timely surgical intervention.

Conclusion: Perforated tuberculous appendicitis is rare but requires prompt surgery to prevent complications. TB should be considered in acute abdominal cases, especially in high-risk areas or exposed patients. Accurate diagnosis through advanced tools and histopathology is crucial, and postoperative antitubercular therapy is essential to prevent recurrence.

Keywords: Perforated, tuberculous appendicitis, atypical presentation, complications,TB

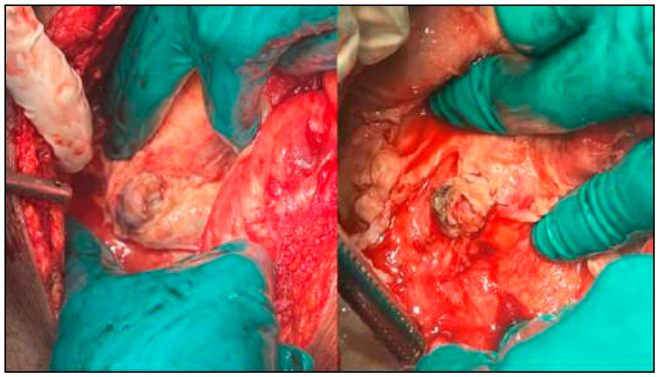


Figure 3. Intraoperative findings: a) finding of perforated gangrenous appendicitis. b) appendicular stump after removal of appendix.

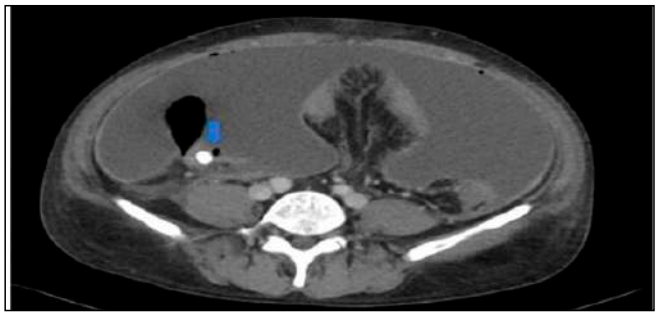


Figure 2. CT Scan Findings of appendicolith with adjacent air loculi (blue arrow) and significant abdominal ascites.



Figure1. X-ray Abdomen demonstrating appendicolith

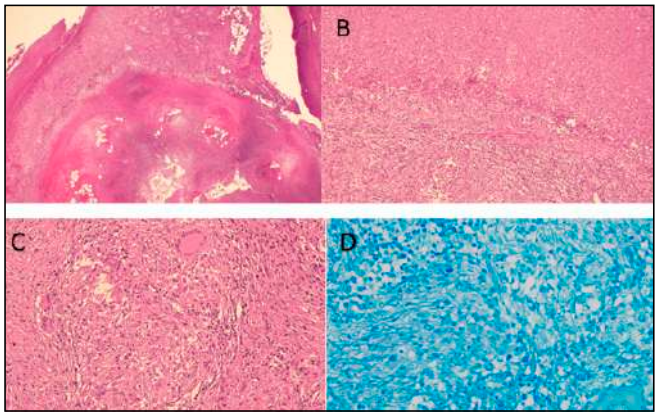


Figure 4. A) Photomicrograph shows an appendix with multiple focally necrotizing granulomas and acute suppurative inflammation B) Photomicrograph shows multiple granulomas with adjacent necrosis. C) High power view. D) Ziehl-Neelsen stain demonstrates an acid-fast bacillus (red circle).

Education for Emergency Surgery

PP-010

TRUE LEFT-SIDED POSITION OF THE GALLBLADDER: AN UNEXPECTED FINDING DURING LAPAROSCOPIC CHOLECYSTECTOMY REQUIRING CAREFUL SURGICAL ORIENTATION

Mohamed Said Ghali, Salah Mansor, Ahmad Zarour
Hamad Medical Corporation

One of the uncommon biliary anomalies is the left-sided gallbladder (LSG). Many cases have been identified since this

finding was first reported in 1886. The most common type, true LSG, has an incidence rate of 0.3%. This case study includes a middle-aged man who needed surgery because of persistent biliary pain. The patient had a laparoscopic cholecystectomy that incidentally revealed the presence of true LSG. This required greater caution and a change in the surgical strategy, and we are sharing our experience in handling this case. The anomaly was difficult for preoperative imaging to identify. It was required to modify the standard surgical technique for the dissection of the gallbladder regarding technique and port site positions. It is strongly recommended to identify critical view of safety. We advise strongly intraoperative cholangiogram or indocyanine green fluorescence as an alternative to confirm the biliary anatomy and ensure the safety of the surgery. Using a laparoscopic method is highly recommended, especially if surgical expertise is available.

Keywords: Laparoscopic, left sided, Gallbladder, Cholecystectomy, Sinistroposition

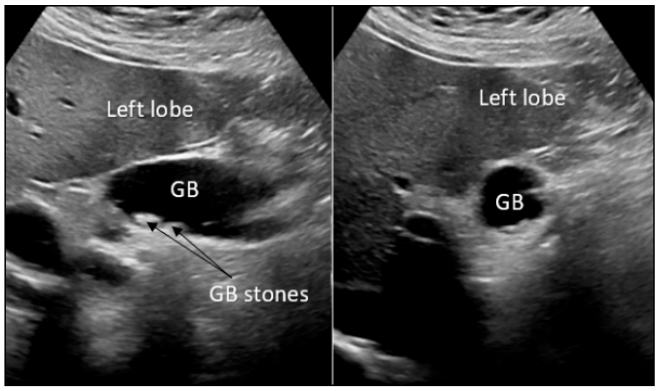


Figure 1. US showing GB with GB stones under left lobe of the liver.

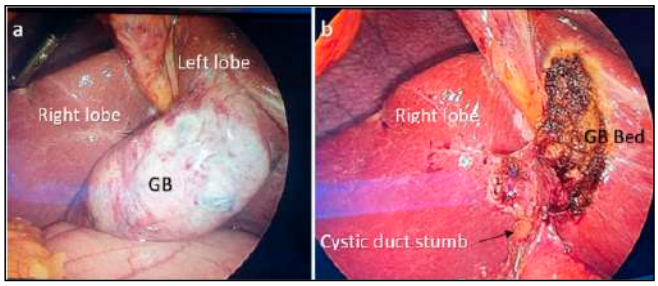


Figure 2. A) laparoscopic view of GB showing GB under left lobe of liver and to left of falciform ligament. B) post cholecystectomy view showing GB bed and cystic duct stump at the right side of CBD.

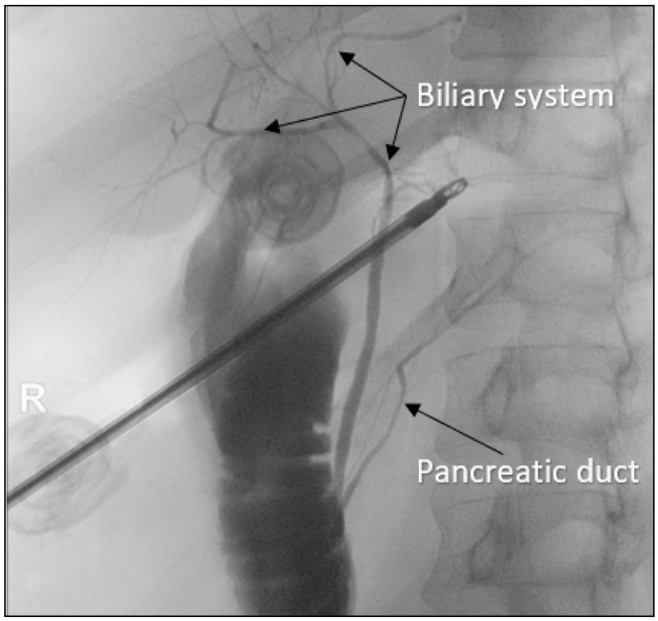


Figure 3. IOC showing complete biliary system along with pancreatic duct. The direction of the cystic duct is going from the left side to the right side of CBD, crossing over the liver hilum.

Vascular Emergencies

PP-011

TRAUMATIC UPPER LIMB AMPUTATION CAUSED BY EXPLOSION IN AN URBAN SETTING: CASE REPORT

Caio Mario Villela de Carvalho Junior[1,2], Ana Paula Da Costa Diogo[1], Larissa Simões Galvão Da Rocha[3,2], Bruna Do Nascimento Villela[1], Gabriel Anthony Alves Veloso[3], Ana Cecília Dos Santos Guimarães Sá[2], Eduarda De Magalhaes Varela[1], Rodrigo Klisman De Carvalho Costa Rodrigues[1]

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Traumatic upper limb amputation is a rare condition but one with significant functional, psychological, and social impact. In civilian settings, the main causes include occupational accidents and urban violence. Conversely, military contexts have enabled the development of structured studies, such as the *Military Extremity Trauma Amputation/Limb Salvage Study – Upper Extremity (METALS)*, which provide valuable data to guide clinical decisions in complex extremity injuries.

This report describes the case of a male patient admitted to the trauma center of Hospital Municipal Albert Schweitzer in Rio de Janeiro following the explosion of a welding gas cylinder, resulting in traumatic avulsion amputation of the left upper limb and extensive facial trauma. Pre-hospital care was provided by the Rio de Janeiro State Fire Department, including clinical stabilization and hemorrhage control of the limb via tourniquet application. Despite destruction of the oral cavity, the patient maintained consciousness and a patent airway, allowing transport without advanced airway management.

Upon hospital admission, the *Advanced Trauma Life Support (ATLS)* protocol was followed. Given the severity of the injuries and significant blood loss, the patient was immediately taken to the operating room. Orotracheal intubation was performed, con-

sidered difficult due to facial injuries. The vascular surgery team, in collaboration with trauma surgeons, explored and ligated the axillary vessels for definitive hemorrhage control. Subsequently, the orthopedic team performed stump revision and skin closure. Limb reimplantation was ruled out due to the poor condition of the avulsed segment, irregularity of the proximal stump, and the patient's hemodynamic instability during surgery.

In the oral cavity, hemorrhage control and soft tissue repair were performed. Multiple facial fractures were identified intraoperatively but not addressed initially due to the absence of a maxillofacial surgery team. After emergency surgery and studies such as METALS as a valuable knowledge base applicable to civilian trauma care, enhancing management strategies for complex traumatic amputations. In this case, a damage control surgery approach was chosen, focusing on rapid hemorrhage control and early ICU transfer to reduce the metabolic response to trauma and facilitate progressive stabilization.

Keywords: Multiple Trauma, Trauma Surgery, Acute Care Surgery, Maxillofacial Surgery, Vascular Surgery, Orthopedic Surgery, Explosions, Facial Injuries, Advanced Trauma Life Support, Amputation, Traumatic.

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Trauma victim patient in Surgical Center



Axillary vein and artery sectioned and ligated



Facial trauma



Facial trauma



Endocrine and Breast Surgery

PP-012

LIFE-THREATENING HEMORRHAGE FOLLOWING RADIOFREQUENCY ABLATION OF A TOXIC THYROID NODULE

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Introduction: Radiofrequency ablation (RFA) is increasingly utilized in the treatment of benign thyroid nodules. Although considered minimally invasive, it is not without risk. Complications such as hemorrhage, nerve injury, or thyroid storm may occur. We present a rare and severe case of life-threatening thyroid storm and hemorrhage following RFA of a toxic thyroid nodule, with underlying occult malignancy.

Case Presentation: A patient under follow-up for subclinical hyperthyroidism, with a 2.5 cm hyperfunctioning thyroid nodule, underwent radiofrequency ablation at an external center. The patient, who had no known comorbidities other than familial Mediterranean fever and was on colchicine treatment, was referred to our institution with swelling of the neck after RFA.

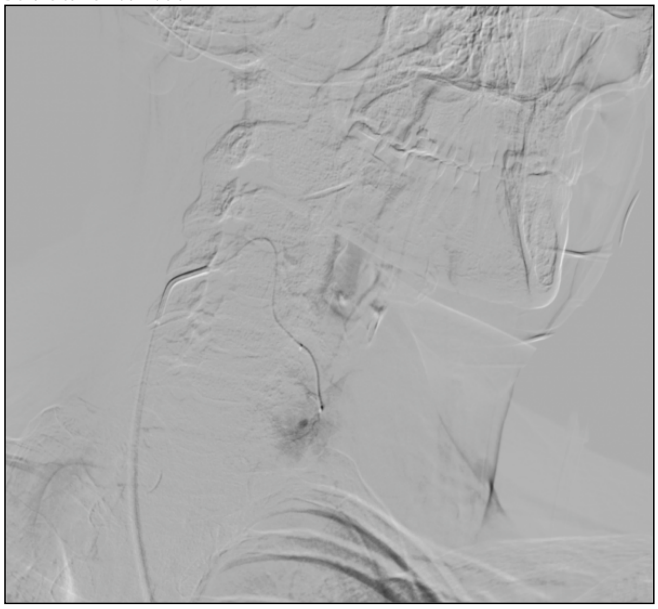
On admission to the emergency department, the patient presented with a blood pressure of 250/150 mmHg and a heart rate of 125 bpm. The cervical swelling was suspected to be due to hemorrhage secondary to the RFA procedure, and the clinical findings were consistent with thyroid storm. Laboratory investigations revealed TSH < 0.01 (0.27-4.20) uIU/ml, fT4: 2.2 (0.93-1.70) ng/dL, fT3: 6.88 (2.04 – 4.40) ng/dL, and hemoglobin: 12 (10.6-13.5) g/dL. Intravenous infusions of beta-blocker (Esmolol, 160 cc/h) and nitroglycerin (Perlinganit, 35 cc/h) were initiated. Interventional radiology was consulted, and coil embolization of the superior and inferior thyroid arteries was planned alongside hematoma aspiration. However, bleeding could not be controlled during the procedure. Due to increasing respiratory distress from local compression, the patient was emergently intubated with a 5F endotracheal tube and immediately taken to the operating room. A control hemogram revealed a drop in hemoglobin to 5.1 g/dL, prompting transfusion of 4 units of erythrocyte suspension and 2 units of fresh frozen plasma. Following sterile preparation, a Kocher collar incision was made. Active bleeding from the ablated nodule was identified. The branches of the superior and inferior thyroid arteries and veins were identified, tied, and ligated. The actively bleeding nodule was excised using a thermal energy device to control hemorrhage. Given the emergency setting, lobectomy was not performed to avoid additional morbidity. The excised thyroid tissue was sent for histopathological analysis. After achieving hemostasis, the procedure was concluded, and the patient was transferred to the intensive care unit. No further bleeding occurred during follow-up. The patient's vital signs stabilized, and she was discharged on postoperative day 6 following drain removal.

Histopathological examination revealed multifocal papillary microcarcinoma (largest focus 0.7 cm) with capsular invasion, consisting of both classical and oncocytic subtypes. Although the patient was informed about the need for further treatment, she did not show up.

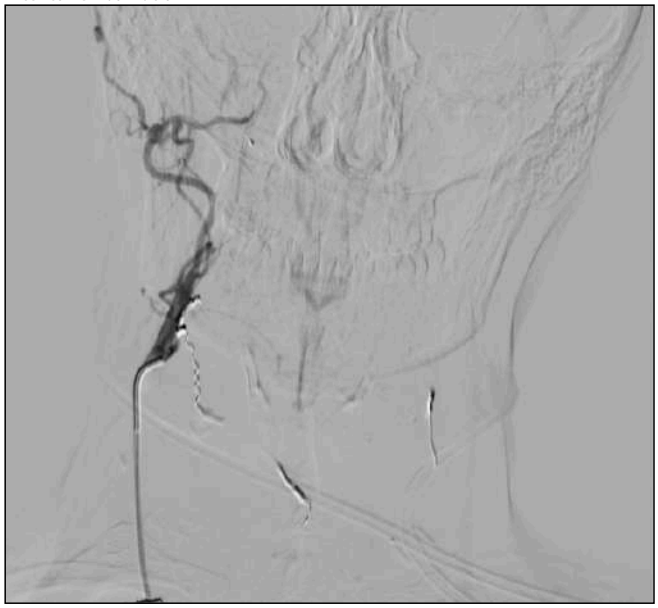
Conclusion: Ablative therapies for thyroid nodules should not be considered risk-free. A patient-specific evaluation must be performed, and all potential complications should be thoroughly discussed with the patient prior to the procedure. The possibility of underlying malignancy must always be considered. Physicians should be prepared to manage all type of complications that may arise unexpectedly during or after the procedure.

Keywords: Toxic nodule, Radiofrequency ablation, Hemmorage

Before coil embolization



After coil embolization



Acute Abdominal and Gastrointestinal Emergencies

PP-013

INTENTIONAL INGESTION OF 15 CYLINDRICAL BATTERIES REQUIRING SURGICAL RETRIEVAL

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Introduction: Intentional ingestion of cylindrical batteries represents a rare but clinically significant form of self-harm. Unlike button batteries, which are more commonly reported in pediatric populations, cylindrical battery ingestion in adults poses greater risks of mucosal injury, luminal obstruction, perforation, and heavy metal toxicity. Furthermore, these batteries may induce electrochemical burns or even electrocardiographic changes such as ST-segment elevation.

Despite the rising number of reported cases, standardized management protocols remain lacking, especially in scenarios involving multiple ingestions in high-risk populations such as prisoners or individuals with psychiatric disorders.

Case Presentation: A 27-year-old incarcerated male with a known history of bipolar disorder presented asymptomatically after the deliberate ingestion of 15 cylindrical batteries. Vital signs were stable on admission. Abdominal X-ray and computed tomography revealed 15 radiopaque cylindrical objects retained in the stomach, with no evidence of passage beyond the duodenum (Figure 1).

There were no radiological signs of gastrointestinal perforation or battery damage. Due to the large number of ingested batteries and associated toxicity risk, endoscopic retrieval was deemed unsafe. Emergency laparotomy was planned. After standard surgical preparation and an upper midline laparotomy, a 3 cm incision was made on the gastric corpus, allowing removal of 15 intact batteries, a nail, and a metal fragment (Figure 2). No perforation or mucosal necrosis was observed intraoperatively. Intraoperative X-ray confirmed complete retrieval of all foreign bodies. Postoperatively, the patient resumed oral intake on day 3 and was discharged on day 5 with psychiatric follow-up arranged.

Discussion: While foreign body ingestion is a common clinical challenge, intentional ingestion is particularly prevalent in psychiatric patients, incarcerated individuals, and those with cognitive impairment. Cylindrical battery ingestion is rare but poses unique dangers due to their chemical contents (e.g., lithium, mercury, manganese) and larger size, increasing the risk for pressure necrosis, leakage, and systemic toxicity.

These batteries can also cause local tissue injury by generating external electrical currents in the gastrointestinal tract. Endoscopic removal is generally the first-line approach, but its feasibility depends on the size, number, and position of the foreign bodies.

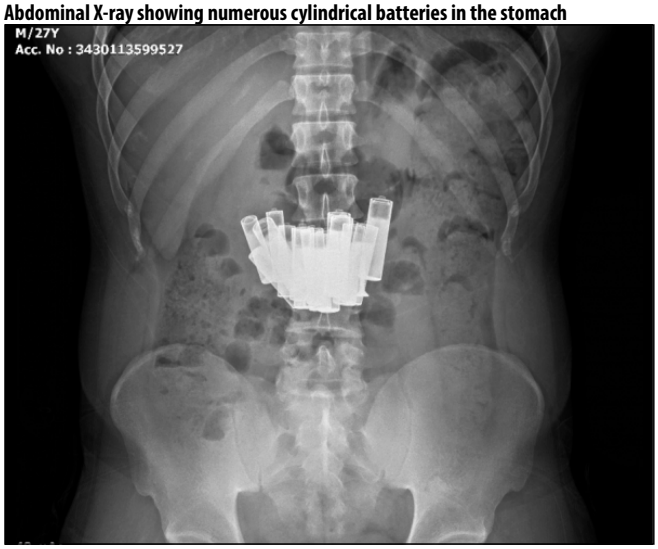
In this case, the quantity and size of the batteries precluded endoscopic intervention, and early surgical removal prevented complications such as erosion, perforation, or leakage.

Beyond the surgical emergency, this case brings attention to the underlying psychiatric pathologies. Deliberate ingestion is often observed in individuals with mood or personality disorders, particularly in custodial settings. Such behavior may serve as a means of manipulation, protest, or self-harm. Postoperative psychiatric evaluation is essential to reduce recurrence. An intraoperative X-ray is strongly recommended before closure to confirm complete retrieval.

Conclusion: This case highlights the importance of early recognition and timely surgical intervention in adult patients with intentional ingestion of multiple cylindrical batteries, particularly when endoscopic removal is not feasible. In addition, comprehensive psychiatric evaluation is essential to address the underlying cause and prevent recurrence

Keywords: foreign body, ingested batteries, abdominal surgery, emergency laparotomy

Abdominal X-ray showing numerous cylindrical batteries in the stomach



Extracted 15 batteries, 1 nail and 1 metal fragment



Damage Control Surgery

PP-014

EXPLORATORY LAPAROSCOPY IN ABDOMINAL TRAUMA. CASE REPORT AND LITERATURE REVIEW.

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General Hospital of Katerini

Aim: This case report aims to present a rare instance of utilizing laparoscopy for the management of abdominal trauma and intraperitoneal bleeding in a pregnant patient.

Background: In cases of abdominal trauma accompanied by intraperitoneal bleeding, most authors advocate for an open surgical approach, typically via exploratory laparotomy. Minimally invasive techniques, such as endovascular embolization, are also employed depending on the clinical scenario. However, laparoscopy is increasingly recognized as a safe and feasible alternative for both the evaluation and management of abdominal trauma during pregnancy. While laparotomy has traditionally been the standard of care, laparoscopic approaches are now being adopted in selected cases due to their benefits, including reduced blood loss, lower infection rates, and shorter hospital stays. Crucially, favorable outcomes depend on the surgeon's expertise in both advanced laparoscopic procedures and obstetric surgical management.

Case Presentation: We report the case of a 32-year-old woman at 18 weeks' gestation who was involved in a motor vehicle accident and presented to the emergency department with multiple injuries. She was hemodynamically unstable and had a Glasgow Coma Scale score of 8/15. She was intubated in the emergency room, received crystalloid fluids via a central venous line, and underwent an urgent full-body computed tomography (CT) scan. The CT revealed multiple rib fractures, a left-sided hemopneumothorax, subarachnoid hemorrhage, and a grade III liver laceration involving the posterior segment IV. A gynecologic ultrasound confirmed a normal fetal heart rate and showed no signs of uterine injury. The patient was evaluated by a neurosurgeon for the subarachnoid hemorrhage, and a conservative management approach was recommended. A chest tube was placed in the left pleural cavity to manage the hemopneumothorax, and the patient was urgently taken to the operating room for exploratory laparoscopy. Intraoperatively, a significant hemoperitoneum was discovered. The source of bleeding was identified and effectively controlled using diathermy and hemostatic agents. Despite successful hemostasis, the patient unfortunately succumbed to multi-organ failure a few hours later.

Conclusions: This case highlights that laparoscopy can be a feasible and effective tool in the management of abdominal trauma with intraperitoneal bleeding during pregnancy, even in emergent scenarios. Careful patient selection and surgical expertise remain key to the safe application of laparoscopic techniques in this high-risk population.

Keywords: laparoscopy, emergency surgery, damage control, pregnancy trauma, hemoperitoneum

Burn Management

PP-015

SMOOTH SOLUTIONS FOR ROUGH INJURIES: COPOLYMER SKIN SUBSTITUTE FOR FRICTION BURNS

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[2]Florida State University College of Medicine

Introduction: Friction skin burns occur as a result of a thermal injury and abrasion when the skin rubs against an abrasive surface scraping or wearing it away. This commonly occur on surfaces such as carpets, asphalt, and concrete. In motor vehicle accidents, this most frequently occurs to motorcyclist even when wearing appropriate protective garments. The temperature of the asphalt or concrete as well as the speed may play a role on the extent of the injuries. Skin substitutes may act as a biological dressing and reduce pain in the setting of a partial thickness injury. While in full thickness injuries it may provide temporary wound coverage and enhance the development of an optimal wound bed for grafting. Polylactic acid membranes may be an effective alternative for the treatment of these kinds of injuries.

Methods: Three patients who sustained both partial and full thickness friction skin burns and associated orthopeadic injuries. Two of these patients were involved in a motorcycle crash and the third patient is a pedestrian struck and dragged by a car. They underwent surgical debridement and subsequent management with polylactic acid membranes. They were grafted with polylactic acid membranes and subsequently underwent STSG.

Results: In partial thickness skin injuries, nearly 100% epithelization and wound healing was noted within 2 weeks. In full thickness wounds, integration and optimal granulation tissue was evidenced in >95% of the surface area as early as 7 days after the product application. This was considered ideal for resurfacing. Skin coverage with meshed STSG revealed nearly 100 % skin graft take and epithelization within 2 weeks.

Conclusions: Polylactic acid membranes provide excellent wound coverage of full thickness friction burn wounds and enhances the formation of the optimal wound bed for skin grafting. For partial thickness wounds, it also provided significant pain control and complete wound healing and re-epithelialization. Follow-up may be needed to determine the long-term outcome.

Keywords: Copolymer Skin Substitute, friction burn

Catastrophic Wound Management

PP-016

FROM POLYMER TO PATIENTS: ADVANCED EPIDERMAL SUBSTITUTE FOR COMPLEX TRAUMATIC WOUND HEALING

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[2]Florida State University College of Medicine

Introduction: Traumatic wounds may be challenging to treat due to their complexity and susceptibility to wound complications. Depending on the severity of tissue damage and loss,

wound coverage may require advanced surgical techniques. This kind of wounds may have debris and have high bacterial contamination increasing the risk of local and systemic infection. Furthermore, the presence of exposed bone may add additional challenges, particularly in certain locations. Polylactic acid skin substitute has been shown to be effective on enhancing wound bed vascularization and may also help on infection control. This copolymer based epidermal skin substitute may be an effective adjunct for the treatment of complex traumatic wounds.

Methods: We present the case of two motorcyclists involved in different crashes. One sustained a degloving injury to his foot with exposed calcaneus. Imaging studies revealed no foot bone fracture. The second patient sustained a complex pelvic fracture which was internally fixated and due to healing complications then experienced a large abdominal wound with significant tunneling and with exposed hardware/cement. They both underwent washout, surgical debridement, and application of a polylactic acid epidermal skin substitute for soft tissue reinforcement. The foot underwent a complex layered closure, obtaining complete bone and wound coverage, and incisional negative pressure wound therapy (NPWT). The abdominal wound underwent application of NPWT.

Results: Upon takedown of the incisional NPWT, the foot skin flap was confirmed to be viable, and the incision was noted to be intact. There was no evidence of incision breakdown or local wound infection. The abdominal wound, contracted well obtaining complete bone and hardware coverage within 4 weeks. Autologous skin graft was not needed. In either case, there was complete wound healing with no complications noted by 3 months.

Conclusions: Polylactic acid copolymer-based epidermal skin substitute is safe and enhances wound healing in complex traumatic wounds. It may expedite the rate of healing and help with infection control. Larger cohort studies may be needed to validate our experience.

Keywords: Polylactic acid dermal matrix, traumatic wound

Anastomotic Leaks

PP-017

BOWEL ANASTOMOSIS AND FISTULA REPAIR REINFORCEMENT WITH DECELLULARIZED FISH DERMIS

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[1]Sarasota Memorial Hospital
[2]Florida State University College of Medicine

Introduction: Anastomotic leaks are life-threatening complications associated with high morbidity, emotional distress, prolonged hospitalizations, additional interventions, and increased mortality. Furthermore, it represents a significant cost burden to healthcare. Its management is challenging and carry significant problems including the formation of entero-cutaneous fistulae. Similarly, fistulas may also have a complicated course. Amnion/chorion membrane has shown decreased colorectal anastomotic leaks. Decellularized piscis dermis use has also been described for this purpose. Fish dermis reinforcement may favor the healing cascade and potentially decrease the risk of anastomotic leaks and fistula recurrence.

Methodology: Eight patients with various comorbidities requiring emergent surgical interventions and bowel resection or fistula takedown and repair were treated with reinforcement of their bowel anastomosis with lyophilized and decellularized fish dermal Xenograft. The patients underwent either a small bowel resection, right or left hemicolectomies, or gastrojejunostomy repair. Etiologies of bowel resection included internal hernia with closed loop obstruction, intussusception, complicated diverticulitis, gastro-jejunostomy perforation, colo-vesicular fistula, among others. Subsequently, their anastomosis was wrapped with lyophilized and decellularized fish dermis. The patients that underwent fistula takedown and repair underwent water soluble contrast study post-operatively to confirm no leak. They were monitoring for return of bowel function and to ensure no leak occurred.

Results: None of the patients undergoing bowel resection and primary anastomosis developed a leak. No colo-vesicular fistula repair was evidenced to present a leak on follow up contrast study. Patients experience return of bowel function within 3-6 days post-operatively. Only complication noted consisted of perforated marginal ulcer.

Conclusion: Decellularized and lyophilized fish dermis reinforcement of bowel anastomosis and of repaired fistulas may enhances its healing leading to decreased leak rate. Further larger prospective and randomized trials may be necessary to confirm this true benefit.

Keywords: anastomosis, fistula, anastomotic leak

Abdominal Trauma

PP-018

MANAGEMENT OF A COMPLEX LIVER TRAUMA FOLLOWING HIGH-ENERGY BLUNT TRAUMA: A CASE REPORT

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[1]1st Department of General Surgery, Kat Attica General Hospital
[2]Radiology Interventional Department, Kat Attica General Hospital

The management of high level liver trauma, according to recent data, requires a multifactorial approach. It is necessary a combination of proper resuscitation, surgical treatment, vascular embolization and ICU monitoring. In this case report, our clinic manage a trauma patient with multiple injuries and complications.

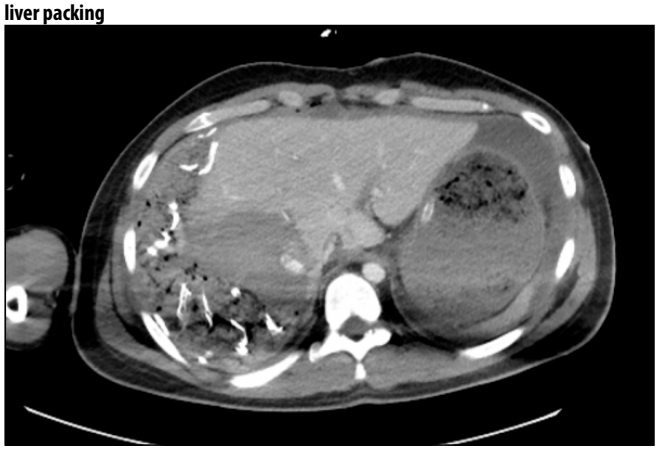
A 28-year-old male was presented to a peripheral hospital after a high-speed motorcycle accident. The patient was hemodynamic instability (Shock Index =2) and positive E-FAST. Exploratory laparotomy was decided in which a grade V injury was identified in segment VII-VIII of the liver. Liver packing was performed. The patient was admitted to our Level 1 Trauma Centre intubated for continued hospitalization. In the initial assessment of the patient, he remained hemodynamically transiently responsive. Resuscitation was performed with blood derivatives and haemostatic agents. According to a full-body CT scan, the patient had a right pneumothorax, active extravasation from the right hepatic artery and factures in left clavicle and shoulder. A right chest tube was placed and angioembolization of the right hepatic artery was performed with microspheres and coils. After 24hours

the patient underwent surgery to take out the packing and put drains. The patient was monitored in the ICU for 10 days and then transferred to our clinic. On the 23rd postoperative day, the patient was taken to the operating room due to cystic effusions in the right pleural cavity. Drainage of the effusions and peeling of the right lung were performed. On the 41st postoperative day, the patient developed fever and sepsis. A CT scan and MRI were performed, which revealed an abscessed collection in the necrotic parts of the liver. Percutaneous puncture of the abscess was performed. On 45th to 49th postoperative day, the patient had high fever. On 50th postoperative day, a thoracotomy was performed on the old one and the chest tube was removed. During his hospitalization, the patient was treated with appropriate antibiotic therapy according to blood and drainage cultures. On the 62nd postoperative day, the patient was discharged with a recommendation for surgical treatment of left shoulder fracture on a routine basis. After 3 months from discharge, the new abdominal CT scan showed regeneration of the liver parenchyma in 80%.

This case report is interest not only because of the patient's survival, but also because of the multiple complications of traumatic liver injury and their multifactorial management of them. It is very important for surgeons to be aware of the possible complications of liver injuries, to recognize them early, and to treat them with proper collaboration with other specialties.

Keywords: Polytrauma, Liver trauma, Hemorrhagic shock, Emergency surgery, Trauma resuscitation, Liver packing, Angioembolism

1st CT scan: Liver trauma grade V with active bleeding at hepatic segment 6-7-8, liver packing



Angiography with active bleeding from segmental artery of right hepatic artery



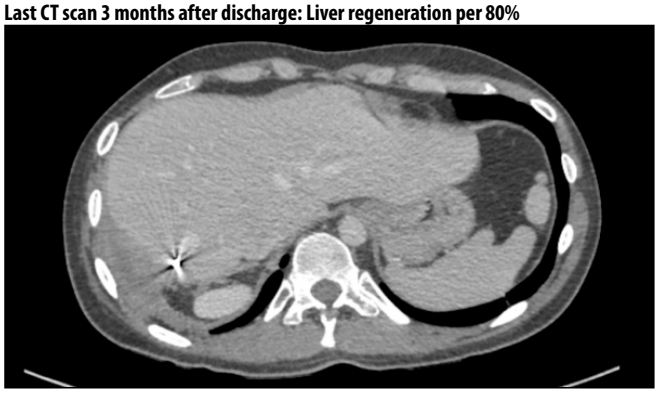
Embolism of right hepatic artery using coils



MRI: Liver abscess in traumatic area and pleural effusion (empyema)



Last CT scan 3 months after discharge: Liver regeneration per 80%



Damage Control Surgery

PP-019

EXPERIENCE OF USING RESUSCITATIVE ENDOVASCULAR BALLOON OCCLUSION OF THE AORTA (REBOA) IN PATIENTS WITH SEVERE COMBINED ABDOMINAL TRAUMA

Aleksey Shabunin, Zurab Bagatelia, Dmitry Grekov, Aleksey Karpov, Andrei Kolotilschikov, Mikhail Petrishin, Dmitry Shikov, Vladimir Tsurkan

Botkin Hospital

Introduction: Patients with severe combined abdominal trauma form the most difficult cohort. Multidisciplinary medical team must provide these patients with all necessary aid immediately from the first second of admission. We present our experience of applying REBOA strategy.

Material and methods: During 2021 – 2024 REBOA was applied in treatment of 8 patients with severe combined abdominal trauma, who were admitted into ICU of Botkin Hospital. The average time of admission of these patients into ICU was 38±15.4 minutes. Comprehensive investigation (including eFAST and pan-CT) and examination by a multidisciplinary medical team performed in next 25±8.5 minutes. REBOA's took 7±5.2 minutes, after that, patients sent to the operating room for further surgical treatment (with ongoing complex intensive therapy). Using the «Damage-control» strategy is mandatory in all patients with severe combined trauma.

Results: In all 8 cases REBOA was successful, no complications occurred. 4 (50.0%) patients died in first 48 hours, 1 (12.5%) patient – in 72 hours. 3 (37.5%) patients survived and continued treatment in ICU and then in surgical department. The period of admission in ICU was 16±5.6 days. The total period of hospitalization was 32±2.4 days.

Conclusion: The minimally invasive technique called REBOA is the important part in managing patients with severe combined abdominal trauma. Further investigations as well as analysis and evaluation of results is necessary.

Keywords: REBOA, Damage control, Severe abdominal trauma

Acute Abdominal and Gastrointestinal Emergencies

PP-020

ENDOSCOPIC TRANSPAPILLARY STENT PLACEMENT IN EARLY PHASE OF NECROTIZING PANCREATITIS

Aleksey Shabunin, Zurab Bagatelia, Aleksey Karpov, Irina Korzheva, Andrey Lukin, Andrei Kolotilshchikov, Dmitry Bocharnykov, Elena Kalashnikova, Aleksey Balaholcev, Mikhail Petrishin

Botkin Hospital

Introduction: Necrotizing pancreatitis is a severe acute abdominal condition, with still high rates of postoperative complications and mortality. Patents, who had severe pancreatitis with disconnected main pancreatic duct (MPD) syndrome, deserve close attention as this form of disease has the poorest prognosis.

Material and methods: During 2021 – 2024, 59 patients with severe pancreatitis (and diagnosed MPD syndrome), underwent endoscopic transpapillary stent placement. 28 Patients have been admitted into Botkin Hospital in first 24 hours from the disease's onset, 19 – in first 48 hours and 12 patients – in 72 hours.

Results: Successful transpapillary stenting of the main pancreatic duct was in 52 (88.1%) cases. For 36 (69.2%) patients transpapillary stenting of the main pancreatic duct was the only surgical procedure while the whole treatment. 7 (11.9%) patients were failed to succeed in transpapillary stent placement. Complications occurred in 5 patients (8.5%): dislocation of pancreatic stent was in 3 cases, and there were 2 cases of bleeding after papillosphincterotomy. Mortality occurred in 3 (5.1%) cases Infected necrotizing pancreatitis developed in 16 (27.1%) patients.

Conclusions: Endoscopic transpapillary stenting of the main pancreatic duct is a modern and highly effective way of treatment patients with disconnected MPD syndrome in early phase of pancreatitis.

Keywords: Acute pancreatitis, endoscopic transpapillary stent placement, disconnected main pancreatic duct syndrome

Open Abdomen

PP-021

VACUUM-ASSISTED ABDOMINAL CLOSURE TECHNOLOGIES IN PATIENTS WITH DIFFUSE PERITONITIS

Aleksey Shabunin, Zurab Bagatelia, Aleksey Karpov, Alexander Klimashevich, Dmitry Bocharnykov, Shamil Khusnutdinov, Daria Ozerova, Makhir Eminov, Andrei Kolotilshchikov

Botkin Hospital

Introduction: Diffuse secondary peritonitis remains a serious surgical problem due to the high mortality rate (30–60% in case of sepsis) and limitations of traditional relaparotomies.

Material and methods: Our study includes 283 patients with peritonitis (MPI≥20), divided into three groups: planned relaparotomies with passive drainage (group 1, n=145), vacuum-assisted laparostomy (VAL) with 48-hour sanitations (group 2, n=81), and vacuum-instillation laparostomy (VIL) with 2.5% glucose solution (group 3, n=57). Groups were comparable in sex, age, abdominal cavity index, Mannheim Peritonitis Index, and APACHE II score. Outcomes included mortality, Comprehensive Complication Index (CCI), surgical site infections, treatment duration, number of operations, and fascial closure in patients with completed sanitations.

Results: Group 1 had a mortality rate of 35.2%, CCI of 66.8±34.2, and fascial closure in 73.0% of cases. Group 2 showed reduced mortality rate (22.2%, p=0.047), CCI (52.3±30.8, p=0.0013) and fascial closure of 89.6%. Group 3 achieved the best results: mortality 19.3% (p=0.018), CCI 44.43±31.4 (p<0.001), and fascial closure 92.2%. VIL was optimal for severe peritonitis (MPI≥30, mortality 19.6%, p=0.008).

Conclusions: VAL and VIL showed greater effectiveness than relaparotomy tactics. We recommend VIL in cases of severe peritonitis (MPI≥30) as the most effective method.

Keywords: Peritonitis, vacuum-assisted laparostomy, vacuum-instillation laparostomy

Acute Abdominal and Gastrointestinal Emergencies

PP-022

SYNCHRONOUS VOLVULUS OF THE TRANSVERSE AND SIGMOID COLON; A CASE REPORT.

Kübra Ergin Karabalık, Firdevs Melike Onuktav, İsmail Moustafa, Mahfuz Şurhak İpek, Ali Levent Işık, Oğuzhan Aydın, Ahmet Aşkar, Ali Bekraki

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Introduction: Colonic volvulus is a pathological condition characterized by the twisting of the colon around itself. Severe complications such as bowel ischemia and necrosis can be seen. Volvulus of the large colon is the third leading cause of bowel obstructions. Patients typically present with symptoms such as abdominal pain and distension, constipation, nausea and vomiting, and the inability to pass gas. The prevalence of colonic volvulus varies greatly geographically and can account for up to 80% of bowel obstructions in the volvulus belt area.1 Early recognition and surgical management is crucial in preventing severe complications.

Case presentation: A 43 years old male patient with mental retardation presented to the emergency department with severe abdominal pain and constipation. The patient presented with the same symptoms over the years and had multiple colonoscopic detorsions. Abdominal radiograph taken the second day of hospitalization demonstrated dilated bowel loops, consistent with "coffee bean" or "bent inner tube" sign (Figure 1). A CT-scan showed a sigmoid colon volvulus (Figure 2). The patient was taken into surgery and an exploratory laparotomy was performed. Synchronous volvulus of the transverse and sigmoid colon was seen (Figure 3). A resection involving the sigmoid and left hemicolon was performed, followed by an end transverse colostomy. The patient was discharged from the ward after an 8 day stay.

Discussion: A synchronous colonic volvulus is an extremely rare clinical condition. Synchronous colonic volvulus must be considered in the differential diagnosis of bowel obstruction. Early diagnosis and endoscopic decompression is recommended, in this case the patient had a history of colonoscopic detorsion in many occasions. Emergency surgery is necessary after unsuccessful detorsion and signs of peritonitis. Surgical management can vary including total-subtotal colectomy, left hemicolectomy with colostomy, resection with end-transverse colostomy.

Conclusion: The occurrence of a simultaneous sigmoid and transverse colonic volvulus is an exceptional situation. There are no guidelines in the treatment and a tailored approach should be used for each patient. Therefore, colectomy with delayed anastomosis seems to be the best option.

Keywords: Colonic Volvulus, Synchronous Volvulus, Detorsion, Colonoscopy

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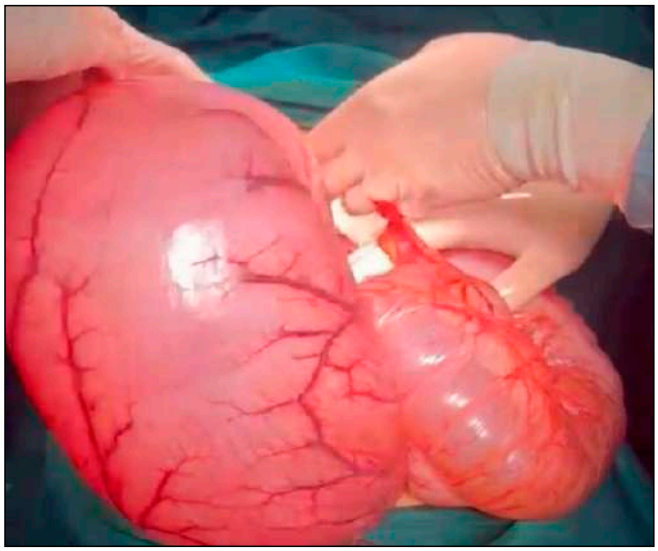


Figure 3. Synchronous volvulus of sigmoid colon and transvers colon.



Figure 1. "coffee bean" or "bent inner tube" sign on X-Ray

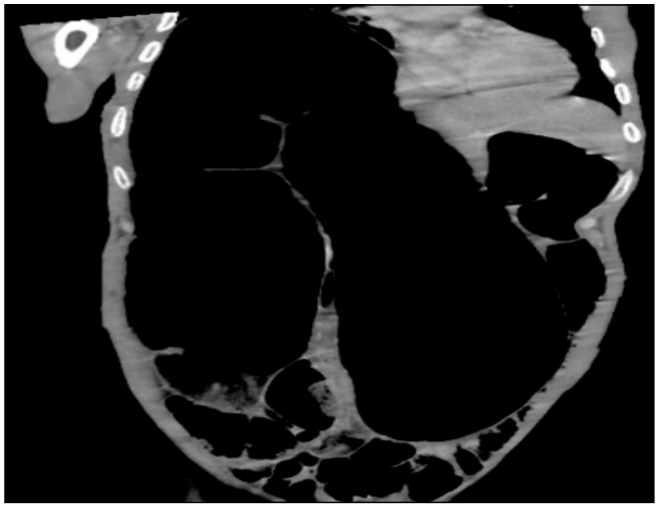


Figure 2. A Computed Tomography image of sigmoid colon volvulus.

Acute Abdominal and Gastrointestinal Emergencies

PP-023

EARLY ELECTIVE APPROACH TO COLONİC VOLVULUS: ÇAM AND SAKURA CİTY HOSPİTAL EXPERİENCE

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Introduction: Colonic volvulus is the twisting of a segment of colon on its mesentery. The incidence of colonic volvulus in endemic regions colonic volvulus represents 13% to 42% of all intestinal obstructions. Any mobile segment of the colon can twist on itself; however, the sigmoid colon is involved in 60–75% of cases, the cecum in 25–40%, the transverse colon in 1–4%, and the splenic flexure in approximately 1% of cases. The management includes relief of the volvulus either by endoscopic or surgical means, assessing the viability of the volved colonic segment and preventing recurrence of the problem. Without definitive surgical treatment, colonic volvulus tends to recur, with each episode carrying the risk of ischemia and perforation[1].

Methods: This retrospective study was conducted between 2023 and 2025 at a major tertiary medical center. This study included 19 consecutive patients with a diagnosis of colonic volvulus. The diagnosis was based on clinical examination, laboratory findings and abdominal computed tomography (CT) scans. The management strategies included colonoscopic detorsion followed by subsequent surgical intervention during the initial admission. Surgical options encompassed one-stage resection and anastomosis, as well as Hartmann's procedure with colostomy. Patients who presented with hemodynamic instability, coagulopathy, acidosis, elevated serum lactate levels, fever, signs of peritoneal irritation and bowel perforation, or had unsuccessful colonoscopic detorsion underwent Hartmann's procedure. While definitive surgical management was advised for three patients following successful colonoscopic detorsion, they declined the procedure and were excluded from the study.

Results: Most of the patients were male (75%). The mean age was 64 years. Among these 16 patients, 12 underwent Hartmann's procedure, while the remaining 4 underwent resection with primary anastomosis. The characteristics and outcomes of patients are shown in Table 1. Heart rate, an indicator of hemodynamic stability, was lower in the resection with anastomosis group. Additionally, the length of hospital stay related to morbidity was shorter in this group compared to those who underwent Hartmann's procedure.

Discussion: The optimal treatment of sigmoid volvulus depends on the patient's initial presentation. In clinically stable patients with uncomplicated volvulus, endoscopic decompression is considered the first-line treatment. Urgent sigmoid resection is indicated when endoscopic detorsion of the sigmoid colon is not successful and in cases of non-viable or perforated colon. Performing a single-step resection with anastomosis or end colostomy should be based on the patient's overall clinical condition and intraoperative findings. Factors such as a high ASA score, coagulopathy, acidosis, or hypothermia all contribute to a prohibitive risk to the integrity of a colorectal anastomosis[1,2]. The Hartmann procedure is more commonly performed in patients with a non-viable colon or peritonitis and is associated with increased rates of postoperative complications (8%) and mortality (5%) [2]. However, most patients in our study underwent Hartmann's procedure, no overall mortality was observed, and those in the anastomosis group experienced a shorter hospital stay.

Conclusion: We recommend that after resolution of the volvulus, sigmoid resection with anastomosis should be offered and preferably performed during the index admission to prevent future recurrence.

Keywords: Colonic Volulus, Colonoscopy, Detorsion

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Table 1.

	All (n=16)	*Hartmann Operation (n=12)*	*Resection with Anastomosis (n=4)*	*p-Value*
Age (years)	68±18,6	68±18,7	57±9,2	0,147
Gender (male), n (%)	12 (75)	10(83,3)	2(50)	0,104
Heart Rate (min.)	80,8±13,5	85,3±9,08	67,3±17	0,015
Fever	36,4±0,29	36,4±0,28	36,5±0,34	0,422
Acidosis	7,08	7,38±0,05	7,36±0,02	0,246
ASA, n (%)				0,633
1	2	2		
2	7	5	2	
3	6	4	2	
4	1	1		
Operation Time (min.)	164±36,6	167±41,3	155±17,8	0,295
Length of Hospital Stay (days)	10,7±5,93	12,2±6,16	6,25±1,26	0,042
Mortality	-	-	-	-

Acute Abdominal and Gastrointestinal Emergencies

PP-024

POSTERIOR MEDIASTINAL ESOPHAGEAL RECONSTRUCTION THROUGH THORACO-ABDOMINAL INCISION FOR THE SEVERE STRICTURE AFTER ACUTE ESOPHAGEAL NECROSIS.

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Case Presentation: A 70-year-old man with a history of heavy alcohol consumption presented to the emergency department with severe abdominal pain, hematemesis, and melena. On arrival, he was in shock, and his abdomen was board-like on palpation. An emergency laparotomy was immediately performed, revealing a perforated duodenal ulcer. The perforation was closed and covered with an omental patch.

On postoperative day 7, although his general condition was stable, persistent vomiting prompted upper endoscopy, which revealed black necrosis of the mucosa extending from the mid-thoracic esophagus to the esophagogastric junction. At that time, the patient was still able to swallow; however, by postoperative day 14, even swallowing saliva had become difficult. Follow-up endoscopy and contrast studies revealed severe stenosis extending from the mid-thoracic esophagus to the abdominal esophagus.

Endoscopic stenting was deemed unsuitable, and surgical intervention was planned. The operation was performed with the patient in the right decubitus position using a thoracoabdominal oblique incision. After dividing the left diaphragm, the mid and lower esophagus and the esophagogastric junction were resected. Reconstruction was performed using a gastric conduit through the posterior mediastinal route.

Postoperatively, the patient developed a right empyema that required percutaneous drainage. However, there were no major complications involving the gastrointestinal tract, and he was able to resume oral intake and was discharged.

Discussion: In cases requiring esophageal reconstruction following esophageal necrosis, subtotal esophagectomy with retrosternal reconstruction is generally performed. However, this approach often necessitates resection of even the intact proximal esophagus and may be complicated by anastomotic leakage or subsequent anastomotic stricture. In the present case, the cervical and upper thoracic esophagus remained intact and was preserved. Reconstruction was performed via the posterior mediastinal route. Furthermore, all surgical procedures were completed under a single operative field.

Keywords: Acute esophageal necrosis, Black esophagus, esophageal reconstruction

Acute Abdominal and Gastrointestinal Emergencies

PP-025

SURGICAL MANAGEMENT AND CHOLECYSTECTOMY DEBATE OF PROXIMAL JEJUNAL GALLSTONE ILEUS IN A PATIENT WITH POLIOMYELITIS: A CASE REPORT

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Introduction: Gallstone Ileus is a rare but life-threatening complication of cholelithiasis, accounting for 1-4% of all mechanical small bowel obstructions. It represents a true mechanical obstruction that evolves secondary to chronic inflammation of a calculous gallbladder leading to adhesions and pressure necrosis, forming a cholecysto-enteric fistula, most commonly at the level of duodenum[1]. A large gallstone (typically >2.5 cm) erodes through this fistula into the intestinal lumen and migrates distally, usually impacting at the terminal ileum or ileocecal valve due to its narrower lumen[2,3].

Case Presentation:A 57-year-old male presented to the emergency department with acute onset of abdominal pain, nausea, and vomiting. His medical history was notable for recurrent biliary symptoms. On physical examination, the abdomen was soft and non-distended, with no signs of peritoneal irritation. A Computed Tomography (CT) scan of the abdomen and pelvis revealed pneumobilia and a large, calcified mass consistent with a gallstone lodged in the second part of the duodenum (Figure 1). This resulted in complete duodenal obstruction and significant gastric dilatation. The patient's medical history was significant for severe physical handicaps, including kyphoscoliosis and atrophy of the lower extremities, sequelae of childhood poliomyelitis. The patient was resuscitated with intravenous fluids and electrolyte correction in preparation for emergency surgical intervention. Laparotomy exposed a 7 cm gallstone causing complete obstruction of the proximal jejunum, distal to the ligament of Treitz, confirming a diagnosis of gallstone ileus. An enterotomy was performed for stone extraction (Figure 2). No surgical intervention was performed on the gallbladder or the existing cholecystoduodenal fistula, which was presumed to be the pathway for stone migration. The patient was transferred to the postoperative intensive care unit for 24 hours. He tolerated oral intake and resumed passage of flatus and was subsequently discharged uneventfully.

Discussion: The most important goal in the treatment of gallstone ileus is the immediate relief of intestinal obstruction. However, the necessity of cholecystectomy in the acute setting remains a subject of ongoing debate, leading to three primary surgical approaches. enterolithotomy alona, One-Stage Procedure (Enterolithotomy + Cholecystectomy + Fistula Repair) and a Two-Stage Procedure which envolves an initial enterolithotomy to resolve the acute intestinal obstruction, followed by a delayed cholecystectomy and fistula repair (typically 4 weeks to 6 months post-recovery).

Conclusion: Although no randomized controlled trials definitively establish the optimal management of gallstone ileus, current clinical practice generally favors enterolithotomy alone as the primary treatment, especially for elderly patients and those with significant comorbidities. The decision between a definitive one-stage procedure and a two-stage approach is individualized based on patient stability, comorbidities, presence of acute cholecystitis, and the surgeon's experience. The need for cholecystectomy and fistula repair should be carefully weighed against the increased surgical risk in the acute setting. Close follow-up is essential for all patients to monitor for recurrence or persistent biliary symptoms.

Keywords: Gallstone ileus, Cholecystectomy

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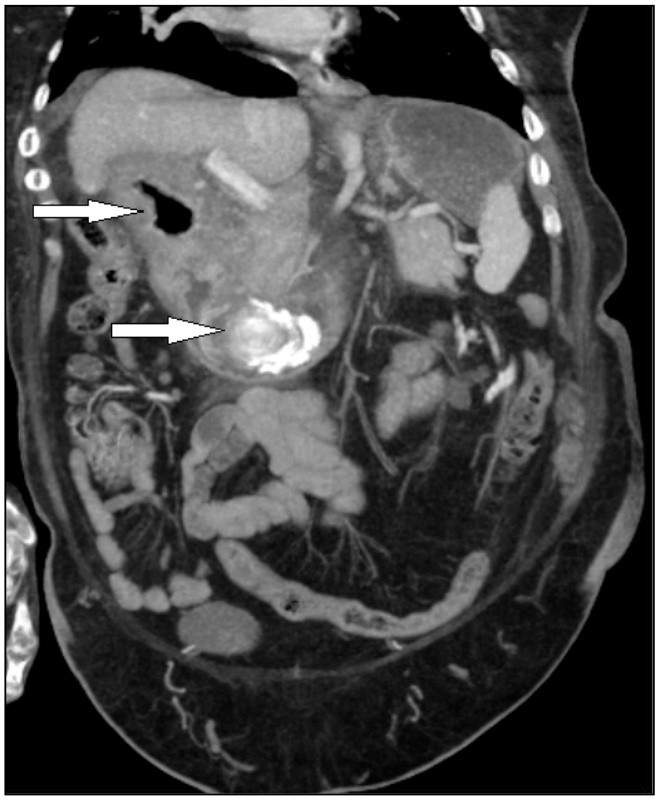


Figure 1. Pneumobilia and duodenal gallstone on Abdominal Computerized Tomography.



Figure 2. A 7 cm gallstone causing complete obstruction of the proximal jejunum.

Organ-Specific Emergencies

PP-026

CERVICODORSAL IMPALEMENT BY A METALLIC OBJECT FOLLOWING A TRAFFIC ACCIDENT: A RARE CASE REPORT

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Penetrating cervical trauma is a highly complex condition with significant risk of mortality, particularly when involving zone I, due to the concentration of critical structures such as major vessels, the trachea, and the esophagus. Diagnostic and therapeutic approaches in such cases require prompt and thorough evaluation, given the anatomical density and the potentially fatal consequences of injury to vital structures. We report a rare case of a 26-year-old male who sustained a metallic impalement injury to the right cervical region (zone I), extending posteriorly to the thoracic area, as a result of a high-energy motorcycle accident.

Upon arrival at the emergency department, the patient was conscious, oriented, eupneic on room air, and hemodynamically stable, although he complained of thoracic pain. The metallic object, part of the motorcycle, remained embedded in the patient's body, having been partially cut by the prehospital rescue team. Initial evaluation with plain chest radiographs (anteroposterior and lateral views) showed no signs of penetration into the thoracic cavity. Computed tomography (CT) was contraindicated due to the presence of metallic artifacts, necessitating a management plan based primarily on clinical evaluation and simple imaging.

Given the patient's stable condition and the likelihood of a muscular path of the foreign body, the surgical team proceeded with operative exploration. A longitudinal dorsal incision followed the trajectory of the object from the cervical region down to the infra-scapular level. Intraoperatively, the foreign body was found lodged exclusively in muscular planes, without violation of the thoracic cavity or critical cervical structures. A bony fragment was identified near the right paravertebral region, raising intraoperative suspicion of a transverse process or rib fracture.

Following careful removal of the object, thorough irrigation and hemostasis were performed, a negative-pressure drain (Hemovac) was placed in the deep muscular bed, and the incision was closed in layers. The patient was admitted to the intensive care unit for monitoring and received prophylactic antibiotics (amoxicillin-clavulanate) and updated tetanus vaccination. Postoperative CT confirmed thoracic spinous process fractures, with no additional surgical complications. He progressed favorably, remained stable, and was ambulatory with physical therapy support. The drain was removed on the third postoperative day, and the patient was discharged on postoperative day five in good general condition.

This case represents an unusual instance of cervicothoracic penetrating trauma with a surprisingly favorable outcome, despite a high-energy mechanism. It highlights the importance of accurate clinical judgment, adherence to trauma protocols, and individualized surgical decision-making. In complex scenarios such as this, timely and appropriate multidisciplinary intervention can significantly influence patient survival and recovery, even in resource-limited settings.

Keywords: Neck Injuries, Wounds Penetrating, Thoracic Injuries, Multiple Trauma, Emergency General Surgery, Trauma Surgery

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Cervical Trauma



Metal Part



After Surgical Exploration



Patient entering the Trauma Room



Education for Emergency Surgery

PP-027

AI CHATBOT POSSIBILITIES IN EMERGENCY SURGERY STUDY

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Introduction: The integration of chatbots into surgical settings has attracted considerable interest due to their potential to enhance patient engagement, streamline communication, and improve surgical outcomes. Chatbot technology, based on ad-

vances in artificial intelligence (AI) and natural language processing (NLP), offers a new approach to assisting both patients and healthcare providers in various surgical processes. Chatbots can also be successfully used for medical education [1-3].

Objective: The main objective of this study is to explore the capabilities of the Surgery-3 chatbot, specifically designed for fourth-year students at Gomel State Medical University.

Materials and Methods: The following educational materials and technologies were used in the work.

- Educational materials of the Department of Surgical Diseases No. 3.
- Sabiston surgery textbook.
- Schwartz's principles of surgery.
- 100 cases in surgery.
- FMGE Solutions - MCI Screening Examination.
- RAG (Retrieval-Augmented Generation)—a technology that combines information retrieval and text generation based on the found data [4].
- DeepSeek [5]—a machine learning model for natural language processing (NLP).
- AnythingLLM [6]—a platform for creating chatbots and intelligent assistants based on NLP.
- Telegram API—for creating and integrating a chatbot into Telegram.
- Local server—to deploy the system and ensure its operation in a local network without Internet access. To implement the RAG technology, educational materials were used in the form of a knowledge graph and a text data retrieval system. After configuring the DeepSeek model to handle medical terminology, the model was used to generate text based on the information found. Integration with AnythingLLM was accomplished by installing and configuring the AnythingLLM platform on a local server.

For the convenience of students, in addition to the AnythingLLM platform interface, we also developed a chatbot for Telegram. For this, we used the Telegram API to create the chatbot. We then connected the chatbot to the RAG model to process requests and conducted tests on real users to evaluate the effectiveness and make improvements.

Results: The result of our work was the creation of the Surgery-3 chatbot. Our chatbot effectively processes multiple-choice test questions (e.g., FMGE Solutions) with the following key results.

- Successfully processes copied questions from tests.
- Analyzes questions and extracts relevant information.
- Adapted for medical terminology, which is important for FMGE questions.
- Extracts and structures information from large volumes of text.
- Average processing time is 2-3 seconds.
- Provides high performance and data security on the local server.

The Surgery-3 chatbot operates at https://t.me/@Surgery3Bot. Advantages include personalized responses, availability with limited Internet connection, 24/7 access, and high speed of query processing. Limitations include difficulties with complex clinical questions and the need for regular knowledge updates.

Conclusion: The Surgery-3 chatbot we developed allows for more effective study of the topics of the course "Surgical Diseases." The use of the department's educational materials in combination with international textbooks on surgery allows for better preparation for exams in surgery.

Keywords: Chatbot, Artificial Intelligence, Knowledge Graph, Emergency Surgery, Education

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Education for Emergency Surgery

PP-028

APPLICATION OF DECENTRALIZED KNOWLEDGE GRAPH FOR SURGICAL EDUCATION

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Introduction: An effective approach to solving the problem of Big Data is the implementation of Knowledge Graph (KG) technology. This methodology facilitates the construction of a specialized semantic, contextual, or relational graph model that captures the relationships between various entities and concepts [1, 2]. A Decentralized Knowledge Graph (DKG) is a distributed open structure on the blockchain for organizing, storing, and exchanging structured knowledge between several participants or nodes [3]. The problem of analyzing big data and its application in the educational process is especially relevant in the field of medicine, with an emphasis on surgical education.

Goal: The aim of this study is to develop a DKG to improve the systematization of knowledge in the field of surgery and its implementation in the teaching of emergency surgery at the Department of Surgical Diseases No. 3 of the Gomel State Medical University.

Materials and Methods: The research into DKGs and their use in surgical education explores how decentralized systems can transform the way medical knowledge is shared and applied. The research utilizes a Cyb.ai platform, which is built on the Bostrom blockchain. Cyb.ai allows users to create "cyberlinks," search through data using graph-based methods, rank results based on relevance, and store and share information easily [4]. The Bostrom DKG is composed of pairs, wherein each "source particle" is connected to a "destination particle" through a "cyberlink," which encompasses supplementary information regarding the node's address and its weight (rank) [4, 5].

We used the educational resources of the Department of Surgical Diseases No. 3 of the Gomel State Medical University, as well as the publications of the World Society of Emergency Surgery (WSES) published in the World Journal of Emergency Surgery, to upload to DKG.

The source code for Cyb.ai is accessible via GitHub at https://github.com/cybercongress/cyb, and comprehensive details regarding the protocol are freely available at https://docs.cyb.ai/.

Results: The result of our work was the creation of the DKG Surgery-3. Access to the developed Knowledge Graph can be found at https://cyb.ai/@gsmu-by/brain. The data collection and

integration process was carried out by incorporating educational resources and full-text articles into the DKG system using relevant keywords.

The information about medical entities and their relationships is visually represented in either a 3D or 2D format. In this representation, nodes represent keywords, and edges illustrate the relationships between them.

After the DKG was created, a testing phase was conducted. We confirmed that the developed DKG accurately represents the integrated information and currently supports the search for relevant educational resources and full-text articles in the field of surgery based on the keywords entered in the search interface https://cyb.ai/.

Conclusion: Decentralized Knowledge Graph is a new method of combining Big Data in medicine. The DKG we developed allows for better systematization of educational and methodological materials for organizing knowledge on surgery.

Keywords: Knowledge Graph, Surgical Education, AI, Big Data

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Acute Abdominal and Gastrointestinal Emergencies

PP-029

IATROGENIC LIVER LACERATION DUE TO MALPOSITIONED CHEST TUBE: A RARE BUT SEVERE COMPLICATION OF TUBE THORACOSTOMY

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Introduction: Tube thoracostomy is a commonly performed procedure in emergency and oncologic care settings. Although considered relatively safe, it carries the risk of serious complications, including organ injury, hemorrhage, and bile leakage. We present a rare case of liver laceration following malpositioned chest tube insertion in a patient with metastatic periampullary adenocarcinoma.

Case Presentation: A 67-year-old female with periampullary adenocarcinoma underwent external percutaneous biliary drainage for surgical preparation. After bilirubin normalization, she was operated at an outside center; however, widespread hepatic and peritoneal metastases rendered the tumor inoperable. A palliative gastroenterostomy was performed due to duodenal invasion.

Two weeks after the fourth cycle of intravenous chemotherapy, the patient presented with dizziness. She was hemodynamically stable, with approximately 450 cc/day bile output from the external biliary catheter. Thoracoabdominal CT confirmed correct catheter placement and stable hepatic metastases. However, a spontaneous massive right-sided pneumothorax with pleural effusion was detected. A chest tube was placed, but absence of drainage prompted repeat imaging, which revealed malposition of the tube into the liver hilum, causing hepatic laceration.

Despite the injury, the patient remained hemodynamically stable. The decision was made to remove the tube under controlled surgical conditions. On operation table, ultrasound showed no intra-abdominal fluid collection. The tube was slowly withdrawn under direct sonographic guidance, with no active hemorrhage observed. Hemodynamic monitoring and serial ultrasound were continued for 30 minutes post-extraction. As no complications were observed, the patient was transferred to the ICU for close monitoring.

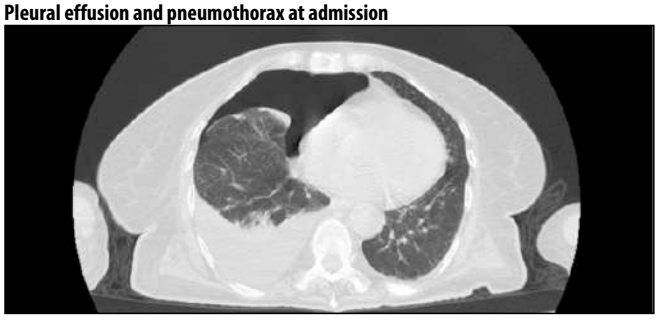
No active drop in hemoglobin levels was observed. Liver enzymes, which had peaked over 300 U/L, gradually declined. Total and direct bilirubin levels remained still. Biliary drainage remained stable (~450 cc/day). Due to persistent pleural effusion, image-guided pleurocan insertion was performed. Follow-up CT performed on postoperative day 6 revealed self-limited hepatic laceration with no fluid collection in abdomen.

On day 12, bile output from the external drainage catheter decreased significantly, while bile was observed leaking from the prior chest tube site. A stoma bag was placed at the site, which collected over 300 cc of bile within 24 hours, while drainage from the external catheter ceased. CT imaging confirmed controlled external biliary fistula formation through the chest tube tract, with no evidence of intraperitoneal bile leak. The patient remained clinically stable for another week. As the externalized bile fistula remained functional and the patient's general condition was good, she was discharged with appropriate instructions to continue oncologic care.

Conclusion: Although tube thoracostomy is frequently performed and often perceived as a simple procedure, its complications can be catastrophic. In this case, improper placement led to hepatic injury and potential biliary-vascular disruption. While our patient was fortunate to remain hemodynamically stable and avoid life-threatening hemorrhage or biliary peritonitis, similar cases may not follow a benign course. Prompt recognition, multidisciplinary coordination, and preparedness for surgical intervention are essential in managing such high-risk complications.

Keywords: Liver injury, Tube Thoracostomy, Malpositioned Chest Tube

Pleural effusion and pneumothorax at admission



Liver injury after tube thoracostomy



Control CT scan at first week. No intraabdominal leakage was observed



Controlled biliary fistula prior to discharge



Perioperative, Critical Care & TICU, SICU

PP-030

FACTOR VII TESTING IN TRAUMATIC BRAIN INJURY PATIENTS : AN EXTRAVAGANCE OR A CLINICAL NECESSITY ?

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Hamad Medical Corporation

Traumatic brain injury is a leading cause of death and disability.managing it is harder in patients with Factor VII deficiency, which raises bleeding risk. This report covers a 29-year-old man with this rare disorder who had severe TBI after an electric scooter fall, highlighting the challenges in treatment.

Introduction: Factor VII deficiency is a rare bleeding disorder with an incidence of approximately 1 in 500,000 individuals.It is essential for initiating the coagulation cascade. Trauma can lead to life-threatening bleeding complications, particularly when involving the central nervous system. This case underscores the importance of a multidisciplinary approach in managing TBI complicated by a bleeding disorder.

Case Presentation: A 29-year-old obese male presented following a fall from an electric scooter. He was unresponsive with a GCS of 11 and had no history of anticoagulant or antiplatelet use. His medical background included unexplained bruising and a previously canceled bariatric surgery due to abnormal coagulation tests.

Initial CT revealed multiple skull fractures, hemorrhagic contusions, subarachnoid and subdural hematomas with mass effect. He was admitted to the ICU for neuro-monitoring and managed conservatively. On day 3, his GCS dropped further; repeat imaging showed diffuse cerebral edema, prompting emergency bifrontal craniectomy.

Preoperative coagulation studies showed PT 19.8 sec, APTT 31.5 sec, and INR 1.7, with Factor VII activity at 55%. Recombinant Factor VIIa was administered at 30 mcg/kg every 4 hours on day 1, then every 6 hours for the following 2 days. Follow-up testing showed normalized PT and APTT, and Factor VII levels peaked at 200%.

During his ICU stay, he developed sepsis and persistent bacteremia. Lumbar puncture was deferred due to coagulopathy. He was managed empirically under Infectious Disease guidance. Following extubation failure, a percutaneous tracheostomy was performed with rFVIIa given beforehand.

Tachycardia raised concern for thromboembolism; CTPA was negative for PE. The patient was successfully weaned from ventilatory support and discharged to a rehabilitation facility in stable condition.

Discussion: This case highlights the complex interplay between trauma, coagulopathy, and critical care in managing TBI patients with Factor VII deficiency. The deficiency disrupts the extrinsic coagulation pathway, impairing thrombin generation and fibrin clot formation, thereby substantially increasing bleeding risk. Traumatic brain injury itself induces a coagulopathy,and with congenital Factor VII deficiency, the risk is magnified contributing to poor outcomes.

Recombinant Factor VIIa (rFVIIa) is critical for restoring clotting but must be balanced carefully to avoid thrombosis. Close monitoring with coagulation tests and Factor VII levels guides safe dosing. In this case, judicious administration of rFVIIa before surgical interventions was key to minimizing bleeding without triggering thrombosis.

A multidisciplinary approach was essential, especially given infectious complications that complicated care. Early recognition, tailored treatment, and strong teamwork are key to managing these complex cases successfully.

Conclusion: Managing TBI in patients with Factor VII deficiency is complex due to a high risk of bleeding. Prompt diagnosis, bleeding control, and multidisciplinary care are key. Recombinant Factor VIIa is the main treatment, but it must be used cautiously due to possible clotting risks.

Keywords: Trauma Wounds and Injuries Brain Injuries, Traumatic Factor VII Deficiency

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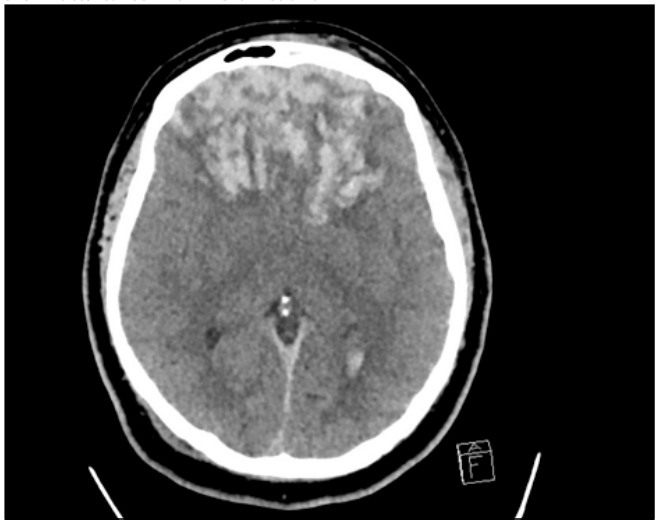
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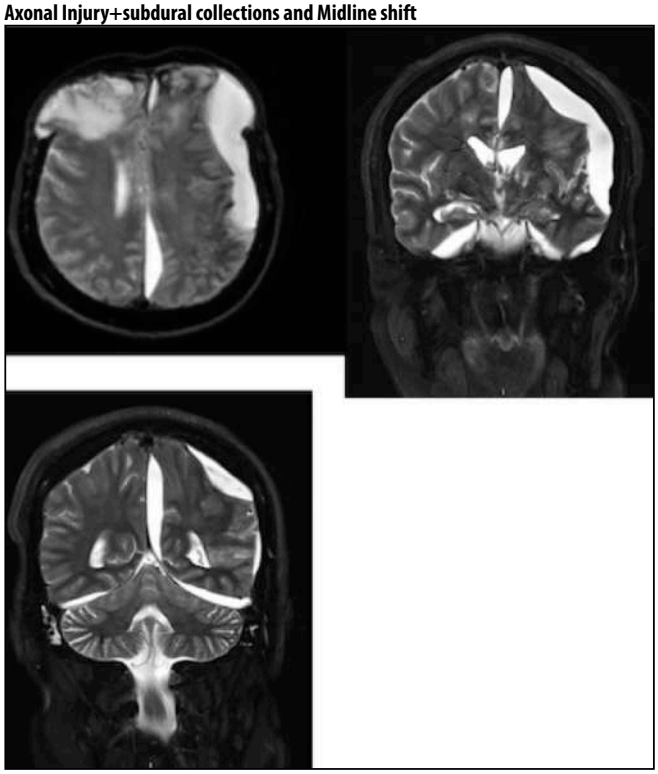
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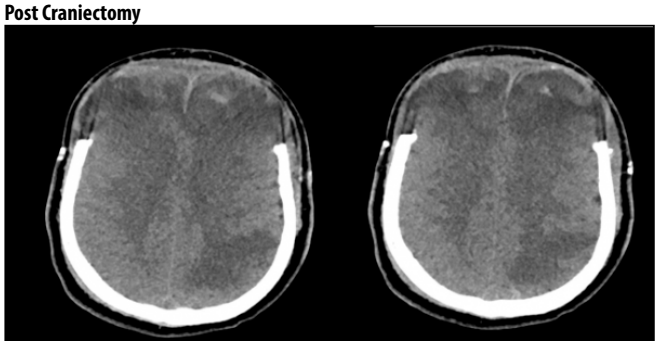
Skull fractures+SDH+SAH+Brain edema



Axonal Injury+subdural collections and Midline shift



Post Craniectomy



Organ-Specific Emergencies

PP-031

MANAGEMENT OF ACUTE CHOLECYSTITIS IN A FRAIL PATIENT: TWO INVASIVE PROCEDURES INSTEAD OF ONE EARLY SURGERY

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Background: Acute cholecystitis is a common surgical condition in elderly and frail patients with comorbidities such as dementia and diabetes. According to WSES guidelines, early laparoscopic cholecystectomy (ELC) within 7 days is recommended for operable patients (Recommendation 1A), while percutaneous cholecystostomy should be reserved for those at very high surgical risk (Recommendation 1B).

Methods: A 74-year-old woman with Alzheimer's disease and type 2 diabetes presented with clinical and radiological findings of acute cholecystitis complicated by gallbladder hydrops. Due to her frailty and comorbidities, percutaneous cholecystostomy was performed with rapid improvement. She was discharged with the drain in place. About two months later, the patient returned due to accidental removal of the drain and symptom recurrence. An urgent open cholecystectomy was performed. Laparoscopy was not feasible due to multiple adhesions and purulent findings.

Discussion: Percutaneous cholecystostomy is consistent with WSES recommendations (1B) for critically ill patients. However, in this case, it resulted in two invasive procedures instead of one, with increased surgical complexity (adhesions, conversion to open). WSES guidelines favor early laparoscopic cholecystectomy to reduce hospitalization, costs, and complications. In patients with cognitive decline, atypical presentation and poor cooperation make surgical timing even more critical.

Conclusion: In elderly frail patients with comorbidities, an individualized but proactive approach is essential. When clinically feasible, early laparoscopic surgery may avoid repeated procedures and technical complications. Percutaneous cholecystostomy remains a temporary option, not a substitute for definitive cholecystectomy.

Keywords: Percutaneous cholecystostomy, frail patient

Open cholecystectomy



Open cholecystectomy



Acute Abdominal and Gastrointestinal Emergencies

PP-032

SURGICAL TACTICS IN PATIENTS WITH COMPLICATED COLON CANCER

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Background: The following section provides a contextual overview. A substantial number of recommendations and data concerning the treatment of complicated colorectal cancer have been identified as being controversial.

Purpose – of the present study is to conduct a retrospective analysis. A thorough investigation into the immediate consequences of surgical intervention for complex cases of colon cancer has been conducted.

Materials and Methods: A two-centre case-control study was conducted, with 274 patients of both sexes participating. The mean age of the patients was 70.2 years (± 2.6 years).

Results: The study demonstrated that 70.1% of cases exhibited acute intestinal obstruction, 26.3% were characterised by perforated cancer, while the remaining instances presented with bleeding (0.7%) or a combination of perforation and obstruction (2.9%). These cases were categorised into four distinct groups based on the presence of these complications. The demographic characteristics, American Society of Anaesthesiologists classification, and types of comorbidities did not differ between all patients evaluated ($p > 0.05$). The tumour's location in the colon did not differ significantly between the patient groups ($p = 0.2714$): most often, the tumours were located in the left colon (56.6%). Fifty-six patients (20.4%) underwent emergency surgery within two hours of admission, and 204 patients (74.5%) were operated on urgently within six hours of admission to the emergency surgery department. A further 14 patients (5.1%) underwent delayed surgical procedures following the stabilisation of their condition. A total of 137 colon resections were performed, of which 48.2% were primary anastomoses and 51.8% were ileostomies or colostomies. The «no touch»technique was used in 11 (4%) of the 274 patients, and the «damage control surgery»approach was used in 13 (4.7%) patients to treat septic shock. The overall mortality rate was 10.2%, with the highest mortality rate observed in patients with combined obstructive and perforating colon cancer (37.5%, $p < 0.05$). The most prevalent cause of mortality within 30 days was the progression of multiple organ failure against the background of generalised peritonitis and abdominal sepsis. The mean duration of hospitalisation was found to be 17 days.

Conclusions: In the presence of a tumour on the right, in contrast to the left-sided localisation, a single-stage surgical intervention is possible, namely right-sided hemicolectomy with ileotransverse anastomosis, if the general condition of the patient and the capabilities of the local hospital allow this intervention. In cases where tumours are localised to the left side of the patient, the optimal surgical intervention in our conditions is an obstructive resection of the colon. Surgeries that are performed for the management of colon cancer, and which do not involve the removal of the tumour, are frequently associated with high postoperative mortality. Such surgeries include anastomosis and stoma placement and are typically performed on patients with the most severe and advanced categories of the disease.

Keywords: Keywords: colon, complicated cancer, diagnosis, surgical treatment, 30-day mortality.

Military Surgery

PP-033

STOPPING BLEEDING IN CASE OF LIMB VASCULAR INJURY IN CASE OF MINE-BLAST TRAUMA AT THE STAGES OF MEDICAL EVACUATION (CASES FROM CLINICAL PRACTICE)

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Introduction: Damage to the vessels of the extremities is a serious condition that carries a high risk of complications, even if the direct threat to life has been overcome. The data on fatalities from vascular injuries, collated from conflicts ranging from the First World War to the present day, reveal a marked increase in the proportion of deaths resulting from such injuries. The figures, which include 0.4-1.3% in the First World War, 0.96% in the Second World War, 2% in the Korean War, 3% in the Vietnam War, and 9% and 12.5% in the wars in Afghanistan and Iraq, respectively, demonstrate a fivefold increase in vascular injury-related fatalities since the First World War. Vascular injury with bleeding has become the most prevalent injury sustained during armed conflict in eastern Ukraine, with pneumothorax ranking second. Bleeding from the vessels of the injured limbs remains the primary and most significant cause of death on the battlefield, accounting for approximately 9% of fatalities in hostilities.

Materials: We analysed five clinical cases of medical care for wounded soldiers with limb vascular injury due to blast trauma in an evacuation and stabilisation point of one of the Special Forces battalions of the National Guard of Ukraine. Discussion. In all five cases analysed, tourniquets were applied by the Tactical Combat Casualty Care guidelines (TCCC-13.01, 01.08.2019). In clinical cases 2 and 4, tourniquet application was not indicated, as there was no active massive bleeding. In clinical case 3, the absolute indication for tourniquet application was traumatic amputation of a limb. The utilisation of improper tourniquets during such surgical operations has the potential to result in severe consequences, including severe tourniquet syndrome and acute renal failure. It is imperative that healthcare professionals at all levels, and in particular military personnel, possess a comprehensive understanding of the principles of tactical medicine, including the indications and contraindications for tourniquet application.

Conclusions: External bleeding has been identified as the primary cause of death in casualties with limb damage to the great vessels. Furthermore, external bleeding has been identified as the cause of death in severe casualties with damage to the great vessels of the extremities.

The widespread use of tourniquets in the prehospital setting necessitates that medical evacuation clinicians develop a comprehensive understanding of the potential complications associated with tourniquet application and their prevention. It is incumbent upon the heads of medical units to enhance the training of personnel engaged in medical evacuation, ensuring that they are cognisant of the risks associated with protracted or improper tourniquet application.

Keywords: damage to limb vessels, mine-explosive trauma, stabilization point, methods of stopping bleeding



Figure. Wounded A. with a penetrating wound to the left shoulder with damage to the subclavian artery

Surgical Infections

PP-034

THE CHANGING LANDSCAPE OF ABSCESS MANAGEMENT: FROM INCISION & DRAINAGE TO ANTIBIOTIC STEWARDSHIP

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Shaikh Zayed Hospital Lahore

Introduction: Despite unambiguous evidence favouring incision and drainage (I&D) alone for uncomplicated abscesses, antibiotic overuse persists in emergency surgical practice. This study evaluates current management trends against, WHO guidelines to identify stewardship opportunities.

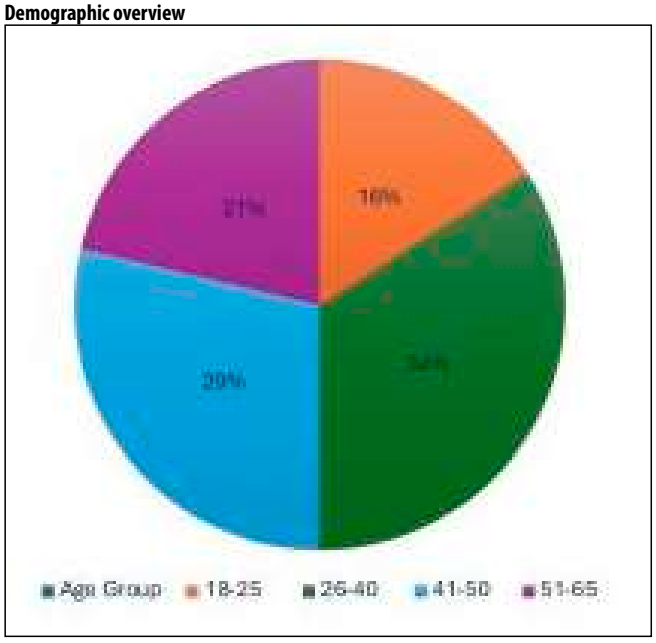
Methods: We reviewed records of all abscess patients treated between January 2023 and January 2024. For each case, we recorded abscess location, whether antibiotics were prescribed post surgery, which antibiotics were given, whether cultures were taken, outcomes and complications.

Result: This study evaluated 162 consecutive patients undergoing abscess drainage at our institution. The cohort included adults aged 26-49 years (34%), with perianal abscesses being the most common presentation (35%). Pus cultures were obtained in just over one-third of cases (n=58). Post-procedural antibiotic prescribing patterns showed 70% of patients (n=113) received antimicrobial therapy, with co-amoxiclav accounting for 69% of prescriptions (n=112). Clinical outcomes showed comparable wound healing rates between groups (94% no antibiotics vs 92% antibiotics). However, the antibiotic group showed higher rates of recurrence (8% vs 6%), hospital readmission (7% vs 3%), and complications including cellulitis (8 vs 2 cases), repeat drainage (15 vs 5 cases), and tissue necrosis (3 vs 1 case).

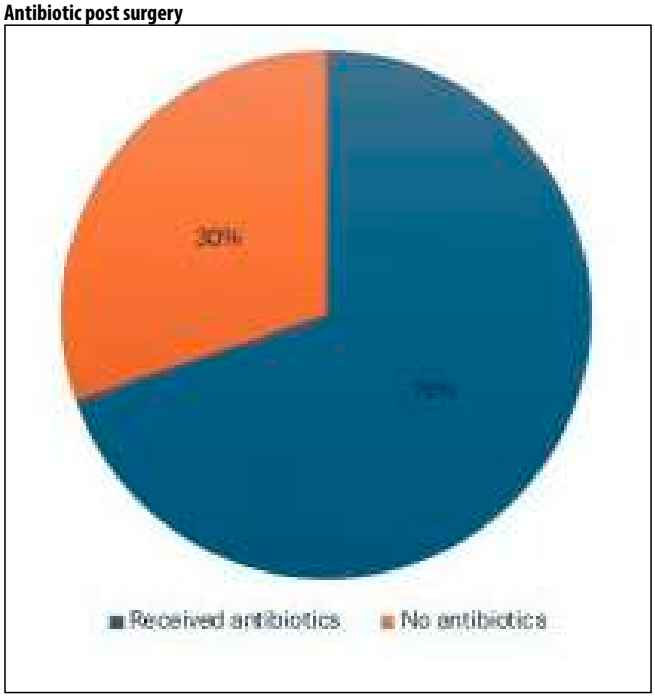
Conclusion: Significant overprescribing of antibiotics for simple abscesses persists despite strong guideline recommendations. Using antibiotics only when truly needed helps fight the growing problem of drug-resistant infections while still providing excellent patient care. we are suggesting following three changes to overcome this issue, clinician education on current guidelines, implementation of a departmental stewardship algorithm and re-audit with feedback.

Keywords: Abscess management Incision and drainage Antibiotic stewardship Postoperative antibiotics Skin/soft tissue infections Surgical site infections Treatment outcomes Wound healing Infection recurrence Retrospective cohort Antimicrobial prescribing Clinical audit

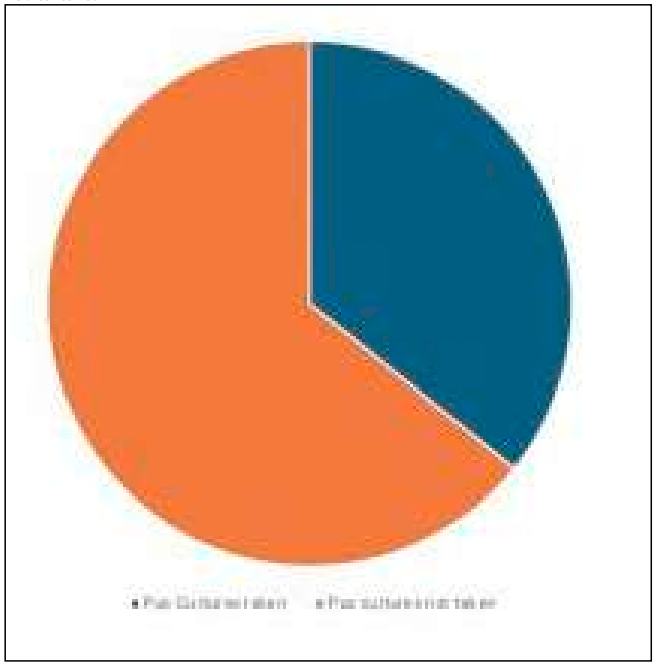
Demographic overview



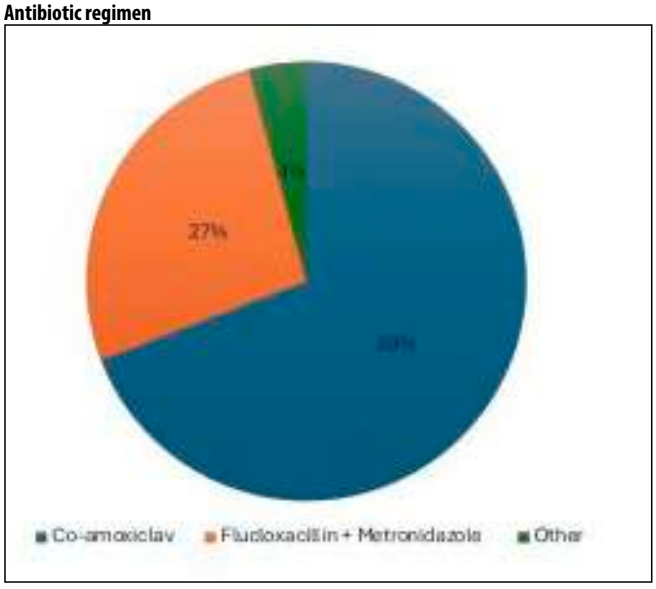
Antibiotic post surgery



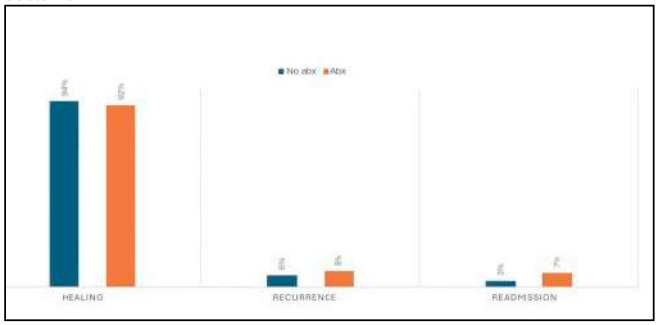
Pus cultures



Antibiotic regimen



Outcome



Abdominal Trauma

PP-035

IS BALANCED MASSIVE TRANSFUSION EQUALLY EFFECTIVE IN REDUCING MORTALITY AMONG ELDERLY POLYTRAUMA PATIENTS? A NATIONWIDE PROPENSITY-MATCHED ANALYSIS

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Background: Balanced massive transfusion (MT), typically defined as a resuscitation strategy approximating a 1:1:1 ratio of red blood cells (RBCs), plasma, and platelets, has demonstrated mortality benefits in severely injured trauma patients. However, limited evidence exists on whether this benefit extends equally to elderly polytrauma patients, whose physiological reserve and transfusion response may differ significantly from younger patients. This study aimed to evaluate the effectiveness of balanced versus unbalanced transfusion in both non-elderly and elderly trauma patients using a nationwide trauma registry.

Methods: We analyzed data from nationwide the Korean Trauma Data Bank (KTDB) between 2017 and 2021. Adult trauma patients (≥20 years) who received ≥10 units of RBCs within 24 hours and had an ISS ≥16 were included. Patients who died in the emergency department or were transferred from other hospitals were excluded. Patients were stratified into non-elderly (<65 years) and elderly (≥65 years) groups. Propensity score matching (PSM) was applied separately within each age group to adjust for baseline differences between those receiving balanced and unbalanced transfusions. The primary outcomes were 24-hour and 30-day all-cause mortality.

Results: A total of 2,109 patients met the inclusion criteria (non-elderly: n=1,435; elderly: n=674). After PSM, 435 patients in each transfusion group were matched in the non-elderly group, and 210 in each group in the elderly cohort. In non-elderly patients, balanced transfusion significantly reduced both 24-hour mortality (12.9% vs. 25.3%, p<0.001) and 30-day mortality (32.2% vs. 43.2%, p=0.001). In contrast, no significant mortality difference was observed in the elderly group (24-hour: 19.0% vs. 26.2%, p=0.080; 30-day: 54.8% vs. 57.6%, p=0.555). Multivariable logistic regression confirmed balanced transfusion as an independent protective factor in non-elderly patients (OR: 0.38; 95% CI, 0.23-0.62; P < 0.001 for 24h, OR: 0.57; 95% CI, 0.40-0.82; P = 0.003 for 30d), but not in elderly patients (OR: 0.75; 95% CI, 0.44-1.29; P = 0.305 for 24h, OR: 1.11; 95% CI, 0.70-1.77; P = 0.657 for 30d).

Conclusion: This nationwide propensity-matched analysis revealed that balanced massive transfusion significantly improves survival in non-elderly trauma patients but fails to confer the same mortality benefit in elderly patients. These findings suggest that age-specific differences in physiology and hemostatic response may influence the effectiveness of transfusion strategies. Further prospective research is warranted to explore tailored resuscitation approaches for elderly trauma populations.

Keywords: Multiple Traumas, Blood Transfusion, Aged, Mortality, Propensity Score

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Flow diagram of patient selection for multiple trauma patients who received unbalaced and balanced transfusion form 2017-2021

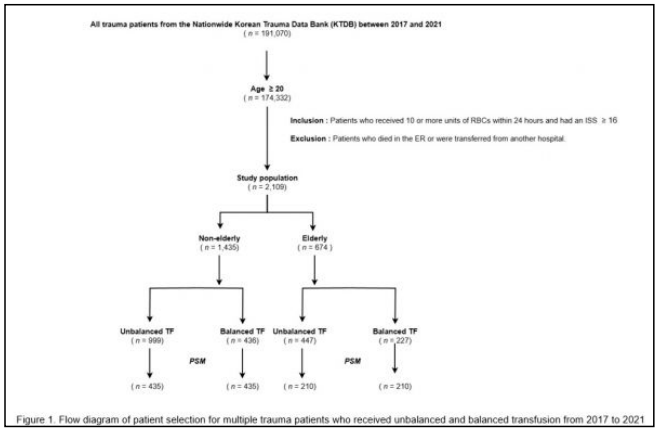
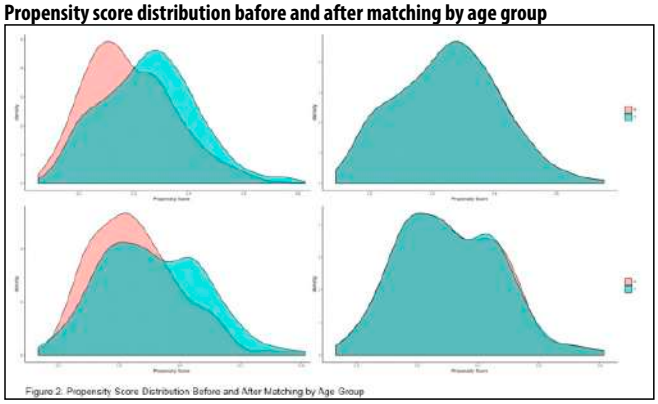


Figure 1. Flow diagram of patient selection for multiple trauma patients who received unbalanced and balanced transfusion from 2017 to 2021

Propensity score distribution before and after matching by age group


Figure 2. Propensity Score Distribution Before and After Matching by Age Group

Comparison of (A) 24-hour and (B) 30-day Mortality by Transfusion Balance in Non-elderly and Elderly Trauma Patients

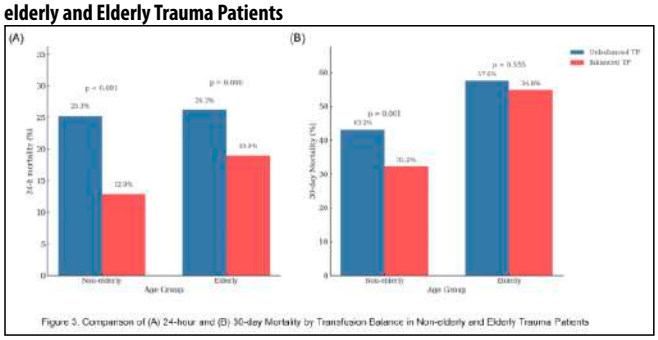


Figure 3. Comparison of (A) 24-hour and (B) 30-day Mortality by Transfusion Balance in Non-elderly and Elderly Trauma Patients

Effect of balanced massive transfusion on 30-day survival in Non-elderly and elderly polytrauma patients

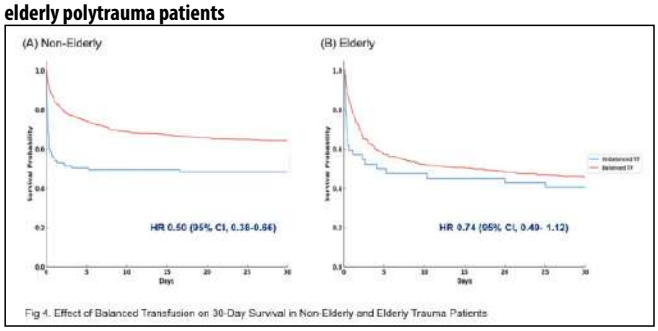


Fig 4. Effect of Balanced Transfusion on 30-Day Survival in Non-Elderly and Elderly Trauma Patients

Table 1. Baseline Characteristics According to Age Group and Balanced Transfusion Status After Propensity Score Matching

	Non-elderly after PSM (n=870)	*Non-elderly after PSM (n=870)*		*Elderly after PSM (n=420)*	*Elderly after PSM (n=420)*	
	Unbalanced TF (n=435)	*Balanced TF (n=435)*	*P-value*	*Unbalanced TF (n=210)*	*Balanced TF (n=210)*	*P-value*
Male, n (%)	345 (79.3)		0.563	137 (65.2)	133 (63.3)	0.684
Mechanism, n (%)			0.589			0.310
Motor vehicle	85 (19.5)	84 (19.3)		22 (10.5)	22 (10.5)	
Motorcycle	54 (12.4)	64 (14.7)		32 (15.2)	19 (9.0)	
Bicycle	7 (1.6)	6 (1.4)		9 (4.3)	9 (4.3)	
Pedestrian	89 (20.5)	73 (16.8)		88 (41.9)	103 (49.9)	
Fall	120 (27.6)	121 (27.8)		39 (18.6)	40 (19.0)	
Slip	4 (0.9)	6 (1.4)		2 (2.4)	2 (1.0)	
Slip	27 (6.2)	30 (6.9)		9 (4.3)	4 (1.9)	
Machine	9 (2.1)	13 (3.0)		0 (0.0)	0 (0.0)	
Penetrating	29 (6.7)	34 (7.8)		2 (1.0)	5 (2.4)	
Others	11 (2.5)	4 (0.9)		4 (1.9)	6 (2.9)	
Comorbidities, n (%)						
Cardiovascular	3 (0.7)	5 (1.1)	0.477	17 (8.1)	12 (5.7)	0.336
Pulmonary	1 (0.2)	2 (0.5)	0.563	3 (1.4)	3 (1.4)	1.000
Neurological	11.5 (2.5)	10 (2.3)	0.825	17 (8.1)	15 (7.1)	0.713
HTN	57 (13.1)	59 (13.6)	0.842	93 (44.3)	90 (42.9)	0.768
DM	48 (11.0)	52 (12.0)	0.671	60 (28.6)	54 (25.7)	0.510
Dementia	0 (0.0)	2 (0.5)	0.157	11 (5.2)	13 (6.2)	0.674
Malignancy	10 (2.3)	7 (1.6)	0.462	20 (9.5)	13 (6.2)	0.204
Liver disease	9 (2.1)	12 (2.8)	0.508	1 (0.5)	1 (0.5)	1.000
CKD	4 (0.9)	3 (0.7)	0.704	4 (1.9)	4 (1.9)	1.000
Vital signs at ED						
SBP, mmHg, mean ±SD	99.4±38.2	104.9±35.3	0.052	103.9±43.2	105.6±41.6	0.702
HR, bpm, mean ± SD	108.4±26.4	110.0±27.2	0.418	95.9±24.9	93.9±24.2	0.422
GCS, median [IQR]	11 [5-14]	10 [5-15]	0.856	9 [4-14]	11 [5-15]	0.069
AIS ≥ 3, n (%)						
Head ≥ 3	156 (36.5)	155 (36.0)	0.882	111 (53.1)	105 (50.0)	0.524
Face ≥ 3	11 (2.5)	9 (2.1)	0.647	5 (2.4)	3 (1.4)	0.475
Neck ≥ 3	4 (0.9)	4 (0.9)	0.997	2 (1.0)	0 (0.0)	0.156
Thorax ≥ 3	293 (67.4)	281 (64.6)	0.391	146 (69.5)	138 (65.7)	0.404
Abdomen ≥ 3	209 (48.3)	212 (48.8)	0.864	86 (41.0)	86 (41.0)	1.000
Spine ≥ 3	43 (9.9)	44 (10.1)	0.910	19 (9.0)	14 (6.7)	0.365
Upper extremities ≥ 3	13 (3.0)	24 (5.5)	0.064	10 (4.8)	8 (3.8)	0.630
Lower extremities ≥ 3	235 (54.1)	220 (50.7)	0.308	98 (46.7)	99 (47.4)	0.886
Injury Severity Parameter						
ISS, mean ±SD	33.1±12.2	32.6±12.8	0.556	33.6±11.8	32.5±11.5	0.283
16-24, n (%)	94 (21.6)	81 (18.6)	0.218	44 (21.0)	59 (28.1)	0.089
25≤, n (%)	341 (78.4)	354 (81.4)		166 (79.0)	151 (71.9)	

Table2. Clinical Outcomes According to Age Group and Balanced Transfusion Status After Propensity Score Matching

	Non-elderly after PSM (n=870)	*Non-elderly after PSM (n=870)*		*Elderly after PSM (n=420)*	*Elderly after PSM (n=420)*	
	Unbalanced TF (n=435)	*Balanced TF (n=435)*	*P-value*	*Unbalanced TF (n=210)*	*Balanced TF (n=210)*	*P-value*
Transfusion, median [IQR]						
pRBCs, units/4h	11 [7-17]	10 [7-13]	< 0.001*	9 [6-12]	8 [5-12]	0.006*
Plasma, units/4h	6 [3-9]	8 [5-12]	< 0.001*	5 [2-8]	7 [4-11]	0.011*
Platelet, units/4h	0 [0-0]	0 [0-1]	0.036*	0 [0-0]	0 [0-0]	0.495
pRBCs, units/24h	17 [13-26]	14 [12-21]	< 0.001*	15 [12-21]	14 [12-18]	0.002*
Plasma, units/24h	12 [7-18]	18 [13-26]	< 0.001*	11 [8-17]	16 [13-23]	< 0.001*
Platelet, units/24h	6 [0-10]	7 [0-10]	0.156	8 [0-10]	8 [0-11]	0.295
Complications, n (%)						
Cardiovascular	48 (11.0)	31 (7.1)	0.045*	28 (13.3)	35 (16.7)	0.339
Pneumonia	46 (10.6)	54 (12.4)	0.395	21 (10.0)	24 (11.4)	0.636
ARDS	9 (2.1)	16 (3.7)	0.155	7 (3.3)	9 (4.3)	0.610
Pulmonary embolism	4 (0.9)	4 (0.9)	1.000	1 (0.5)	0 (0.0)	0.317
DVT	11 (2.5)	12 (2.8)	0.833	5 (2.4)	5 (2.4)	1.000
CRABSI	7 (1.6)	9 (2.1)	0.614	3 (1.4)	2 (1.0)	0.653
AKI	34 (7.8)	52 (12.0)	0.041*	21 (10.0)	27 (12.9)	0.357
UTI	5 (1.1)	12 (2.8)	0.086	6 (2.9)	2 (1.0)	0.153
Severe sepsis	23 (5.3)	19 (4.4)	0.527	8 (3.8)	11 (5.2)	0.481
ICU Parameter, n (%)						
ICU admission	426 (99.1)	427 (99.1)	0.997	209 (99.5)	208 (99.0)	0.562
Unplanned intubation	11 (2.5)	15 (3.4)	0.426	7(3.3)	7 (3.3)	1.000
Unplanned ICU readmission	13 (3.0)	9 (2.1)	0.388	7(3.3)	2 (1.0)	0.092
Unplanned re operation	16 (3.7)	24 (5.5)	0.195	9 (4.3)	6 (2.9)	0.430
Discharge disposition, n (%)			0.002*			0.752
Home	72 (16.7)	79 (18.2)		18 (8.6)	24 (11.4)	
Transfer to other hospital	155 (35.9)	197 (45.5)		57 (27.1)	56 (26.7)	
Mortality, n (%)						
24h mortality	110 (25.3)	56 (12.9)	< 0.001*	55 (26.2)	40 (19.0)	0.080
30-day mortality	188 (43.2)	140 (32.2)	0.001*	121 (57.6)	115 (54.8)	0.555

Table 3. Multivariable Logistic Regression for 24-Hour and 30-Day Mortality in Non-Elderly Trauma Patients

	24h mortality			*30d mortality*		
	OR	*95% CI*	*p Value*	*OR*	*95% CI*	*p Value*
sBP	0.99	0.98-1.00	0.033*	0.99	0.99-1.00	0.708
GCS	0.86	0.82-0.91	<0.001*	0.83	0.79-0.86	<0.001*
Age group	1.08	0.98-1.19	0.113	1.11	1.03-1.20	0.003*
Balanced transfusion	0.38	0.23-0.62	<0.001*	0.57	0.40-0.82	0.003*

Table 4. Multivariable Logistic Regression for 24-Hour and 30-Day Mortality in Elderly Trauma Patients

	24h mortality			*30d mortality*		
	OR	*95% CI*	*p Value*	*OR*	*95% CI*	*p Value*
sBP	0.99	0.99-1.00	0.702	1.00	0.99-1.01	0.240
GCS	0.89	0.85-0.95	<0.001*	0.84	0.80-0.88	<0.001*
Age group	1.12	0.99-1.45	0.063	1.29	1.08-1.53	0.004*
Balanced transfusion	0.75	0.44-1.29	0.305	1.11	0.70-1.77	0.657

Military Surgery

PP-036

COMPLICATIONS ASSOCIATED WITH TOURNIQUET APPLICATION ON THE BATTLEFIELD IN WOUNDED WITH INJURIES TO THE MAIN VESSELS OF THE LIMBS

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Kharkiv National Medical University, Ukraine

Introduction: Bleeding from the vessels of the injured limb remains a major and important cause of preventable battlefield deaths in both the civilian world and the theatre of operations, accounting for approximately 9% of military deaths in the ongoing Russian-Ukrainian war. Tourniquet application is considered an effective and simple (by medical and non-medical personnel) method of preventing casualty exsanguination in pre-hospital injuries. There are several indications for tourniquet application on the battlefield, which include 1) amputation of a limb, 2) multiple traumas with limb disruption, 3) uncontrolled bleeding from a large vessel of the limb, 4) a multi-victim event with the inability to qualitatively assess the type of bleeding and choose a method of stopping it, and 5) a nighttime scenario. The use of a tourniquet to stop bleeding is a frequent necessity at all stages of the treatment of patients with vascular injuries of the extremities. Complications of tourniquet placement, such as neuropraxia (first degree of damage) associated with direct nerve pressure or ischaemia, as well as rhabdomyolysis, limb compartment syndrome, increased intravascular coagulation in the form of vascular thrombosis and limb ischaemia, are well known.

Materials and methods: In this report, we present six cases after treatment at the preliminary stages of evacuation, where patients were tourniqueted to stop bleeding (taking into account the standards and following the "golden hour" rule), underwent vascular surgery (autovenous vascular plastic surgery, vessel ligation, defect suturing), fasciotomy, etc. In a specialised hospital, further rehabilitation, secondary surgical treatment of wounds with suturing, anti-inflammatory therapy and symptomatic therapy were carried out, individually aimed at overcoming complications arising from disorders of the main blood flow when the injuries were sustained. In all 6 cases, CAT tourniquets were available and used for urgent bleeding control as part of the individual first aid kit.

Results and discussion: The battlefield is characterised by a high degree of stress and conditions that are extremely difficult for the proper assessment and treatment of combat injuries of the extremities. Thus, based on the Military Medical Clinical Centre of the Southern Region, 2496 patients with limb injuries requiring tourniquets were analysed, and in 92 cases (3.7%), limb amputations were performed. The number of deaths was 101 (4.0%). The average duration of tourniquet application on the limb ranged from (205.9±8.1) min, i.e. the limbs were subjected to significant ischaemia. In our observations, the duration of tourniquet application in patients was longer and amounted to (218±72.23) minutes (median - 180; minimum - 150; maximum - 320). In one clinical case, during the evacuation of patients from the battlefield, the tourniquet was loosened when it had been on the limb for more than 2 hours.

Conclusions: The findings of other studies confirmed that there is a need to improve the training of medical staff in the use of tourniquets by adhering to the following practical recommendations to prevent post-tourniquet syndrome: a medical professional accompanying the injured or the injured person, if able, should loosen the tourniquet and examine the bleeding wound every 2 hours: if there are no signs of massive bleeding, the tourniquet should be replaced with a pressure dressing.

Keywords: limb injury, urgent bleeding control, turnstile, post-tourniquet syndrome, clinical cases

On 12.08.2023, a 22-year-old male patient presented with a problem of mine-blast injury to a limb. The treatment plan included conservative measures.



The patient is a 22-year-old male, and the following observations were made on 15/12/23 prior to the application of secondary sutures.



Acute Abdominal and Gastrointestinal Emergencies

PP-037

A RARE CAUSE OF GASTROINTESTINAL PERFORATION: METASTASIS OF LUNG ADENOCARCINOMA – A CASE REPORT

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Introduction: Lung adenocarcinoma most commonly metastasizes to the brain, liver, adrenal glands, and bones. Metastasis

to the gastrointestinal (GI) tract is rare, with a reported incidence of only 0.5–1% in the literature. GI metastases are often asymptomatic and are usually diagnosed when complications such as perforation, obstruction, or bleeding arise. Here, we present a rare case of lung adenocarcinoma metastasis diagnosed during surgery in a patient presenting with acute abdomen and found to have diffuse ulcerative lesions in the small intestine.

Case Presentation: A 72-year-old male patient presented to the emergency department with fever and diffuse abdominal pain. Contrast-enhanced abdominal CT revealed free air and fluid collection in the peritoneal cavity (Figure 1). Chest CT demonstrated a mediastinal mass (Figure 2). Emergency laparotomy was performed. Intraoperatively, multiple ulcerative and necrotic lesions were observed along a 210 cm segment of the small intestine extending from the ligament of Treitz to the ileocecal region, occurring every 10–15 cm. Some of these areas were perforated (Figure 3). Resection was performed, followed by the creation of a terminal jejunostomy and a mucous fistula at the ileocecal level.

Pathology: Macroscopic examination of the resected specimen showed numerous ulcerative lesions. Microscopically, tumor cells infiltrated all layers from the serosa to the mucosa, exhibiting marked pleomorphism, eosinophilic cytoplasm, and high mitotic activity (Figure 4). Immunohistochemical staining revealed positivity for CK7, TTF-1, and EMA, and negativity for CK20, CDX2, and CEA. These findings supported the diagnosis of a poorly differentiated adenocarcinoma of pulmonary origin. The PD-L1 tumor proportion score (TPS) was found to be 70%.

Discussion: Gastrointestinal metastasis of lung adenocarcinoma is an exceptionally rare phenomenon. In the literature, such metastases usually occur at advanced stages as part of widespread systemic disease. In symptomatic and isolated GI metastases, surgical intervention—particularly in the presence of complications—has been reported to improve both survival and quality of life. In our case, the diagnosis was established intraoperatively, and the patient's condition stabilized following surgical management. In addition to immunohistochemical profiling, the high PD-L1 expression indicates the potential suitability for immunotherapy.

Conclusion: In cases presenting with diffuse ulcerative lesions in the small intestine, metastatic processes—particularly those originating from the lung—should be considered in the differential diagnosis. Surgical resection may provide both diagnostic and therapeutic benefits in selected symptomatic patients. Furthermore, PD-L1 positivity may suggest that immunotherapy could be an effective treatment option in such cases.

Keywords: Lung adenocarcinoma, Gastrointestinal metastasis, Small bowel perforation

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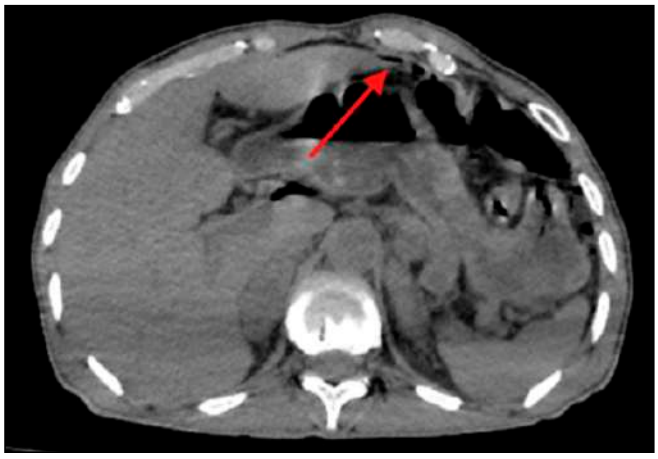


Figure 1. Pneumoperitoneum

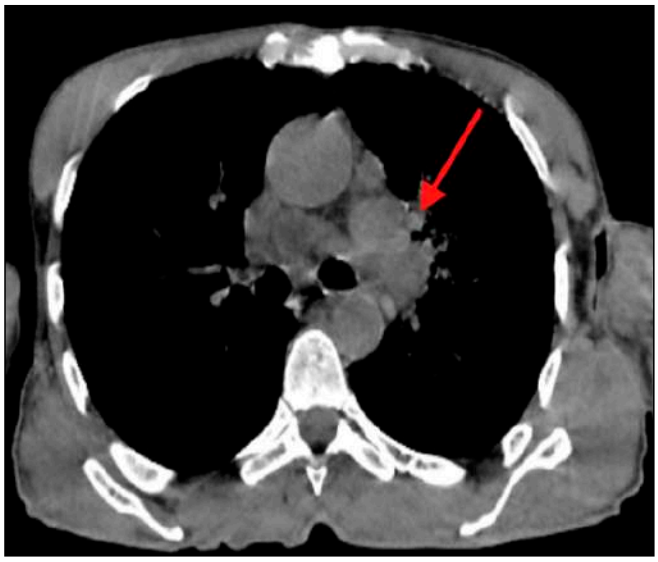


Figure 2. Mediastinal Mass



Figure 4. Small Bowel Metastasis of Lung Cancer

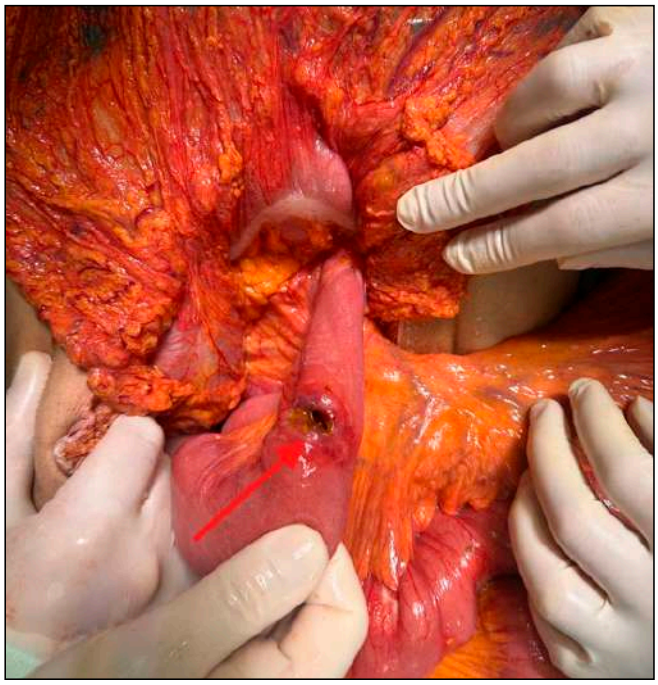


Figure 3. Jejunal Perforation

Acute Abdominal and Gastrointestinal Emergencies

PP-038

JEJUNAL OBSTRUCTION DUE TO STRICTURE IN A PATIENT WITH FACTOR V LEIDEN MUTATION: A RARE CASE REPORT

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Introduction: Ileus is defined as impaired bowel passage due to mechanical or functional causes. Among its rare etiologies are strictures secondary to vascular anomalies. Factor V Leiden (FVL) mutation creates a prothrombotic state, which may lead to mesenteric ischemia and, in the long term, stricture formation.

Case presentation: A 55-year-old female patient presented with complaints of abdominal pain, nausea-vomiting, and abdominal distention. Imaging studies (FIGURE 1) revealed a totally obliterated jejunal stricture located approximately 20 cm distal to the ligament of Treitz. The patient had a known history of Factor V Leiden mutation. During surgery, resection of the strictured jejunal segment (both proximal and distal jejunum) was performed (FIGURE 2), along with excision of the falciform ligament and sampling of lymph nodes adjacent to the Treitz area.

Histopathological examination revealed extensive ulceration, submucosal fibrosis, active chronic inflammation, and regenerative and hyperplastic changes. CMV testing was negative. No malignancy was detected in the lymph nodes or the excised falciform ligament.

Discussion: Factor V Leiden mutation is a known prothrombotic condition that can predispose to mesenteric venous thrombosis (MVT). Narawane et al. reported a surgically treated jejunal stricture caused by FVL and protein C deficiency, with a favorable long-term outcome. Heresbach et al. documented small bowel infarction in four patients carrying the FVL mutation. Literature also reports that patients managed conservatively after MVT may develop strictures months later.

The prevalence of FVL carriers in the general population ranges from 2% to 7%, and such late gastrointestinal complications should be considered. This case highlights how prothrombotic disorders can manifest with rare gastrointestinal complications.

Conclusion: In cases of persistent ileus, vascular etiologies—particularly thrombophilic disorders—should not be overlooked. In patients with Factor V Leiden mutation, mesenteric ischemia may result in delayed stricture formation. Surgical intervention may serve both diagnostic and therapeutic purposes in this patient population.

Keywords: Factor V Leiden mutation , Mesenteric venous thrombosis (MVT) , Jejunal stricture , Mechanical ileus

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Figure 1. Small bowel obstruction

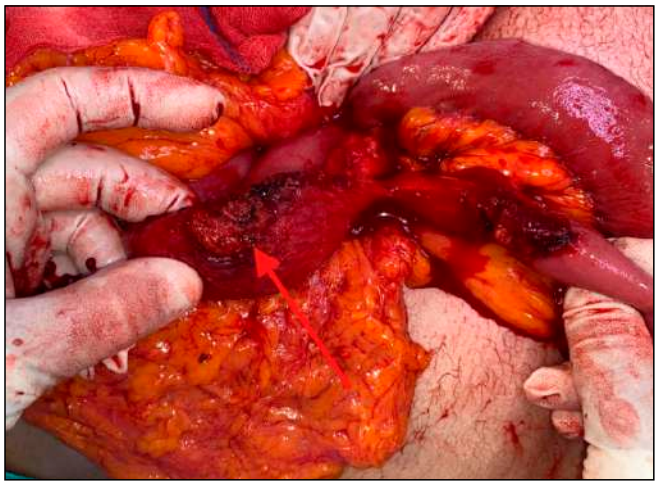


Figure 2. Jejunal stricture

Minimal Invasive Emergency Surgery

PP-039

USE OF GRANUDACYN® SOLUTION IN THORACOSCOPIC MANAGEMENT OF PLEURAL EMPYEMA: A STAGE-BASED OBSERVATIONAL STUDY

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Introduction: Pleural empyema progresses through three clinical stages: exudative (I), fibrino-purulent (II), and organized (III). While chest drainage remains the first-line treatment, surgical intervention is often required in advanced phases. Granudacyn®, a hypochlorous acid-based solution with antimicrobial activity, was evaluated as a pleural irrigant during thoracoscopy.

Methods: Twenty-six patients were stratified according to empyema stage:

- **Group I:** 9 patients with exudative-phase empyema
- **Group II:** 7 patients with fibrino-purulent empyema
- **Group III:** 10 patients with organized empyema

All patients underwent thoracoscopy with debridement and pleural irrigation using 500 mL of Granudacyn®. Clinical and laboratory data, including inflammatory markers (CRP, WBC, ESR, PCT), CT scan findings, and hospital stay duration, were collected.

Results: All patients experienced clinical improvement and a reduction in inflammatory markers. Patients in Group I had the fastest recovery (mean stay <14 days). Group II showed improvement within 2 weeks. Group III required longer hospitalization, yet with favorable outcomes. No adverse events related to Granudacyn® were observed.

Discussion: Granudacyn® proved safe and well tolerated at all empyema stages. Early-phase patients benefited from faster recovery, while those in advanced stages achieved resolution over extended periods. Its use may support decontamination and inflammation control during thoracoscopy.

Conclusions: Thoracoscopic pleural irrigation with Granudacyn® appears to be a promising adjunctive treatment across the different stages of empyema, with positive preliminary outcomes and no adverse reactions

Keywords: Pleural empyema, granudacyn

Hernia

PP-040

ENHANCING POSTOPERATIVE CARE THROUGH REMOTE WOUND MONITORING: A QUALITY IMPROVEMENT STUDY USING A DIGITAL PLATFORM IN INCISIONAL HERNIA SURGERY.

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Guy's and St Thomas' Nhs Foundation Trust

Introduction: Surgical site infections (SSIs) remain a common cause of postoperative morbidity, particularly following short stay procedures such as hernia repairs [1]. Early recognition of wound complications is essential, but traditional follow up often delays detection [2]. Remote digital platforms have shown promise in improving safety and patient experience by supporting earlier intervention after discharge [3,4].

Methods: We conducted a prospective observational study of 122 patients undergoing complex incisional hernia surgeries between September 2024 and March 2025. Eligible patients were enrolled in a structured remote monitoring programme using the Isla digital platform, which allows secure, asynchronous submission of wound photographs and symptom checklists [4]. Clinical and demographic data were analysed to assess engagement, outcomes, and participation across subgroups.

Results: Of 121 eligible patients, 94.2 percent enrolled on Isla and 87.7 percent submitted wound data. The patient reported SSI rate was 9.0 percent. Wound dehiscence occurred in 15.4 percent of cases, with 8.1 percent being superficial and 4.1 percent involving deeper layers. Antibiotic use for wound concerns was reported in 5.7 percent. Two patients were escalated for in person review based on remote findings.

The Isla platform enabled clinicians to review images and provide guidance within 24 hours. Patients reported the process was easy to use and reassuring. Technical barriers were minimal, with only two patients requiring support. Patients of all ages, backgrounds, and locations, including some living more than 400 miles from the hospital, were able to engage with the platform at similar rates, highlighting its broad accessibility and ease of use [6].

Discussion: Remote wound monitoring via Isla was feasible, safe, and well received. It enabled early identification of complications and reduced reliance on routine in person visits. These findings support its role in short stay surgical pathways, particularly where timely access to follow up may be limited [5,7].

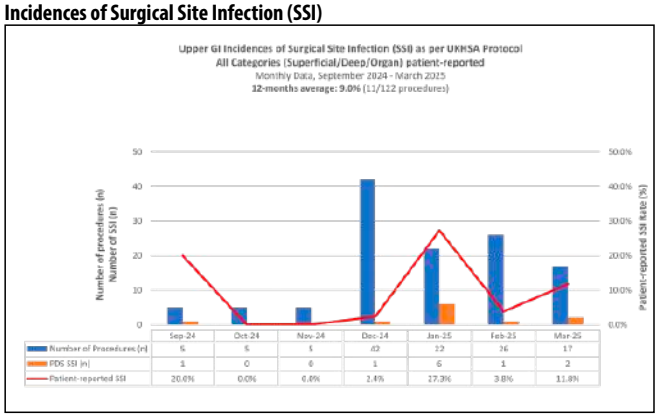
Conclusion: Digital wound surveillance using Isla is a widely applicable approach to postoperative care. High patient engagement and clinically relevant outcomes suggest it can complement traditional follow up. Further research should explore long term impact, digital inclusion, and integration with clinical systems [8,9].

Keywords: Hernia Repair-Surgical Site Infection-Postoperative Monitoring-Remote Wound Surveillance- Digital Health-Patient Engagement-Surgical Outcomes

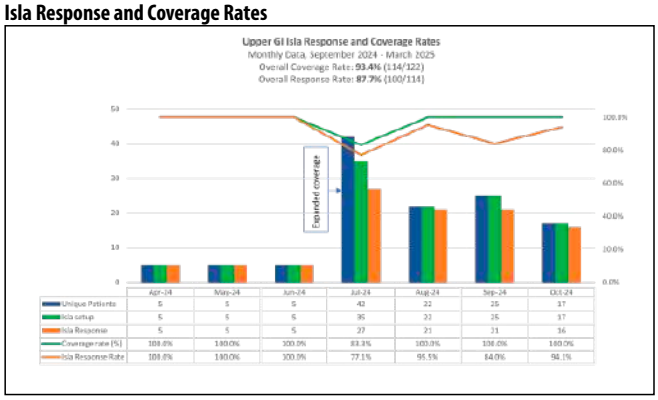
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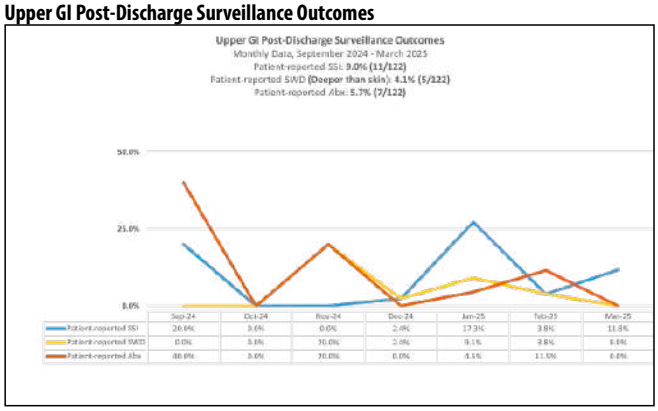
Incidences of Surgical Site Infection (SSI)



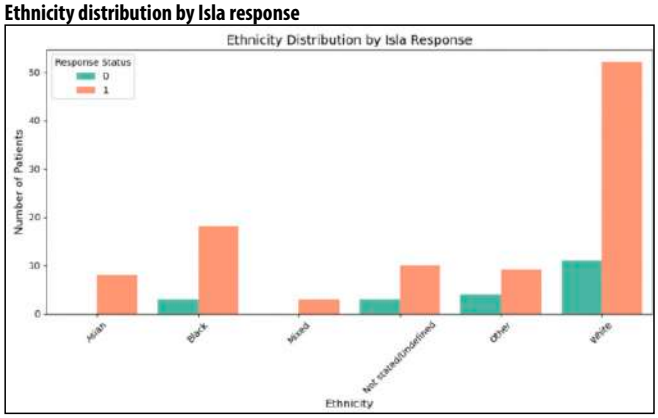
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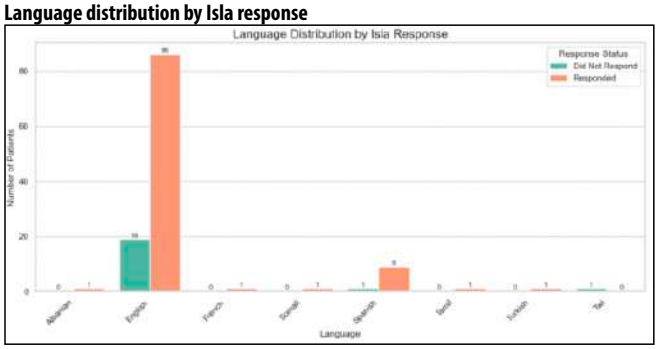
Upper GI Post-Discharge Surveillance Outcomes



Ethnicity distribution by Isla response



Language distribution by Isla response



Perioperative, Critical Care & TICU, SICU

PP-041

IMPROVING EMERGENCY GENERAL SURGERY THEATRE EFFICIENCY THROUGH A STRUCTURED WARM LIST PATHWAY: A CLOSED LOOP AUDIT AT A TERTIARY HOSPITAL IN LONDON

Mark Youssef, Sarah Wheatstone, Emma Stewart-Parker

Guy's and St Thomas' Nhs Foundation Trust

Introduction: Theatre efficiency is a national priority, driven by elective backlogs, post-pandemic recovery, and increasing demand on emergency services. Emergency general surgery (EGS) lists frequently face variability in utilisation due to unpredictable case demand and short notice cancellations. In line with GIRFT principles, a closed loop audit was conducted to assess current list performance and implement a Warm List pathway to better utilise theatre capacity.

Methods: A retrospective audit was performed over two cycles. The first cycle included EGS lists from January to June 2023. The second cycle, from October 2024 to March 2025, followed the introduction of a Warm List pathway. Data were collected from electronic systems and included number of lists, cases completed, procedures performed, and discharge outcomes.

Results: In the first cycle, 57 of 71 scheduled lists were completed. Eight were cancelled due to no suitable cases. A total of 102 procedures were performed, averaging 1.8 cases per list. Common procedures included EUA, laparoscopic appendectomy, abscess drainage, hernia repair, and laparotomy. Same day discharge was achieved in 37 percent of cases. To improve list usage, the Warm List pathway was introduced. Inclusion criteria were patients ASA I or II, low anaesthetic risk, suitable for hernia repair (excluding recurrent or complex hernias) or lymph node biopsy, able to attend at short notice, with an escort and consent for possible cancellation. Exclusion criteria included frailty, complex medical needs, and anticoagulation.

Pathway: Initial assessment involved consultant or registrar review, renal function and infection screening, ECG if required, and first stage consent. Patients were added to the Warm List on the electronic system. On the day of surgery, they were admitted to the surgical day unit for final preparation, with flexibility based on emergency pressures. Post-operatively, patients were reviewed and discharged directly from recovery with clear instructions. Following implementation, 12 additional patients were successfully operated on during previously unused time. No major complications were reported. The pathway improved utilisation and patient experience.

Conclusion: This project demonstrated improved EGS theatre efficiency through a structured Warm List pathway, aligned with GIRFT principles. Continued re-audit and team engagement are key to sustaining these gains.

Keywords: Theatre Efficiency, Perioperative Optimisation, Warm List Pathway, Day Case Surgery, Preoperative Assessment, Surgical Workflow

Minimal Invasive Emergency Surgery

PP-042

PLEURAL EMPYEMA IN A TRACHEOSTOMIZED ALS PATIENT: EFFECTIVE MANAGEMENT WITH GRANUDACYN® IRRIGATION

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Introduction: Pleural empyema is a severe inflammatory process characterized by the accumulation of purulent fluid in the pleural space. This condition typically evolves through three distinct stages: the exudative phase, where a sterile pleural effusion forms; the fibrinopurulent phase, marked by bacterial invasion, fibrin deposition, and loculation; and the organizational phase, where fibroblasts infiltrate the pleura, leading to the formation of a rigid pleural peel. Accurate staging is crucial for guiding treatment decisions and determining the most appropriate management strategy, ranging from simple drainage to more invasive surgical interventions. The effective management of pleural empyema, especially in fragile or high-risk patients, remains a significant clinical challenge.

Methods: We report the case of a 73-year-old male with spinal-onset ALS and chronic respiratory failure, already tracheostomized, who was admitted with fever and dyspnea. At admission, laboratory tests revealed significant inflammatory markers, including leukocytosis (WBC 18.500/mm^3), neutrophilia (N 87%), and elevated C-reactive protein (PCR 185 mg/L). A chest CT revealed a massive left-sided pleural empyema (12×8×17 cm). A 12 Fr chest drain was inserted under ultrasound guidance. Despite initial drainage, purulent effusion persisted. On the 10th day of hospitalization, pleural irrigation with Granudacyn® (a hypochlorous acid-based solution) was initiated through the existing drain. Clinical, laboratory, and radiologic data were monitored throughout.

Results: Serial CT scans showed progressive reduction of the empyema cavity (9×3×10 cm on day 4 of irrigation, and ~2 cm by day 18), with improvement in lung aeration and resolution of atelectasis. No need for surgical debridement or intrapleural fibrinolytics arose. Clinically, the patient exhibited increased oxygen saturation, reduced subjective dyspnea, and improved ventilatory comfort. No adverse reactions to the solution were noted. The patient was discharged on day 30 with near-complete radiological and clinical resolution.

Conclusions: Pleural irrigation with Granudacyn® proved to be an effective and well-tolerated adjunctive therapy for empyema in a fragile, tracheostomized ALS patient. This minimally invasive approach facilitated empyema resolution and respiratory improvement without surgical intervention. It may represent a valid palliative strategy in similar high-risk patients.

Keywords: Granudacyn, pleural empyema

Education for Emergency Surgery

PP-043

TRAINING PROGRAM FOR TRAUMA SURGEONS AND INTERVENTIONAL RADIOLOGISTS AT YOKOHAMA MAJOR TRAUMA CENTER: INNOVATIVE APPROACHES TO SKILL DEVELOPMENT

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Background: Our institution serves as a designated severe trauma center for Yokohama City's 3.77 million population since April 2015. With over 100 medical staff including 17 senior residents, we face the challenge of training specialized trauma surgeons and interventional radiologists (IR physicians) in an environment with limited emergency case volume.

Objective: To develop an innovative training system that ensures adequate skill acquisition and maintenance for trauma surgeons and emergency IR specialists, including both certified physicians and those pursuing certification, overcoming the limitations of case-dependent learning in trauma medicine. In FY2023, we treated 1,120 emergency patients with 150 severe trauma cases (ISS≥16). Emergency hemostatic procedures were limited to 37 surgical interventions and 63 transcatheter arterial embolization (TAE) procedures. The number of physicians with specialized certifications or pursuing such certifications (trauma surgery specialists and emergency IR certified physicians) has increased from 6 to 12 over the past three years.

Methods: We established a comprehensive training framework incorporating: (1) Strategic partnerships with high-volume domestic hospitals for external rotations, (2) International fellowship programs providing exposure to advanced techniques, (3) Interdepartmental collaboration with general surgery and diagnostic radiology departments to provide elective case experience.

Results: This multi-modal approach has demonstrated progress in our training objectives. The increase in physicians pursuing specialized certifications indicates growing engagement with our training framework. The program has maintained clinical service quality while providing enhanced training opportunities. Our program addresses the fundamental challenge in trauma training - the "case volume paradox" where specialized skills are essential but emergency cases alone provide insufficient practice opportunities. By creating systematic access to both emergency and elective procedures, we ensure continuous skill development regardless of trauma case fluctuations.

Conclusions: Our innovative training system successfully overcomes traditional limitations in trauma medical education, providing a sustainable pathway for developing highly skilled trauma surgeons and IR specialists in resource-constrained environments.

Keywords: training, severe trauma center, trauma IR

Organ-Specific Emergencies

PP-044

RETROPERITONEAL HEMATOMA IN ZONE II DUE TO RUPTURE OF TFE3-REARRANGED RENAL CELL CARCINOMA

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Introduction: Renal cell carcinoma (RCC) comprises a heterogeneous group of malignancies arising from the epithelial cells of the renal tubules, accounting for 90% of adult renal neoplasms. Among these, Xp11.2 translocation RCC with TFE3 gene fusion is a rare subtype, predominantly affecting pediatric and young adult populations, with a female predominance

Chronic kidney disease (CKD), regardless of etiology, predisposes to RCC through degenerative cystic changes in native kidneys. Acquired cystic kidney disease, seen in 5–20% of patients initiating dialysis, becomes nearly universal after 10 years of treatment, regardless of dialysis modality

Retroperitoneal hematoma is a rare clinical entity, with its presentation dependent on the rate and volume of bleeding. Hemorrhage can be spontaneous or secondary to trauma or iatrogenic causes. Spontaneous cases may be due to coagulopathies, vasculitis, aneurysm rupture, or hemorrhage from retroperitoneal tumors—either benign or malignant.

Case Report: A 19-year-old male with a history of kidney transplantation for CKD five years prior and a current return to dialysis presented with a 24-hour history of insidious right lumbar pain radiating. He denied trauma or hematuria.

On physical examination, the abdomen was asymmetrical with right-sided distension, generalized tenderness and guarding. Laboratory tests revealed hemoglobin 5.4 g/dL, leukocytosis (26,470/mm^3, neutrophils 91%), and creatinine 8.56 mg/dL. Abdominal CT showed a heterogeneous mass with trabeculations in the right flank (retroperitoneal zone II), measuring approximately 20 × 8 cm, displacing adjacent structures. The right kidney was not visualized, while the transplanted kidney in the left iliac fossa appeared preserved.

The patient was anuric and required hemodialysis on day one. Despite conservative management and transfusion of five units of red blood cells, hemoglobin levels remained unchanged. With persistent symptoms of an acute surgical abdomen, a diagnosis of complicated retroperitoneal hematoma was made, and surgical intervention was performed.

During laparotomy the Cattell-Braasch maneuver exposed a 2,500 mL retroperitoneal hemorrhage associated with a dysmorphic, atrophic right kidney (3 cm) and minor active bleeding. A radical right nephrectomy was performed with complete hemostasis. The patient was extubated and transferred to the ICU.

Histopathological analysis confirmed a Grade II clear cell RCC, confined to the kidney, without vascular, perineural, sinus, hilar, or ureteral involvement. Immunohistochemistry demonstrated a clear cell RCC with TFE3 gene rearrangement.

Postoperatively, the patient showed clinical improvement, with hemoglobin rising to 8.1 g/dL and creatinine decreasing to 6.9 mg/dL, though dialysis was still required. On postoperative day seven, he developed partial abdominal wall dehiscence, which was surgically corrected. He was discharged on postoperative day 15

Discussion: CKD is a known risk factor for RCC, with most cases diagnosed post-transplantation. Spontaneous hemorrhage due to RCC is rare but potentially fatal, occurring in less than 1% of cases. It may present as the initial manifestation of the disease and constitutes a surgical emergency. The bleeding may result from capsular rupture, local invasion, or vascular erosion. Prompt recognition is essential, as hypovolemic shock may develop rapidly, increasing patient morbidity and mortality, and complicating subsequent surgical management

Keywords: retroperitoneal hematoma, renal cell carcinoma, TFE3, laparotomy, hemorrhage

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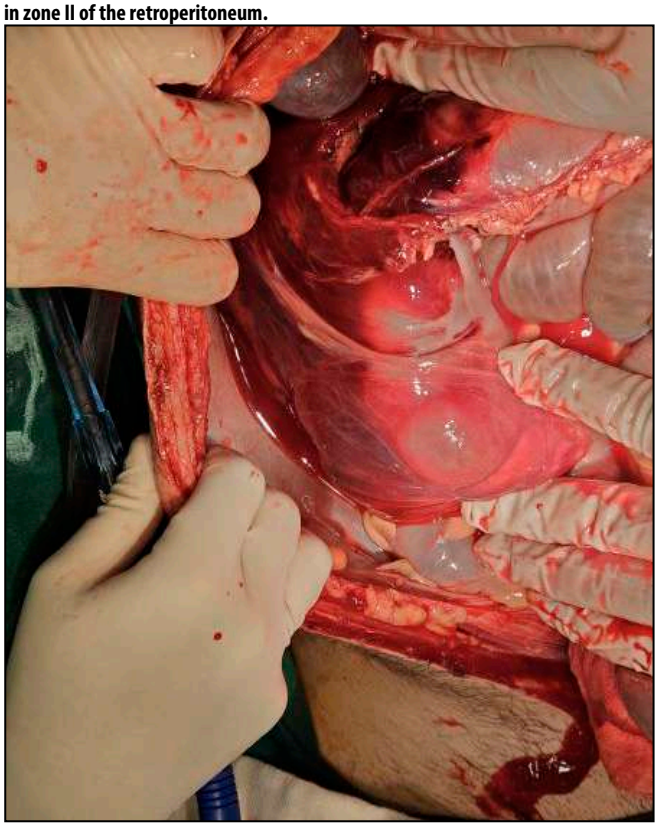
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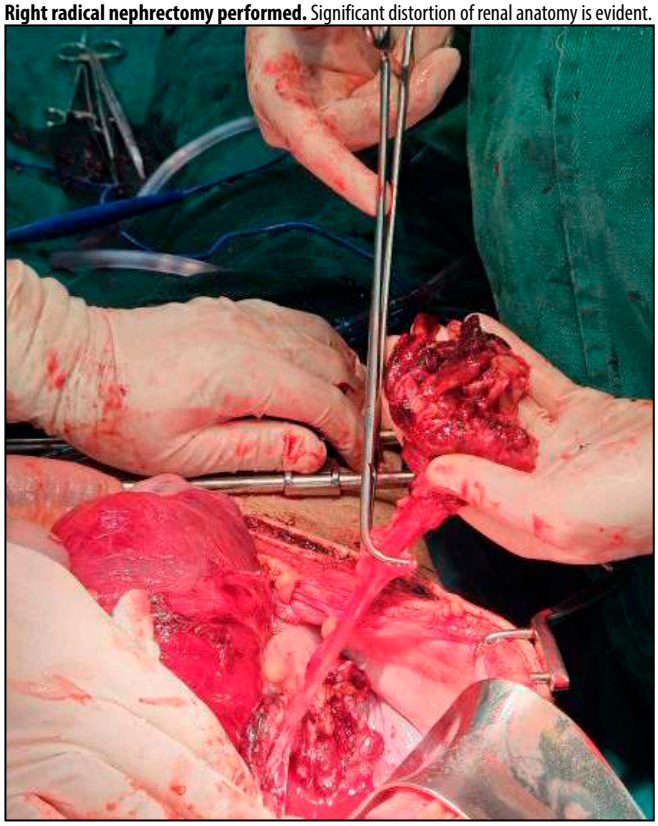
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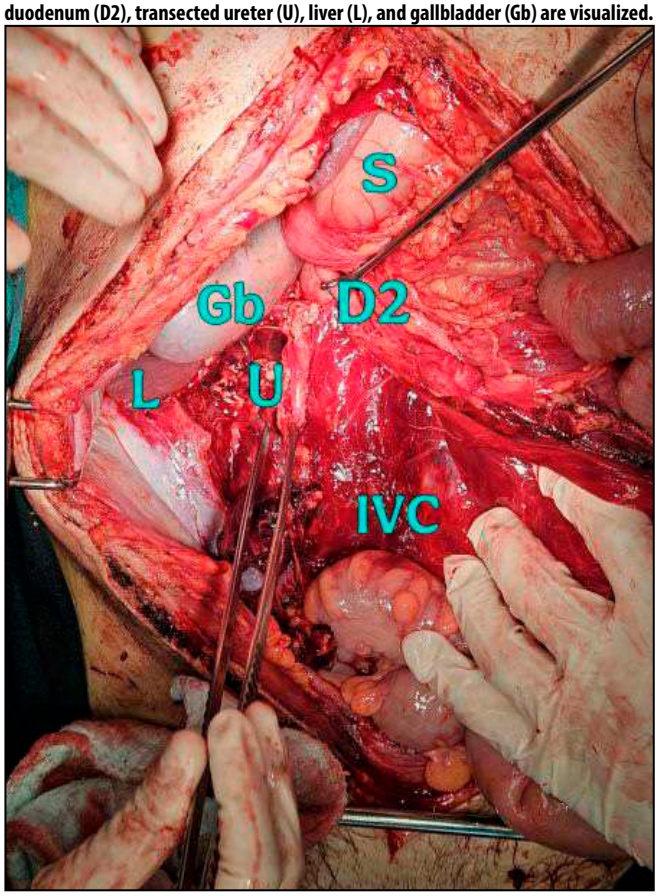
Laparotomy: no free intraperitoneal fluid is observed, but a hematoma is present in zone II of the retroperitoneum.



Right radical nephrectomy performed. Significant distortion of renal anatomy is evident.



Cattell-Braasch maneuver following nephrectomy exposing the retroperitoneum: the inferior vena cava (IVC), stomach (S), retracted second portion of the duodenum (D2), transected ureter (U), liver (L), and gallbladder (Gb) are visualized.



Organ-Specific Emergencies

PP-045

WHEN AIR RETURNS: RE-EXPANSION PULMONARY EDEMA IN A LATE-PRESENTING PNEUMOTHORAX

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Re-expansion pulmonary edema (REPE) is a rare but potentially life-threatening complication that can occur after rapid re-expansion of a chronically collapsed lung, particularly following chest tube drainage of a pneumothorax. Though uncommon, it is crucial for clinicians to be aware of this entity, especially in cases with delayed presentation.

We report the case of a 48-year-old male who presented to the emergency department with a 3-week history of right-sided pleuritic chest pain, thoracalgia, and progressive dyspnea, following a blunt thoracic trauma. On examination, the patient was tachycardic, with an oxygen saturation of 93% on room air. Chest radiography revealed a large right-sided pneumothorax. A chest drain was promptly inserted with successful lung re-expansion. However, within hours of the procedure, the patient developed worsening respiratory symptoms and hypoxemia. A follow-up chest X-ray showed ipsilateral alveolar infiltrates consistent with re-expansion pulmonary edema. Supportive care with supplemental oxygen and close monitoring led to clinical improvement over the following days.

REPE typically occurs within hours after rapid re-expansion of a lung that has been collapsed for more than 72 hours. Risk factors include young age, large pneumothoraces, and the duration of lung collapse. Although the exact pathophysiology is not fully understood, it is thought to involve increased capillary permeability due to mechanical stress and reperfusion injury. The condition can range from mild and self-limiting to severe respiratory failure, requiring intensive care. Preventive measures such as controlled, gradual re-expansion and close monitoring are essential, particularly in patients with delayed presentation.

This case underscores the importance of recognizing re-expansion pulmonary edema as a potential complication following chest tube drainage in delayed pneumothorax. Awareness and early identification are critical to ensure prompt and appropriate management, reducing the risk of morbidity

Keywords: Re-expansion pulmonary edema; Pneumothorax; Chest tube drainage; Thoracic trauma; Pulmonary complications; Delayed presentation; Supportive therapy

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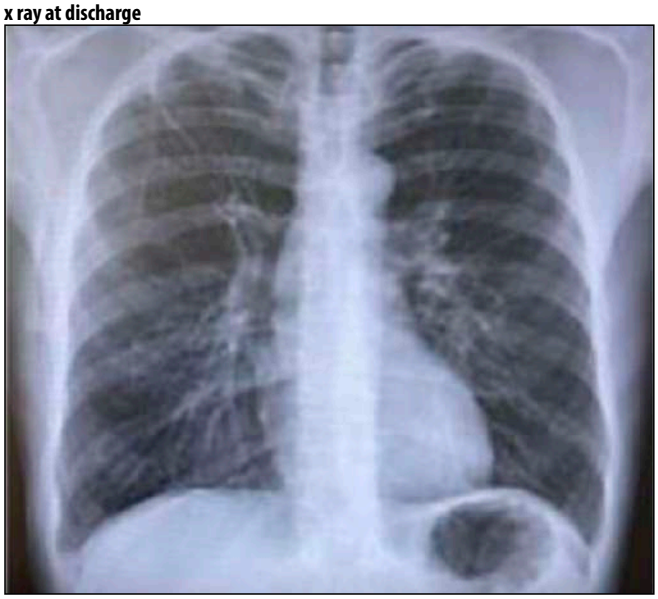
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Pneumothorax



x ray at discharge



e-expansion pulmonary edema



Pneumothorax drainage



Acute Abdominal and Gastrointestinal Emergencies

PP-046

AN OBSTRUCTIVE SMALL BOWEL REASON: MESENTERIC DEDIFFERENTIATED LIPOSARCOMA

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Introduction: Mechanical obstruction of small bowel is a common reason of surgical evaluation. Obstruction mechanism can be extrinsic lesions, intrinsic lesions or intraluminal causes. Most common reasons are adhesions, tumors and hernias. Sarcomas are malignant tumors which are mesenchymally originated, they compromise 0,1-0,2% of adult malignancies. Liposarcomas, usually found in retroperitoneum, extremities or cervical area. Although they are common in the retroperitoneal region, primary liposarcomas of mesentery are extremely rare.

There are three main histologic subgroups: well-differentiated/dedifferentiated, myxoid, pleomorphic. In this case report, we present a patient with mechanical obstruction of dedifferentiated primary mesenteric liposarcoma.

Case Report: A 51-year-old male patient referred to the emergency department with abdominal pain. He has a non-specific non-localised abdominal pain for approximately 2 months and the pain grew extremely yesterday. He describes the pain in the umbilical region. He has nausea, no vomiting. He has no story of diarrhea or constipation. He had flatus and fecal discharge yesterday. He has no history of abdominal surgery. He hasn't undergone any endoscopic evaluation before. He hasn't got any prescribed medicine and no history of medical illness.

His application vital signs are in normal range. In physical examination, he has mild distension. He has mild tenderness in lower right quadrant. In rectal examination, there is normal fecal content. In laboratory findings, routine biochemical, coagulation tests and complete blood count are all in normal range.

In radiological finding, there is air-fluid levels in abdominal x-ray. In computed tomography; there is an mass lesion which contains solid and fluid components in fat tissue density, 23x16 centimeters (cm) in diameter, in mesenteric midline and right lower quadrant, extending to the 3 cm superior to the umbilical plane. Also there is an 22 millimeters (mm) of ileal wall thickening in a segment of approximately 2,5 cm. (Mass infiltration?) In proximal of this area small bowel segments are dilated and there are air-fluid levels.

Because of these clinical and radiological findings, patient has undergone emergency surgery for small bowel obstruction. In operation, there is an multilobulated mass formation in mesentery of ileum and also it infiltrates the small bowel segments and obstruct the passage. Mass is located in ileal segment of 60 cm prior to the ileocecal valve and it includes approximately 20 cm long ileal segments. There isn't any other intraperitoneal findings. Resection and anastomosis of related segments with proper mesenteric line was performed.

After the surgery, patient has no complication. He tolerated normal diet in postoperative day 4 and discharged. Pathological findings showed dedifferentiated liposarcoma, high grade dedifferentiation and 9 reactive lymph nodes. Also shows rhabdomyoblastic differentiation and infiltrates submucosa of small intestine. Surgical margins are intact. Patient referred to the medical oncology department after surgery.

Conclusion: Mechanical small bowel obstructions of liposarcomas are rare. Patients with slow story of abdominal dullnes and distention shouldn't be ignored. May not be usual presentation but we should consider liposarcomas in intraabdominal masses and resection must be performed with optimum care for no residue tissue. Liposarcomas taken into evaluation of obstructive emergency patients.

Keywords: ileus, liposarcoma, small bowel obstruction

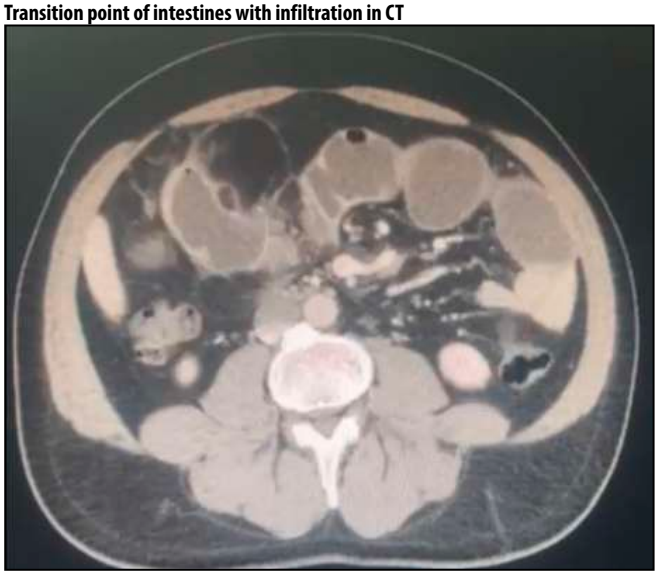
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Computed Tomography Image of Lesion



Transition point of intestines with infiltration in CT



Inflatration of ileum, intraoperative image



Resection material



Multılobulated mass formation, intraoperative image



Surgical Infections

PP-047

CONSERVATIVE SURGICAL MANAGEMENT OF A LARGE PERISPLENIC ABSCESS FOLLOWING INCOMPLETE ABORTION: A CASE REPORT

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Introduction: Perisplenic abscesses are rare and represent a challenging clinical scenario, especially when arising as a complication of pelvic infections. Prompt diagnosis and careful management are crucial to avoid spleen loss and systemic complications. We report a case of a large perisplenic abscess in a patient after incomplete abortion, focusing on the decision-making process balancing conservative and surgical treatment with spleen preservation.

Method: A 35-year-old female was admitted for incomplete abortion treated with uterine curettage. Following worsening abdominal pain and laboratory signs of infection, CT imaging revealed a large perisplenic fluid collection compressing the spleen. Initial conservative antibiotic therapy was administered, but due to clinical deterioration and abscess size, urgent surgical intervention was planned. A laparoscopic approach was started but converted to open laparotomy due to extensive adhesions between the enlarged liver, diaphragm, and omentum obstructing visualization. Upon exploration, a voluminous purulent abscess was drained; the abscess capsule was thickened and adherent to the spleen's lateral surface and the diaphragmatic peritoneum. Lavage with warm saline was performed until clear fluid was obtained. The spleen was entirely preserved, showing no lacerations or active bleeding. Two Jackson-Pratt drains were placed in the splenic lodge and pelvic cavity.

Discussion: Large perisplenic abscesses warrant surgical drainage when conservative management fails or the abscess compromises adjacent organ function. Preservation of the spleen is paramount due to its immunological role and should be attempted whenever the abscess is extracapsular without parenchymal invasion. Open surgery may be required to safely perform adequate drainage and adhesiolysis.

Conclusion: This case highlights that a multidisciplinary approach, timely diagnosis, and tailored surgical strategy allow effective management of large perisplenic abscesses with spleen preservation, improving patient outcomes after gynecological infections.

Keywords: splenic abscess, abscess drainage, spleen preservation, conservative surgical management

Acute Abdominal and Gastrointestinal Emergencies

PP-048

EARLY ANASTOMOTIC OBSTRUCTION DUE TO INTRALUMINAL CLOT FOLLOWING SURGERY FOR ASBO IN A HIGH-RISK ELDERLY PATIENT: A CASE REPORT

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[2]Policlinico Universitario Paolo Giaccone, Palermo

Introduction: Adhesive small bowel obstruction (ASBO) is common in elderly patients. However, early postoperative obstruction caused by an intraluminal clot is a rare and potentially serious complication. Prompt diagnosis and surgical management are crucial, especially in high-risk patients under anticoagulant therapy.

Methods: An 86-year-old male with multiple comorbidities—including atrial fibrillation on apixaban, chronic kidney disease, and previous transcatheter aortic valve implantation—presented with a 3-day history of abdominal pain, nausea, and vomiting. CT scan showed small bowel dilatation with a transition point consistent with mechanical obstruction likely due to adhesions. Laparotomy confirmed ASBO from a dense omental band causing ileal strangulation. Necrotic ileal segment was resected and a side-to-side ileo-ileal anastomosis was performed using staplers. Initial recovery was uneventful. On postoperative day 2, due to the worsening of clinical-laboratory data, a repeat CT revealed persistent obstruction with an endoluminal hyperdense mass at the anastomosis suggestive of an organized clot. Re-laparotomy identified an intraluminal clot obstructing the anastomosis. After clot evacuation, active bleeding was noted at the anastomotic site, necessitating resection and a new side-to-side ileo-ileal anastomosis.

Discussion: This case underlines the rare but critical complication of early postoperative obstruction caused by an intraluminal clot. While postoperative ileus is frequent, mechanical blockage by blood clots is exceptional, particularly in anticoagulated elderly patients. Radiologic imaging played a key role in timely diagnosis and surgical planning. Managing these patients requires balancing hemorrhagic and thrombotic risks and often multidisciplinary coordination. Early recognition and intervention are essential to prevent severe complications such as ischemia or perforation.

Conclusion: Intraluminal clot-induced obstruction should be considered in elderly anticoagulated patients presenting with postoperative ileus. Rapid imaging and prompt surgical management are vital to ensure favorable outcomes.

Keywords: Intraluminal clot, Small bowel obstruction, Postoperative complications, Anticoagulated patient.

Acute Abdominal and Gastrointestinal Emergencies

PP-049

MICROBIOTA PROFILING RESULTS OF PATIENTS WITH ACUTE DIVERTICULITIS - A REVIEW OF THE LITERATURE

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Background: The gut microbiota has been associated with a number of colorectal diseases, with several studies implying that dysbiosis can lead to acute and chronic inflammation of the bowel. However, very little is known about the role of microbiota's changes in acute diverticulitis (AD).

Materials and Methods: A review of the literature on clinical data concerning the profile of gut and fecal microbiota in patients suffering from acute diverticulitis was conducted, using the PubMed, and the GoogleScholar databases. The results are presented in a qualitative manner.

Results: Overall, seven studies were included in the qualitative synthesis, containing 470 patients with AD, with a mean age of 58 years. Four studies used mucosal biopsy materials, two studied the fecal microbiota, and one tested rectal swabs. Five researchers used 16s rRNA sequencing, while the remaining 2 used PCR amplification studies for microbiome profiling. 4 studies reported an increased alpha diversity of AD patients compared to healthy individuals. There was a higher abundance of the Verrucomicrobia phylla in AD patients, as well as an increased abundance of Bifidoacterium longum, Proteobacteria, and Actinobacteria. Protective microbes as Lachnospiraceae, Ruminococcus and Faecalibacteruium were decreased in the AD patients. The Firmicutes to Bacteroides ratio was not significantly different between AD patients and healthy individuals. Lastly, one study reported an increased abundance of sulfur-reducing bacteria in patients with perforated diverticula.

Outcomes: Since the microbiota profile of patients with AD seems to be different than that of healthy individuals, shedding light to this interesting aspect might offer new diagnostic and surveillance tools, as well as therapeutic targets. Larger-scale studies are crucial to validate the results, and also put the modern antibiotics and probiotics to the test of efficient treatment of AD patients today.

Keywords: acute diverticulitis, gut microbiome, microbiota, diverticulosis

Table 1. Main outcomes of microbiota profiling in patients with acute diverticulitis.

Researcher	Year of study	No of patients	Main outcomes	Comments
Schieffer et al.	2016	9	Increased abundance of Proteobacteria phylla	The researchers pointed out alterations in the bacterial-fungal relationship between normal mucosa and diverticular tissues.
Portolese et al.	2023	48	Increased abundance f sulfur-reducing, and sulfur-oxiding bacteria	Patients with perforated diverticula demonstrated higher abudance of sulfur-reducing bateria.
Hao et al.	2025	298	Decreased bacteria of the Family XIII, increased abundance of Oscillospira, Ruminiclostridium6, and Lachnoclostridium	
Gueimonde et al.	2007	9	Increased abundance of Bifidobacterium longum	Bifidobacteria species were increased in AD patients compared to IBD, and colorectal cancer patients.
Daniels et al.	2014	31	Increased alpha diversity. Increased diversity of Proteobacteria.	Proteobacteria used as a diagnostic tool demonstrated an accuracy of 84%.
Grady et al.	2020	65	Increased alpha diversity. Increased abundances of Actinobacteria and Proteobacteria. Decreased abundances of bacteria producinf short chain fatty acids (Lachnospiraceae, Ruminococcus, Faecalibacterium).	Patients with complicated disease had higher numbers of the genera Prevotella, Fusicatenibacter, and Faecalibacterium.
Hullar et al.	2011	10	Increased alpha diversity. Increased Verrucomicrobia phylla.	After antibiotic treatment numbers of Bacteroidetes were increased, while Coriobateria were decreased, as well as the alpha diveristy was poorer.

Table 2. Studies' designs

Researcher	No. of patients (Men/Women)	Mean age in years (range)	Type of sample	Profiling technique
Schieffer et al.	9 (5/4)	60.9 (43-77)	mucosa	16s rRNA sequencing
Portolese et al.	48 (20/28)	53 (50-66)	mucosa	16s rRNA sequencing
Hao et al.	298		mucosa	16s rRNA sequencing
Gueimonde et al.	9		mucosa	PCR
Daniels et al.	31 (20/11)	58 (54-62)	feces	PCR
Grady et al.	65 (38/27)	58 (27-91)	rectal swabs	16s rRNA sequencing
Hullar et al.	10 (6/4)	55 (38-67)	feces	16s rRNA sequencing

Acute Abdominal and Gastrointestinal Emergencies

PP-050

SIGMOID CANCER WITH DIASTATIC CECAL PERFORATION: A RARE SURGICAL EMERGENCY REQUIRING TOTAL COLECTOMY

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Introduction: Sigmoid colon cancer represents the second most common site of colorectal malignancies, accounting for approximately 19–21% of cases, preceded only by rectal cancer. It predominantly affects individuals aged between 60 and 75 years. Due to the narrower lumen of the sigmoid colon, this cancer often presents earlier than right-sided colon cancers, typically as acute bowel obstruction. This obstruction may be complicated by diastatic perforation, a rare but life-threatening surgical emergency requiring prompt intervention.

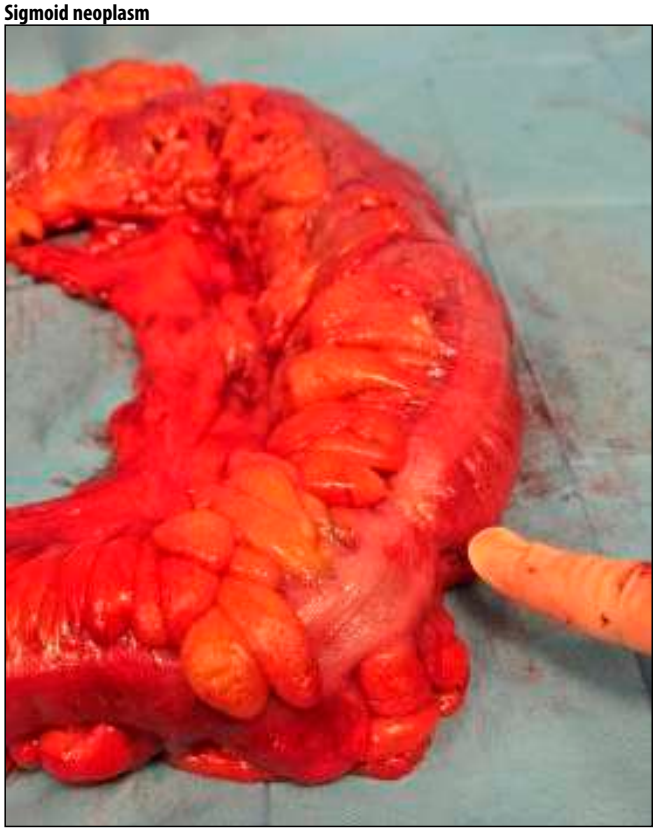
Methods: We present the case of a 73-year-old female admitted to our department with acute abdominal pain and clinical signs of bowel obstruction. Computed tomography (CT) revealed a stenosing neoplasm of the sigmoid colon with suspicion of cecal perforation. The patient was promptly taken to the operating room for urgent exploratory laparotomy.

Results: Intraoperative findings included severe distension of the entire colon, which abruptly ended at the level of the sigmoid colon where a hard, woody-consistency stenosing mass was identified, consistent with the preoperative imaging. Adhesions between an ileal loop and the anterior aspect of the cecum were observed. Careful blunt dissection allowed the separation of these structures and revealed an ongoing diastatic perforation of the cecum, temporarily contained by the adherent ileal loop. Given the extensive colonic distension, hyperemia, and congestion, a total colectomy with terminal ileostomy fashioned in the right flank was performed. The postoperative course was uneventful. Due to the presence of hepatic metastases, the patient was discharged with referral for continued oncologic management.

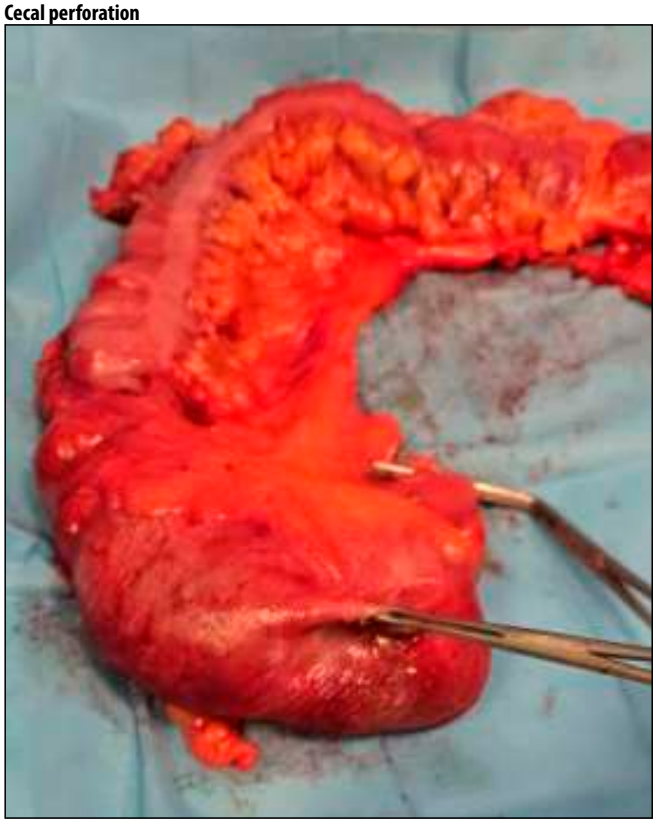
Conclusions: Acute presentation of sigmoid colon cancer complicated by diastatic cecal perforation is a rare but severe surgical emergency. Prompt recognition and aggressive surgical management, including total colectomy when indicated, are crucial to prevent generalized peritonitis and improve patient outcomes. This case underscores the importance of individualized surgical planning based on intraoperative findings in obstructive colonic malignancies.

Keywords: Sigmoid colon cancer; Acute bowel obstruction; Diastatic cecal perforation; Total colectomy; Emergency surgery; Obstructive; colorectal cancer; Terminal ileostomy; Colonic distension.

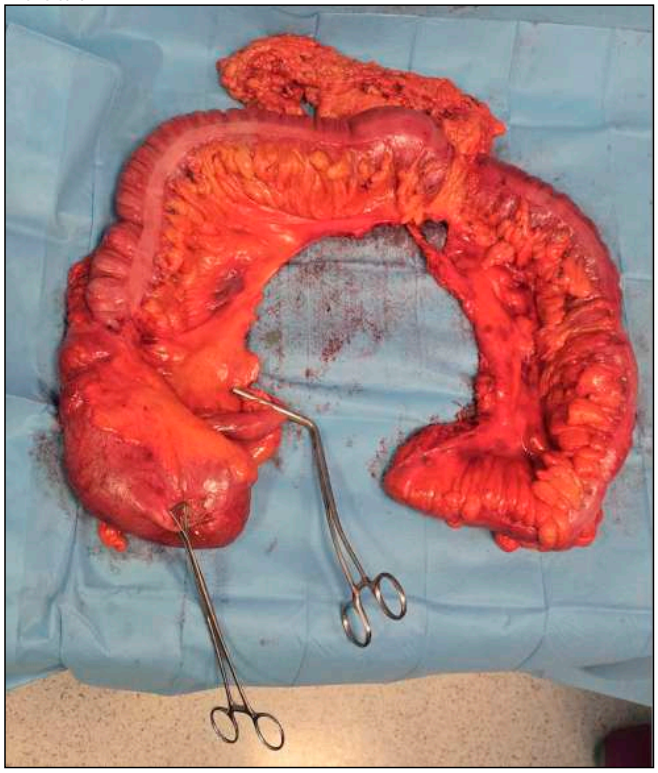
Sigmoid neoplasm



Cecal perforation



Entire colon



Acute Abdominal and Gastrointestinal Emergencies

PP-051

ARTIFICIAL INTELLIGENCE AND DECISION MAKING IN EMERGENCY GENERAL SURGERY: ACCURACY IN PREDICTION, DIAGNOSIS, AND COST REDUCTION

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Background: The integration of Artificial Intelligence (AI) into emergency general surgery (EGS) has the potential to revolutionize decision-making processes, enhancing diagnostic accuracy, optimizing resource allocation, and improving patient outcomes. This review explores the current applications of AI, including machine learning algorithms and predictive models, in the assessment and management of acute surgical conditions.

Materials and Methods: A PubMed search was conducted using the terms "Artificial Intelligence" AND "Decision Making" AND "Emergency Surgery". Articles describing the performance of different AI algorithms in patients undergoing emergency surgery were included in the study.

Results: Out of 131 articles screened, ultimately seven were included in the synthesis. They described the diagnostic accuracy of AI algorithm in detecting anomalies in the ultrasonography, the predictive value of Lasso and XGBoost AI algorithm regarding major complications and death, and the compliance

of new AI algorithms constructed by the authors, to real patient outcomes and mortality. One article presented the concept of the Optimal Policy Tree, which validated the decision making of patients with splenic injuries, proving to be itself a valuable tool for treating future trauma patients more efficiently and at a lower cost.

Conclusions: AI-driven tools assist surgeons in rapid diagnosis, risk stratification, and personalized treatment planning, particularly in time-sensitive emergencies such as perforations, obstructions, and trauma. Challenges related to data quality, model interpretability, and ethical considerations are present. However, AI holds significant promise to augment decision-making and support clinical judgment in high-pressure emergency settings, contributing to more precise, efficient, and patient-centered care.

Keywords: artificial intelligence, emergency surgery, AI algorithms, Lasso, XGBoost, Otimal Policy Tree

Abdominal Trauma

PP-052

ACCIDENTAL INGESTION OF SUBSTANTIAL AMOUNT OF HYDROGEN PEROXIDE - CAUSTIC ESOPHAGEAL INJURY AND SYSTEMIC COMPLICATIONS

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Background: Hydrogen peroxide (H_2O_2) is a weak acid, which constitutes a chemical compound used as an antiseptic, disinfectant, and bleaching agent. Its ingestion can have numerous effects, depending on the amount that was consumed. These effects may vary from slight intestinal irritation and vomiting, to gas embolism, neurological complications, respiratory distress, and even death.

Materials and Methods: We present the case of 58 year-old man who was transferred to the Emergency Department (ED) after ingesting almost 500ml of pure hydrogen peroxide. CT scans and endoscopic images are provided, to demonstrate the local and systemic complications of the compound.

Results: The patient was transported to the ED from a Primary Health Care Center, hemodynamically stable and normotasic, with a saturation of 93%. He reported a slight sore throat and had a voice gill, without repoting any dyspnea. Nevertheless, he was intubated early to avoid airway compromise. Endoscopic control revealed an extensive yet superficial esophageal burn. CT scan revealed one free air bubble in the thorax, and extensive absorption of the H_2O_2 intravascularly. No signs of arterial embolism were present. Patient was put on high doses of esomeprazole and was monitored closely for portal and pulmonary embolism, as well as cerebral air embolism. He demonstrated an uncomplicated course and was extubated 5 days later.

Conclusions: Hydrogen peroxide ingestion can be fatal, esecially when it is consumed in its pure forms (concentrions >10% v/v). Local burns of the exposed areas constitute only the tip of the iceberg. One must keep in mind the disastrous complications of air embolism in multiple systems, act fast and desicively, as to not compromise the airway, and protect the patient from a potential stroke, massie pulmonary emolism and hepatic failure.

Keywords: hydrogen peroxide, esophageal burn, peroxide ingestion, air embolism

Sepsis and Septic Shock

PP-053

ENDOTYPING IN SURGICAL SEPSIS - STEPPING INTO THE ERA OF PERSONALISED TREATMENT

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Background: Sepsis and septic shock remain major causes of mortality for the surgical petients. Endotyping involves categorizing patients based on their unique immune response profiles, rather than just relying on clinical symptoms. Endotypes are often characterized by specific gene expression profiles and associated with varying degrees of severity and mortality. Their research promises to provide us with new therapeutic strategies, and improved treatment outcomes.

Materials and Methods: A literature review was conducted in the PubMed, Embase, and GoogleScholar databases, using the key words “endotyping AND sepsis AND surgical patients”. Inclusion criteria were as follows: original research articles on critically ill surgical patients, prvoding information about specific endotypes and molecular/cellular biomarkers in relation to mortality, initiation of chronic illness, and major complications.

Results: Overall 4 articles were included in the synthesis, containing in total 1042 surgical patients, admitted in the ICU department. Two studies used messenger RNA transcriptomic classifiers of bacterial infection and 30-day mortality and proved a significant prognostic value regarding mortality and initiation of chronic illness. Patients were classified as inflammopathic, coagulopathic and adaptive endotype, with the first type demonstrating the worst survival percentage. One study demonstrated higher levels of sPDL-1 molecule and a decrease in the absolute lymphocyte count in patients with severe sepsis, biomarkers that both translated to worse overall survival. One study showed an increase of the naive and activated CD4+ & CD8+ cells, as wel as NK cells, and an increased production of Il-32. Also, downregulated genes of B-cells were identified, causing an immunometabolic deficiency in septic patients that was related to higher mortality rates.

Conclusions: Endotypes consist of a new tool in the diagnostic and therapeutic process of sepsis in the surgical patient. In the era of personalised medicine endotyping can help identify potential therapeutic targets and startify patients for clinical trials, potentially improving the success rate of new drug development. The next step should be to develop more accurate and accesible methods of endotype classificaion, as lons as to integrate endotyping to clinical practice.

Keywords: endotyping, sepsis, surgical patient

Catastrophic Wound Management

PP-054

SOFT TISSUE CLOSURE VIA ACUTE DEFORMATION IN A GUSTILO TYPE 3B TIBIAL PILON FRACTURE

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Objective: Gustilo-Anderson Type 3B open tibial fractures resulting from high-energy trauma are challenging clinical pictures in terms of both bone stabilization and soft tissue reconstruction. In this study, we report a case successfully treated with acute deformation and gradual correction using Taylor Spatial Frame (TSF) without the need for a free flap.

Case: A 32-year-old man with a type 3B open fracture of the distal tibia after a gunshot wound presented with an initially failed skin graft and a persistent soft tissue defect. An acute varus deformity was created with the help of TSF and the wound edges were closed primary. Subsequently, the deformity was gradually corrected with a daily distraction program planned with computer-aided TSF software. Short leg was corrected by lengthening with proximal tibial osteotomy. After seven months of treatment, infection-free recovery and functional limb were achieved.

Conclusion: In cases of tissue loss in open fractures, the wound can be closed first by applying a controlled deformation to the fracture, and then the limb can be gradually returned to the normal anatomical position with the help of TSF. The present case is one of the most extreme examples showing that this approach can be safely applied without disruption of vascular circulation.

Keywords: soft tissue, open fracture, tibia pilon

Prehospital Trauma Management and Acute Care

PP-055

SIMULTANEOUS IPSILATERAL SHOULDER AND HIP DISLOCATION FOLLOWING HIGH-ENERGY TRAUMA: A RARE CASE PRESENTATION

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Simultaneous shoulder and hip dislocations on the same side are extremely rare injuries in orthopedic traumatology. This case presentation details a high-energy trauma, specifically a simultaneous left anterior shoulder dislocation and left anterior hip dislocation resulting from a fall from a height. During the management process, successful closed reduction was achieved for both joints; however, due to the initial instability of the hip joint, multiple reduction maneuvers were required, and prolonged immobilization was applied. During the three-year follow-up, the patient developed a massive rotator cuff tear in the shoulder and hip osteoarthritis related to the dislocation. This case highlights the importance of rapid diagnosis and tailored treatment processes in unusual injury patterns, as well as the challenges in managing such complex cases.

Keywords: high energy trauma, ipsilateral,dislocation

Abdominal Wall Emergencies

PP-056

NECROTISING SOFT TISSUE INFECTION FROM AN INGUINAL-SCROTAL APPENDICULAR HERNIA: A COMPLEX SURGICAL EMERGENCY.

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[2]Policlinico Universitario Paolo Giaccone- U.o. Chirurgia Generale E D'urgenza
[3]Corresponding Autor

Introduction: Appendiceal involvement in inguino-scrotal hernias is rare. Its progression to necrotising soft tissue infection (NSTI) is exceptionally uncommon and associated with high morbidity, particularly in elderly patients and those with comorbidities. Early diagnosis and aggressive surgical management are critical.

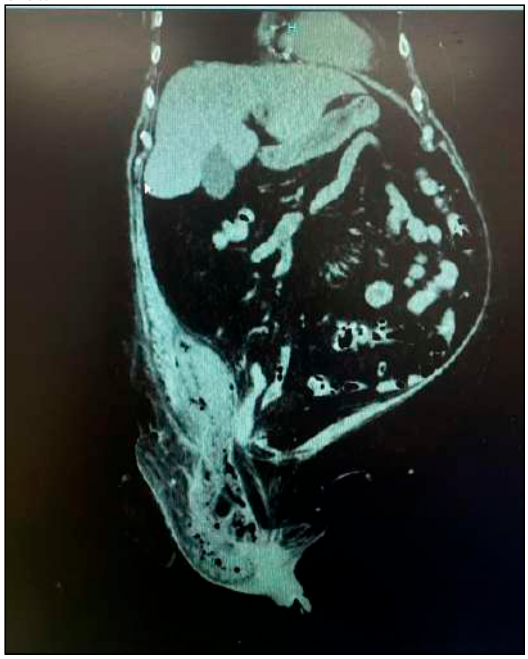
Methods: A 78-year-old man with significant comorbidities and a known right inguino-scrotal hernia presented with persistent low-grade fever for over six weeks, unresponsive to antibiotics. Laboratory results revealed elevated inflammatory markers (CRP, PCT 8 ng/mL). CT scan showed a large hernia containing a voluminous abscess (~20 cm), inflamed appendix, necrotic omentum and soft tissue emphysema of the scrotal bursa extending to the ipsilateral psoas muscle suggestive of NSTI (possible Fournier's gangrene).

Results: Emergency inguinal-scrotal exploration revealed extensive soft tissue necrosis with loss of anatomical planes. The herniary sac contained necrotic omentum and purulent fluid. A midline supra- and infra-umbilical laparotomy was necessary for recognition and isolation of the cecal appendix, which was tenaciously adherent to the inner inguinal ring and self-amputated at the apex. Abdominal exploration allowed toileting of the necrosis of the retroperitoneum at the right para-colic shower. A radical surgical debridement, appendectomy and copious irrigation with Granudacyn® were performed. Drains were placed in the pelvis, in right iliac fossa and in the scrotum. Repair of the primary hernia was completed in a contaminated field without the use of a prosthesis.

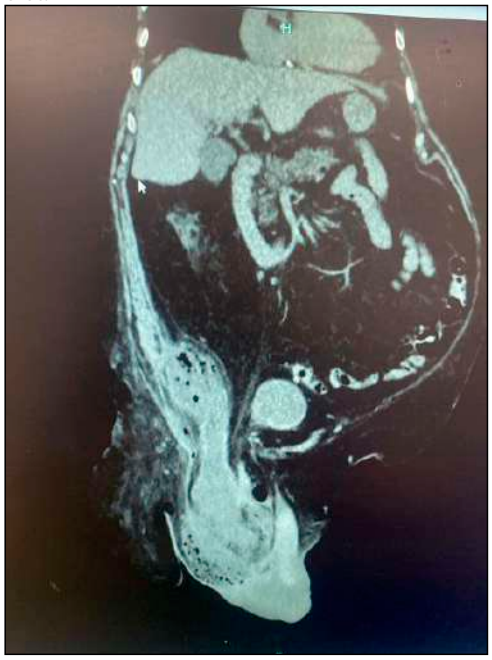
Conclusion: This case highlights a rare but life-threatening evolution of an appendiceal inguinal hernia into NSTI. Early imaging, high clinical suspicion, and a combined inguinal-abdominal surgical approach are essential. Prompt source control and multidisciplinary care are vital for survival, particularly in elderly and frail patients.

Keywords: Emergency surgery; appendiceal hernia; Amyand hernia; necrotizing soft tissue infection; Fournier's gangrene; source control; elderly patients.

CT Scan 1



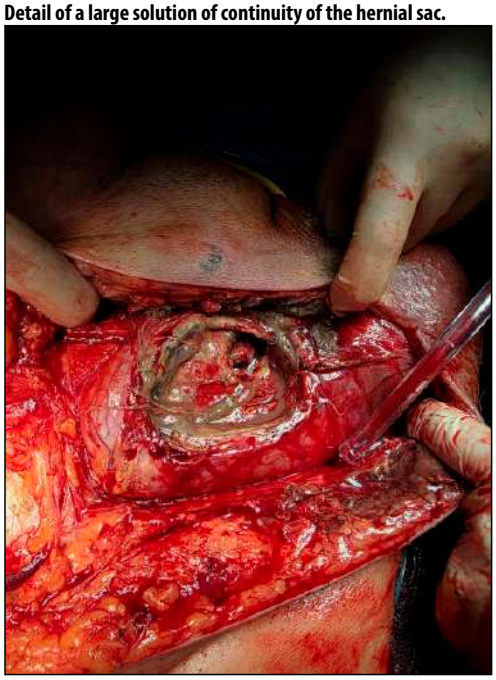
CT Scan 2



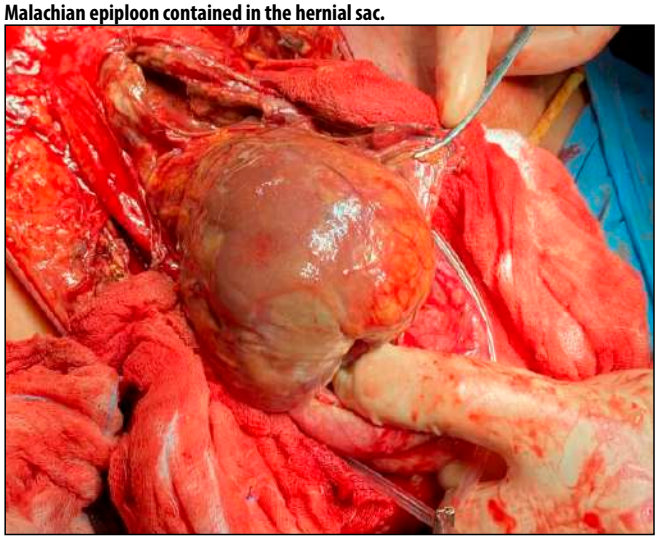
Wide solution of continuity of the hernial sac and perifunicular tissues secondary to perithyphylitis abscess.



Detail of a large solution of continuity of the hernial sac.



Malachian epiploon contained in the hernial sac.



Vascular Emergencies

PP-057

MORE THAN A VASCULAR EMERGENCY: ACUTE LIMB ISCHEMIA AS THE INITIAL MANIFESTATION OF INTRAABDOMINAL CANCER- A CASE PRESENTATION

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[2]Klinik Für Allgemein- Und Viszeralchirurgie ,sankt-marien Hospital Buer, Gelsenkirchen, Germany
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Introduction – Aim: Acute limb ischemia (ALI) is a vascular emergency requiring immediate treatment. Although embolism and atherosclerosis are common causes, in rare cases—about 5%—ALI may be the first sign of an underlying malignancy. We present a complex case in which acute arterial thrombosis revealed an undiagnosed intraabdominal cancer, highlighting the challenges of multidisciplinary management.

Materials and Methods: A 59-year-old woman presented with acute lower limb ischemia. Imaging confirmed arterial thrombosis, and she underwent multiple urgent vascular procedures, including endovascular and open surgeries. Despite intervention, limb viability deteriorated, resulting in amputation. During hospitalization, she developed acute renal insufficiency requiring multiple dialysis sessions. Abdominal CT revealed a large intraabdominal mass with bowel obstruction and rupture, prompting emergency exploratory laparotomy and tumor resection.

Results: Histology confirmed a malignant intraabdominal neoplasm. Tumor-related vascular invasion and a paraneoplastic hypercoagulable state were implicated in the arterial thrombosis. The patient's clinical course was complicated by multiorgan involvement, requiring prolonged vascular, renal, and oncologic management.

Conclusions: This case underscores the importance of considering occult malignancy in patients with unexplained thrombotic events, especially in complex presentations involving multiple systems. When vascular and abdominal symptoms coexist, a multidisciplinary approach is essential for timely diagnosis and optimal care. Malignancy should be part of the differential diagnosis in acute vascular events without clear etiology.

Keywords: Vascular Emergency Acute Limb Ischemia Intraabdominal Cancer

Acute Abdominal and Gastrointestinal Emergencies

PP-058

EMERGENCY MULTIORGAN RESECTION FOR LOCALLY ADVANCED COLON CANCER: CHALLENGES IN A YOUNG ADULT PATIENT

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Background: Locally advanced colon cancer with infiltration into adjacent organs and complications such as covered perforation represents a surgical emergency requiring prompt, complex intervention. We report a case of a young adult patient presenting with left lower abdominal pain and chronic constipation who underwent emergency multiorgan resection.

Case Presentation: A male patient in his early 40s presented to the emergency department with left-sided lower abdominal pain and a four-week history of chronic constipation. Clinical evaluation revealed mild hypotension and elevated inflammatory markers. Abdominal ultrasound was inconclusive, but CT imaging showed a conglomerate tumor at the left colon flexure infiltrating the pancreatic tail and splenic hilum, suggestive of covered perforation. Due to clinical deterioration and signs of acute abdomen, exploratory laparotomy was indicated.

Intervention: Intraoperatively, mechanical bowel obstruction and extensive tumor infiltration into the pancreas and spleen were confirmed, along with purulent discharge indicative of perforation. Massive venous bleeding from the superior mesenteric vein occurred but was controlled with vascular surgeon assistance. En-bloc resection including left hemicolectomy, distal pancreatectomy, and splenectomy was performed. An end colostomy was created due to ileus.

Outcome: Postoperatively, the patient was stabilized in the ICU, receiving blood transfusions and supportive care. Histopathology confirmed colon adenocarcinoma. The patient was enrolled in adjuvant chemotherapy and received postsplenectomy vaccinations. Recovery was uneventful, and the patient was discharged in good condition for outpatient oncology follow-up.

Conclusion: This case exemplifies the formidable challenge posed to both surgeon and patient when emergency management involves locally advanced colon cancer with multiorgan invasion and covered perforation. Successfully navigating the complexities of such extensive disease requires swift multidisciplinary collaboration and decisive surgical intervention. Despite the high stakes, timely, coordinated care can achieve curative resection and lead to encouraging short-term outcomes, under-

scoring the critical importance of teamwork in managing these rare but demanding emergencies.

Keywords: Multiorgan Resection Young Adult Patient

Acute Abdominal and Gastrointestinal Emergencies

PP-059

PERFORATED PEPTIC ULCER IN THE NIGHTMARE PATIENT - THERE'S ALWAYS A SOLUTION

Diogo Vaz Acosta, Luís Amaral, Ana Beatriz Martins, Pedro Ponte, Rayanne Pinto, Pilar Ferreira, Miguel Catarino, Gonçalo Reis, Maria Inês Leite

Hospital Do Divino Espírito Santo De Ponta Delgada

Introduction: The lifetime prevalence of peptic ulcer disease (PUD) and its complications has been on a steady decline over the years, mainly due to the widespread use of proton pump inhibitors. Even though upper gastrointestinal bleeding is the most common complication of PUD and six times more prevalent than perforation, mortality is five times higher in perforation when compared to a bleeding ulcer, and thus carries a far more serious prognosis.

Methods: We present the case of a 72 years-old male, partially dependent in his daily activities, with preserved mental status and relational capacity, with a previous history of Parkinson's disease, chronic liver disease (Child-Pugh A), chronic obstructive pulmonary disease, tobacco and alcohol abuse, bacterial endocarditis of the tricuspid valve less than a year prior and a hospitalization for cardiogenic shock due to Takotsubo cardiomyopathy, who presented in the ER for intense epigastric pain lasting for 3 days. He was tachycardic (HR 115bpm), hypotensive (BP 66/49mmHg), pale and diaphoretic. Abdominal examination revealed a distended abdomen with epigastric tenderness, guarding and rebound tenderness. Prompt fluid challenge and piperacillin/tazobactam were initiated, with a favorable hemodynamic response. Arterial blood gas showed a compensated metabolic acidosis and lactate level of 5.33 mmol/L. Bloodwork revealed elevated WBC with left shift and a CRP of 1.91mg/dL. A CT scan of the abdomen showed moderate pneumoperitoneum, a prepyloric perforation of the anterior gastric wall and diffuse peritonitis. He had an ASA score IV, an APACHE II score of 21 (estimated mortality 30%) and a SOFA score of 4 (estimated mortality 20.2%). A consultation with ICU attendings and anesthesiologists was carried out and the patient was deemed as having no criteria for ICU admission due to his severe comorbidities, as well as having no condition for general anesthesia on account of the very slim chance for postoperative extubation. Consequently, the patient was submitted to a primary closure with an omental patch through laparotomy, under continuous spinal anesthesia, bilateral rectus sheath block and sedation with ketamine. There was a transient need for noradrenaline intraoperatively (maximum dose of 0.30 mcg/kg/min).

Results: The patient was discharged on the postoperative day 5, without major complications and made a full recovery.

Conclusions: A perforated peptic ulcer carries a significant risk of morbimortality, especially in patients with severe comorbidities and in septic shock. Timely action is of the essence and even though several patients are in extremis and have a low physiological reserve, perforated peptic ulcer is a benign disease with a potential for cure. We believe our prompt action, even in suboptimal conditions, provided the patient his only chance of survival. We also believe that this anesthetic strategy allowed for resource saving, including keeping an ICU bed and ventilator free, saving all the costs associated with an ICU admission and, most likely, a quicker hospitalization due to the absent use of mechanical ventilation.

Keywords: Peptic Ulcer, Perforation, Emergency Surgery, Critical, Shock

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Acute Abdominal and Gastrointestinal Emergencies

PP-060

AI-ESA: A SMARTPHONE-BASED AI ASSISTANT FOR SELF-TRIAGE IN EMERGENCY SURGERY

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Background: Emergency departments are often overwhelmed by patients presenting with non-urgent conditions, contributing to overcrowding and delayed care for true emergencies. A reliable self-triage tool, accessible via smartphone, could empower adult patients with acute symptoms to assess their condition and decide whether emergency surgical evaluation is needed [1-3].

Aim: To develop and implement an artificial intelligence–based assistant (AI-ESA) designed to guide adult users through self-triage when experiencing acute symptoms potentially requiring emergency surgical attention.

Materials and methods: AI-ESA is a web-based triage system integrating the following software: Gradio frontend for natural language input; Modal backend for scalable and secure processing; Claude AI for symptom interpretation and urgency classification (emergency/elective/home care); DuckDuckGo API for geolocation and clinic recommendation; Hosting on Hugging Face for public access.

Users describe their symptoms in free text and can optionally enter their location. The system analyzes inputs to generate a triage recommendation, a list of possible differential diagnoses, and a suggestion of nearby healthcare facilities (if location is provided).

Results: The functional prototype (https://aimedica-ai-emergency-surgery-assistant.hf.space) delivers a structured, AI-driven triage pathway. It helps adult users assess the severity of acute symptoms and decide whether emergency evaluation is appropriate, potentially reducing inappropriate ED visits and improving triage efficiency.

Conclusions: AI-ESA represents a novel self-triage tool for emergency surgery. It implements AI to support early decision-making by adult patients with acute symptoms, aligning healthcare demand with available resources. Further validation and integration with national systems are planned to enhance its clinical reliability and scalability.

Keywords: self-triage, artificial intelligence, emergency surgery, digital health, Claude AI

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Acute Abdominal and Gastrointestinal Emergencies

PP-061

GALLSTONE ILEUS - A TWO-STAGE, OR NOT TWO-STAGE PROCEDURE, THAT IS THE QUESTION!

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Introduction: Gallstone ileus is a rare diagnosis that accounts for 1% to 4% of mechanical bowel obstructions. Due to symptoms being intermittent, the diagnosis is frequently delayed, which in turn, may contribute to the high levels of morbidity and mortality associated with this pathology. Treatment involves surgery, either by simply dealing with the bowel obstruction and performing an enterolithotomy, or by also addressing the gallbladder and cholecystoenteric fistula, which can be done in the same procedure, or at a later date.

Methods: We present the case of a 67 years-old female, with a previous history of obesity, cholelithiasis, type 1 bipolar disorder and hypertension, who presented in the ER for the third time in 4 days for bilioenteric vomiting and food intolerance. She was hypertensive (BP 143/108 mmHg) and tachycardic (HR 105 bpm). Initial abdominal examination revealed distention but no tenderness or guarding on palpation. Bloodwork showed elevated WBC with left shift, a CRP of 3.52 mg/dL and a slight acute kidney injury (Creatinine 1.35 mg/dL, Urea 126 mg/dL). Abdominal X-Ray showed several air-fluid levels, with no pneumoperitoneum. A general surgery consultation was asked for and a nasogastric tube was put, which precipitated vomiting. Later that night, the patient presented with a fever (38°C) and slight polipnea. Blood gas revealed a type 1 respiratory failure and a primary respiratory alkalosis with a secondary metabolic alkalosis. A CT scan showed a non-distended gallbladder with wall thickening, in close relation to the duodenum, and local fat stranding; there was also diffuse small bowel distension (40 mm) proximal to a gallstone (35x27mm) located in the distal ileum. The patient was submitted to an enterolithotomy (*Heineke-Mikulicz*-like closure) and the gallbladder was left in place. During surgery, there was an increasing difficulty in ventilation and the patient presented with hemodynamic instability, for which noradrenaline started.

Results: The patient was admitted to the ICU after surgery, where she presented a swift recovery. Full parenteral nutrition was started on POD 1. Noradrenaline was stopped on POD 1 and she was extubated on POD 2. On POD 3 she was transferred to the general surgery ward. Oral intake was started on POD 4, without complications. On POD 10 she was diagnosed with an UTI for which amoxicillin/clavulanate was started. The patient was discharged on POD 11. She is currently being followed in a general surgery appointment and awaits an MRI for second surgery planning.

Conclusions: Although the timing for cholecystectomy remains controversial, we believe that in the unstable patient, a damage control strategy is best suited for treatment. By just performing an enterolithotomy, the duration of surgery is considerably cut short and the patient can be returned to the ICU much quicker, where resuscitation can be continued and metabolic derangements can be corrected. Performing a cholecystectomy in the same procedure is also an option in fit, stable patients, but the surgical team needs to be mindful that the gallbladder is frequently inflamed and fibrotic, and more often than not, it proves to be a laborious, technically demanding and time-consuming procedure.

Keywords: Gallstone Ileus, Emergency Surgery, Shock, Fistula

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Acute Abdominal and Gastrointestinal Emergencies

PP-062

THE DECEPTIVE PNEUMOPERITONEUM - THERE'S MORE TO IT THAN MEETS THE EYE

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Introduction: Pneumoperitoneum is the presence of free air inside the peritoneal cavity. It is generally associated with a hollow viscus perforation, but it can also occur in the setting of trauma, iatrogenic injury, gynecologic pathology or even be spontaneous in nature. It carries a high morbidity and mortality rate, and thus, demands for a swift diagnosis and treatment. Patients usually undergo surgery, in order to repair the cause of the pneumoperitoneum and treat the ensuing peritonitis.

Methods: We present the case of a 62 years-old male, with an active stage IV Hodgkin-like lymphoma undergoing chemotherapy (hospitalized in the previous month for febrile neutropenia, pneumonia and septic shock) and a chronic urinary catheter since last hospitalization (urinary retention due to BPH) which needed to be replaced 3 days prior to ER admission due to obstruction. The patient also had a previous history of a stage IV

gastric MALT lymphoma in the previous year (considered cured after chemotherapy, hypertension, type 2 diabetes, dyslipidemia, heavy smoking and previous alcohol abuse. He presented in the ER for fever (38.3°C), lower abdominal pain and low urinary output lasting for 2 days. He was tachycardic (HR 107 bpm) and hypotensive (BP 85/59 mmHg). Abdominal examination revealed a distended abdomen with lower quadrant tenderness, guarding and diffuse rebound tenderness. Prompt fluid challenge and piperacillin/tazobactam were initiated, with a favorable hemodynamic response. Arterial blood gas showed a compensated metabolic acidosis and lactate level of 1.22 mmol/L. Bloodwork revealed an WBC of 21.81x109/L with left shift, a CRP of 13.1 mg/dL, a procalcitonin of 2.80 ng/mL and an urinalysis consistent with an UTI. A CT scan of the abdomen showed hydropneumoperitoneum, probably due to a gastric/duodenal perforation and a diffusely distended colon (maximum diameter of 9 cm). A consultation with ICU attendings and anesthesiologists was carried out and the patient was deemed as having no criteria for ICU admission due to his severe comorbidities. The patient was submitted to an exploratory laparoscopy, which revealed a diffuse purulent peritonitis; peritoneal fluid samples were collected. Since there was no evident cause for the peritonitis, the surgery was converted to a midline laparotomy and a bladder perforation was found, caused by the urinary catheter balloon; a primary closure with an omental patch was made.

Results: Due to isolation of Candida tropicalis from the urine and peritoneal fluid, the patient was started on fluconazol. The patient was discharged on POD 7, without major complications and made a full recovery. Urinary catheter was removed successfully on POD 14. He is currently undergoing chemotherapy.

Conclusions: Bladder perforation is an extremely rare cause of pneumoperitoneum and can, therefore, be overlooked. Exploratory laparoscopy is an excellent diagnostic tool (sensitivity of 90-100%) and can be a therapeutic tool as well. However, it still has some limitations, especially in the setting of bowel distention and limited visual field. When doubt remains, conversion to laparotomy should be pursued, in order to thoroughly visualize the whole peritoneal cavity. Even though the patient had several severe and life threatening comorbidities, the cause for peritonitis was benign and potentially curable. The swift acting of the surgical team allowed for a quick and full recovery, and even the continuation of chemotherapy.

Keywords: Pneumoperitoneum, Perforation, Bladder, Emergency Surgery, Critical, Shock

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Abdominal Trauma

PP-063

BILE DUCT INJURY DUE TO BLUNT TRAUMA FOLLOWING MOTOR VEHICLE ACCIDENT

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Bile duct injuries following blunt abdominal trauma are exceedingly rare, accounting for less than 1% of such injuries, and are often overshadowed by more immediately life-threatening conditions. However, delayed recognition can result in bile leaks, biliary peritonitis, and sepsis, significantly increasing morbidity. We present the case of a 47-year-old male who sustained a constellation of injuries—including right hemopneumothorax, multiple rib fractures, a grade III liver laceration, right lung contusion, and a partial common bile duct injury—following a high-energy motor vehicle collision. Despite initial stable hemodynamics, the patient developed progressive hyperbilirubinemia by day 5, prompting evaluation with MRCP, which identified a distal bile duct disruption and subhepatic bile leak. The patient underwent emergency laparotomy with external T-tube drainage, deferring definitive biliary reconstruction to a later stage. This case underscores the necessity of maintaining a high index of suspicion for biliary injuries in patients with liver lacerations adjacent to the hilum, highlights the utility of MRCP in diagnosis, and supports a staged approach to surgical management to optimize outcomes and minimize perioperative risks.

Keywords: Bile duct injury, liver laceration, blunt trauma, MRCP, external biliary drainage

Acute Abdominal and Gastrointestinal Emergencies

PP-064

ABDOMINAL STAB WOUNDS - IT'S BETTER TO BE SAFE THAN SORRY

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Introduction: Penetrating abdominal trauma is frequently caused by stab wounds and mainly affects the small bowel, colon, liver and abdominal vasculature. Severity can range from localized to life threatening injuries. Treatment is often surgical, and when surgery is indicated, laparoscopy can be pursued in hemodynamically stable patients, whilst laparotomy is the standard of care in unstable patients. Criteria for laparoscopic management of anterior abdominal stab wounds is still controversial. However, the German Guideline on the Treatment of Patients with Multiple and/or Severe Injuries 2022 update concludes that diagnostic laparoscopy should be performed in hemodynamically stable patients when the need for intervention is unclear.

Methods: We present the case of a 47 years-old male, active smoker and overweight, but with no other previous history, who works at a slaughterhouse. He presented in the ER for a self-inflicted abdominal stab wound with a knife, while at work. He was hemodynamically stable (HR 70 bpm; BP 140/70mmHg) and had no trouble breathing (O2sat 96% in ambient air). Thorax

examination showed no subcutaneous emphysema and normal, symmetrical lung sounds. Abdominal examination revealed a 2.5 cm wound in the right hypochondrium with a downward trajectory and, at the least, fascial incision.

A CT scan was asked for, which showed no signs of pneumoperitoneum; although there weren't any signs of bowel or liver injury, the wound trajectory clearly went beyond the rectus abdominis and there were doubts if the peritoneum remained intact. The patient was submitted to an exploratory laparoscopy, which revealed no free fluid inside the peritoneal cavity, a hematoma of the falciform ligament and an intact peritoneum.

Results: The patient was discharged on the next morning, without any complications.

Conclusions: Exploratory laparoscopy is an excellent diagnostic tool (sensitivity of 90-100%) and, more often than not, can also be therapeutic. Since it is a minimally invasive procedure, patients present reduced pain and a swifter recovery, which often translates into a shorter hospital stay. By performing an exploratory laparoscopy, the surgical team was able to be certain that there was no visceral trauma, safely discharge a patient less than 24 hours after ER admission and avoid a non-therapeutic laparotomy.

Keywords: Penetrating Trauma, Abdominal, Stab Wound, Exploratory, Diagnostic, Laparoscopy

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Acute Abdominal and Gastrointestinal Emergencies

PP-065

ADHESIVE PERITONEAL DISEASE AND HYALURONIC ACID DRUG: USE IN PLANNED OPERATIONS FOR INCISIONAL HERNIAS AND ACUTE ADHESIVE SMALL BOWEL OBSTRUCTION.

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Objective – to study and compare the results of treatment of patients with peritoneal adhesions after planned and urgent surgical interventions, in which the separation of adhesions was performed and the preparation of hyaluronic acid was used.

Materials and methods: During the period from 2013 to 2024, 80 patients with adhesion disease, who underwent adhesion separation, aged from 21 to 79 years, were examined and treated. The patients are divided into the following groups: 1) control group - included 20 patients who underwent planned surgical treatment, separation of adhesions, and conservative treatment with generally accepted methods for large incisional hernias; 2) the second group - (20 patients) - planned surgical interventions in patients with incisional ventral hernias and separation of adhesions with the use of hyaluronic acid preparation; 3) in the third group, 20 patients who underwent urgent enterolysis without the use of hyaluronic acid preparation with acute adhesion small bowel obstruction; 4) in the fourth group, 20 patients who underwent urgent enterolysis with the use of hyaluronic acid preparation with acute adhesion small bowel obstruction. Fast-track rehabilitation of patients is mandatory in the postoperative period, which included: 1. Early activation of the patient after adheolysis on the 1st day after the operation; 2. Activation of peristalsis by the end of the second day, to achieve gas discharge; 3. Epidural modern anesthesia; 4. Early tube electrolyte nutrition and nutrition (advantage of high intubation of the small intestine); 5. Mandatory administration of a prophylactic dose of hypocoagulants (based on pathogenesis) regardless of the patient's age, even in the absence of risk according to the Caprini scale); 6. Use of rectal suppositories with streptokinase and streptodornase (with risk factors according to the "severe scheme").

Results: Good immediate, short-term and long-term results with a follow-up period of up to 6 years were obtained in the second group after planned surgical interventions and the use of the hyaluronic acid preparation. However, in the fourth group of patients, after urgent enterolysis and the use of the drug, an improvement in the immediate results is visible, but the long-term results are practically no different from the third group of patients.

Conclusions: Hyaluronic acid has been shown to be effective in the treatment of adhesions during elective surgery in patients with incisional hernias. However, hyaluronic acid is not effective in emergency surgery for acute adhesive intestinal obstruction. It is necessary to differentiate patients with adhesion disease of the peritoneum and manifested small bowel obstructions from planned enterolises.

It is possible to achieve improved results with a comprehensive approach to the prevention and treatment of adhesion disease of the peritoneum, the use of modern and new anti-adhesion drugs.

Keywords: adhesive peritoneal disease, acute adhesion small bowel obstruction, hyaluronic acid drug, adhesion separation, complex treatment.

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Education for Emergency Surgery

PP-066

USING COMPETITIVE SIMULATION TO ADVANCE PEDIATRIC EMERGENCY EDUCATION: A MULTISCHOOL EXPERIENCE

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Unicamp

Introduction: Simulation-based medical education has become an essential tool for safely replicating real-life clinical scenarios, fostering the development of both technical and non-technical competencies, and reinforcing knowledge retention. This project, initiated one year ago, introduced a national inter-university competition among Brazilian medical schools as an innovative strategy to assess medical training and promote simulation-based learning, particularly in critical care situations.

Methodology: Eight medical schools from Southeastern Brazil participated: University of São Paulo – Ribeirão Preto Campus, Bauru Medical School, Jaguariúna University Center, Taubaté University, Max Planck University Center (Indaiatuba), Federal University of Uberlândia, Vale do Rio Doce University (Governador Valadares), and Western Paraná State University. All teams faced identical high-fidelity simulation scenarios and were evaluated by trained medical specialists with certified expertise. On Day 1, participants engaged in eight high-complexity scenarios. On Day 2, 16 low-complexity, skill-focused scenarios were conducted. Finalist teams participated in two additional advanced cases, including a pediatric emergency. High-fidelity mannequins and evaluation software from a leading simulation company were used to ensure realism and standardization.

Experience Report: Scenarios covered core medical domains: internal medicine/intensive care, surgery, obstetrics/gynecology, and pediatrics. Four pediatric scenarios were implemented over three days:

- **Day 1:** Pediatric cardiac arrest with a non-shockable rhythm (asystole), emphasizing integrated clinical reasoning and teamwork.
- **Day 2:** Upper airway obstruction (foreign body aspiration), focusing on airway management skills; followed by viral laryngotracheitis, requiring accurate diagnosis and appropriate intervention.
- **Day 3:** Traumatic brain injury in a pediatric patient, demanding trauma mechanism recognition, injury site assessment, diagnostic workup, and acute management.

Conclusion: The integration of realistic simulation and competitive frameworks enhanced the assessment of technical and non-technical skills among medical students, particularly in pediatric emergencies. This experience highlights the value of simulation in medical training as a means to prepare future physicians for high-stakes, real-world clinical challenges.

Keywords: Realistic simulation; Pediatric emergencies; Medical education

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The teams watching the finals



The teams



Pediatric cenario



Disaster and Mass Casualty

PP-067

MOTORCYCLE NIGHTMARE: LESSONS FROM A BRAZILIAN MULTIPLE-VICTIM INCIDENT

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University of Campinas

Introduction: Motorcycle accidents constitute a significant global public health burden, particularly in low-income and middle-income countries. The purpose of this study was to analyze the epidemiological, clinical, effectiveness of triage protocols, trauma simulation training and outcomes related to the "Rolezinho" in Campinas, Brazil, an unauthorized gathering of approximately 300 motorcyclists that resulted in 31 injuries and 3 deaths. Methods: We investigated the risk factors, injury patterns, and emergency response through comprehensive data collection, including epidemiological profiles, triage information, clinical findings, imaging results, interventions, and trauma scoring. Statistical analyses were used to identify factors associated with severe injuries and mortality. Results: Most victims were young males, with motorcycle-to-motorcycle collisions being the predominant mechanism of injury. Despite high helmet use (91%), traumatic brain injury was the most common injury, followed by bone fracture. All fatalities resulted from run-over incidents and presented with severe traumatic brain, thoracic, and facial injuries. Emergency medical response was prompt, with 81% of the victims receiving care within one hour. Conclusion: Our findings highlight the importance of effective triage protocols, regular trauma simulation training, and judicious use of diagnostic resources in multiple victim scenarios. This study addresses a significant literature gap regarding multiple victim incidents involving vulnerable road users and emphasizes the need for implementing standardized trauma protocols and developing integrated prehospital-to-hospital care systems to reduce motorcycle-related mortality in Brazil.

Keywords: Road traffic injuries,injury prevention, injury surveillance tools, Road traffic death, global health

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Multiple victims



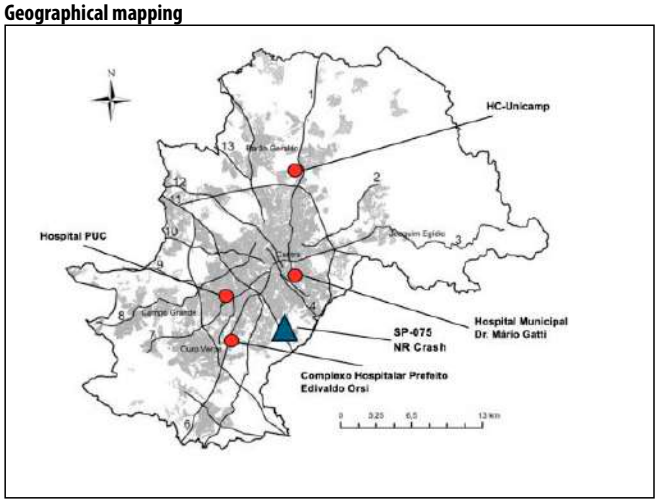
Motorcycle high energy damage



Helmet damage



Geographical mapping



Education for Emergency Surgery

PP-068

PANDEMIC PARADOX: TRAFFIC MORTALITY TRENDS DURING COVID-19 IN CAMPINAS, 2019-2023.

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University of Campinas

Objective: To analyze road traffic mortality patterns during pre-pandemic, pandemic, and post-pandemic periods in Campinas, Brazil. Methods: A retrospective observational study conducted in Campinas from 2019 to 2023, analyzing 17,726 road traffic crashes with 406 deaths, using databases from the Campinas Municipal Development Company and São Paulo State Traffic Accident Information System. Multivariate logistic regression analysis was performed to identify independent risk factors associated with road traffic deaths. Risk factors analyzed included alcohol consumption, nighttime driving, gender, crash location, vehicle type, and weekend occurrence. Chi-square tests were used to compare proportions across periods. Results: Despite a 32.0% reduction in traffic volume, mortality rates increased from 10.46 to 13.76/100,000 inhabitants, with a 26.7% increase in years of potential life lost. The frequency of road traffic deaths increased from one death every 2.9 days to one every 2.0 days. Speeding was the main contributing factor for violations, representing 67% during the pandemic period. The highest risk emerged from the combination of alcohol consumption, speeding and nighttime driving. Motorcyclists accounted for 43.1% of deaths, increasing to 47.0% in the post-pandemic period. Conclusion: A pandemic paradox emerged where reduced traffic led to increased mortality. Risk behaviors established during the pandemic became entrenched rather than temporary, particularly affecting young male motorcyclists.

Keywords: COVID-19; Traffic Accidents; Mortality; Accident Prevention; Wounds and Injuries; Accident, Traffic.

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Open Abdomen

PP-069

PROSPECTIVE STUDY ON THE EFFECTIVENESS OF BARKER'S VACUUM PACK FOR NON-TRAUMATIC OPEN ABDOMEN

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Asst Valle Olona

Background: Open abdomen (OA) represents a complex surgical strategy used in extremely critical scenarios such as septic states from intra-abdominal contamination, where primary closure of the abdominal wall would be dangerous or technically impossible. Barker's Vacuum Pack (BVP) is a OA technique that combines effectiveness and ready availability. We aim to evaluate the impact of BVP on outcomes, determining its predictive factors for success or failure.

Methods: A consecutive unselected series of 30 patients undergone 42 total procedures of OA for non-traumatic reasons from May 2019 to July 2024 was prospectively recorded and then retrospectively evaluated regardless of the temporary abdominal closure technique used. Data on the patients' demographics, disease features, operative details and outcomes were recorded and analyzed. Regardless of the technique used, OA was systematically renewed every two days until the final closure. Severe complications have been considered hemodynamic instability, organ failure and the occurrence of enteroatmospheric

fistulas Continuous and categorical variables were analyzed with Student's and Fischer's tests respectively.

Results: We considered 20 male (66.6%) and 10 female patients (33.3%), with a mean age of 65.1±12.3 and a body mass index (BMI) of 27.3±6.3. 23 patients were treated by BVP while 7 underwent OA with alternative techniques to BVP (4 Bogota bag, 3 skin-approximation). Timing between index operation e definitive closure (3.5 ± 0.9 dd vs 9.8 ± 1.9; P = 0.023) and severe complications' rate (36% vs 64%; P = 0.013 were statistically lower in BVP cohort. BVP group showed a statistically significant reduction in mortality rate (8% vs 42.8%; P = 0.060).

Conclusions: BVP strategy proved effective in terms of major adverse event rate, time to final closure, and mortality

Keywords: Open Abdomen, Barker's Vacuum pack, non-traumatic

Acute Abdominal and Gastrointestinal Emergencies

PP-070

A RARE CAUSE OF COLONIC PERFORATION: INTESTINAL PLASMABLASTIC LYMPHOMA

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The majority of gastrointestinal system lymphomas (65%) occur in the stomach. Lymphomas that develop in the colon and rectum account for 10-20% of all gastrointestinal system lymphomas. Lymphomas constitute 0.2% of all colon malignancies. Plasmablastic lymphoma is a distinct pathological entity, classified as a subtype of large cell lymphoma. This condition is uncommon and is associated with a poor prognosis. The condition is frequently linked to a state of immunosuppression, a term given to describe a condition in which the immune system is unable to adequately fight infection. Examples of this include HIV infection. However, cases have been reported in the absence of HIV infection. In this case presentation, the objective is to present a patient who presented to the emergency department with acute abdominal symptoms and was diagnosed with lymphoma based on the pathology results.

Case: A 66-year-old male patient presented to the emergency department with complaints of nausea, vomiting and abdominal pain. For a period of three days, the patient experienced an absence of both defecation and defecative symptoms. The patient's vital signs revealed a pulse rate of 110 beats per minute. The patient exhibited normal blood pressure readings, with a temperature of 38.8 degrees Celsius. A physical examination was conducted, which revealed widespread tenderness, accompanied by the presence of rebound tenderness. The patient's upright abdominal X-ray exhibited features consistent with ileus. The subject had a known diagnosis of COPD and had been receiving treatment for approximately two years due to HIV positivity. Contrast-enhanced abdominal CT revealed irregular wall thickness at the splenic flexure of the colon, along with a collection area of approximately 9 cm in diameter in the left upper quadrant adjacent to the pancreatic tail. Furthermore, multiple cases of congestive lymphadenopathy were identified in the vicinity of the pancreatic body, mesenteric vascular structures, para-aortic and para-caval regions. At the time of admission to the emergency department, the WBC count was 3900/μL and the CRP was 295 mg/L. Preliminary diagnostic findings indicated the presence of intestinal perforation, likely resulting from a colon tumour. Consequently, a surgical intervention was planned for the patient. Following laparotomy, substantial amounts of purulent fluid were observed within the abdominal cavity. On examination, the omentum and peritoneal surfaces exhibited multiple lymphadenopathies. A tumour and perforation were observed at the splenic flexure of the colon. A segmental colon resection with end colostomy was performed to excise the mass. Following a 24-hour period of intensive care, the patient was observed in the ward. Following the successful completion of a trial of oral medication and the passage of stools from the colostomy, the patient was discharged from hospital. The diagnosis of plasmacytic lymphoma was made in the colon resection material. Lymphoma involvement was observed in five of the seven lymph nodes that were dissected in the vicinity of the colon. The patient was observed and treated by oncology and haematology specialists

Keywords: intestinal perforation, colonic lymphoma

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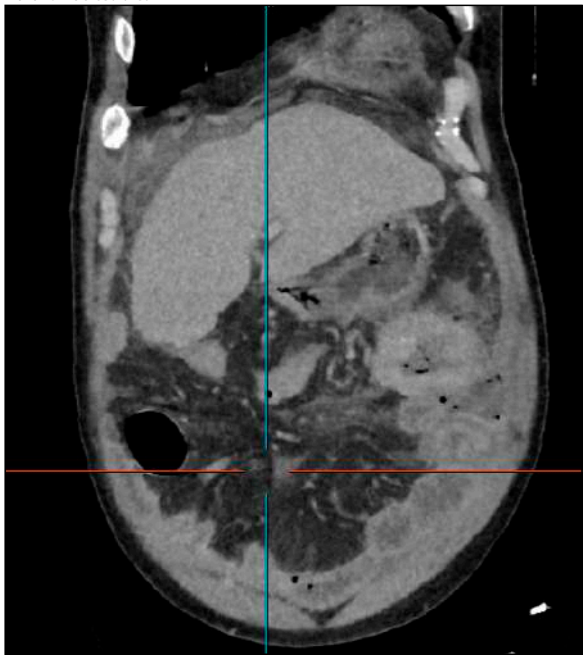
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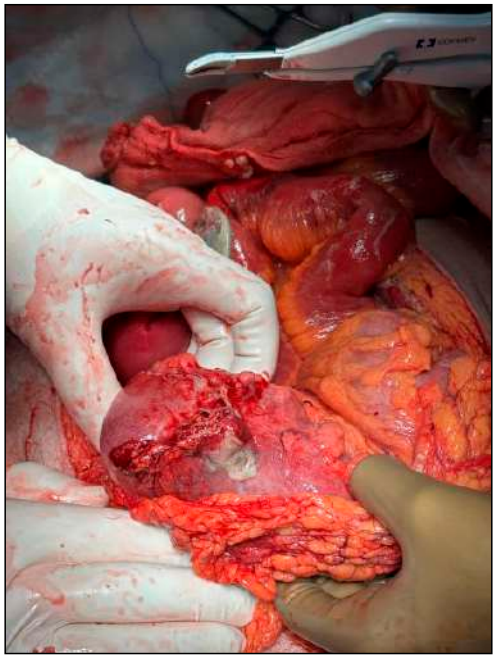
Asymmetric wall thickness in the colonic loops in the upper left quadrant, as well as the presence of free fluid in the surrounding area, are observed. Splenomegaly is a noteworthy finding.



Coronal section showing the lesion in the upper left quadrant. Perihepatic free fluid is noticeable.



Perforated mass in the colon



Acute Abdominal and Gastrointestinal Emergencies

PP-071

OUTCOMES OF NON-OPERATIVE MANAGEMENT WITHOUT INTERVAL APPENDECTOMY IN PATIENTS WITH PERIAPPENDICEAL ABSCESS: A RETROSPECTIVE ANALYSIS

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Background: Non-operative management (NOM) with percutaneous drainage is an established initial treatment for periappendiceal abscesses. However, the necessity of interval appendectomy (IA) following successful NOM remains controversial. This study aimed to evaluate the feasibility and outcomes of NOM without IA and compare clinical outcomes between patients managed with NOM alone and those undergoing IA after NOM.

Methods: A retrospective review was conducted on 53 patients diagnosed with periappendiceal abscess who underwent percutaneous drainage between January 2009 and December 2019. Patients were categorized into two groups: NOM only (n = 26) and IA after NOM (n = 27). Clinical data, including demographic characteristics, abscess size, laboratory values, treatment course, and follow-up outcomes, were analyzed. Statistical tests were applied based on data distribution.

Results: The recurrence rate in the NOM group was 11.1%, with all cases successfully managed surgically and no malignancies identified. The NOM group was significantly older (62.4 ± 11.5 vs. 49.5 ± 21.9 years, p = 0.007) and had more comorbidities (p = 0.004). The IA group showed higher inflammatory markers and larger abscess sizes. The NOM group had shorter hospital stays (7.9 ± 5.6 vs. 12.9 ± 6.6 days, p = 0.003) and total antibiotic durations (15 [IQR 12–18] vs. 21 [IQR 15–27] days, p = 0.005).

Conclusion: NOM without IA is a feasible and safe treatment option for selected patients with periappendiceal abscesses. Further prospective studies are needed to validate these findings and guide treatment decisions.

Keywords: Abscess, Appendectomy, Appendicitis, Non-operative management, Percutaneous drainage

Table 1. Comparison of clinical outcomes of Nonoperative management vs interval appendectomy

	NOM (n) ((Mean ± SD) or Median (IQR))	*IA (n) ((Mean ± SD) or Median (IQR))*	*p-value*
Duration of hospitalization (days)	7.9 ± 5.6	12.9 ± 6.6	0.003
Duration of total hospitalization (days)	9.3 ± 7.8	15.3 ± 6.2	0.002
Duration of drainage (days)	12.0 ± 7.9	14.7 ± 14.7	0.213
Duration of IV antibiotics (days)	5 (5 - 9)	13 (9 - 17)	<0.001
Duration of Total antibiotics (days)	15 (12 – 18)	21 (15 -27)	0.005

Hernia

PP-072

COMPLICATED TYPE II AMYAND'S HERNIA: STRANGULATED SLIDING HERNIA WITH AUTOAMPUTATED APPENDIX

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Introduction/Aims: Amyand's hernia, the inclusion of the vermiform appendix within an inguinal-hernia sac, is rare, representing 0.5–1% of inguinal-hernias, with only 0.13% involving appendiceal inflammation. Incidence peaks in pediatric and elderly populations, more commonly in males. We aim to present a complex case of a Type II Amyand's herniaencountered intraoperatively.

Methods: A 62-year-old man presented to our emergency department with a large, painful and non-reducible right inguinal hernia. This hernia had been present for 2 years without painful symptoms or symptoms of intestinal obstruction. Since a few days she has reported pain in the evening of herniated swelling, fever and a subocclusive episode. On CT scan he suspected necrotising fasciitis. The patient underwent emergency surgery. Intraoperative findings, surgical management and postoperative results were documented.

Results/Discussion: A voluminous abscess was drained and microbilogical examination was performed. The abscess surrounded the herniary sac within which was the thickened, oedematous cecum up to the ileocecal valve. The vermiform appendix appeared necrotic, covered with fibrin and self-amputated distally. A strangulated Amyand hernia with lateral and medial components (EHS P3L2M) was diagnosed. The appendectomy was classified as type II according to Losanoff and Basson and was performed with an endoscopic pet stump suture. Surgical Surce control of the abscess and empirical antibiotic therapy reasoned appendectomy. Clinical improvement due to rapid control of septic source. The hernia sac was closed and reduced, followed by posterior wall reinforcement using direct tissue repair and Postempski hernioplasty. The postoperative course was unremarkable, with no complications.

Conclusions: Amyand's hernia is a rare surgical entity, especially when complicated by strangulation and appendiceal pathology, typically diagnosed intraoperatively. Management must be tailored based on patient condition and hernia type, following established classification systems such as EHS and Losanoff–Basson.

Keywords: Amyand's hernia; Inguinal hernia; Strangulated hernia; Appendiceal ischemia; Sliding hernia; Type II Amyand's hernia; Losanoff Basson classification; EHS classification; Emergency hernioplasty; Appendectomy; Postempski repair; Abscess drainage.

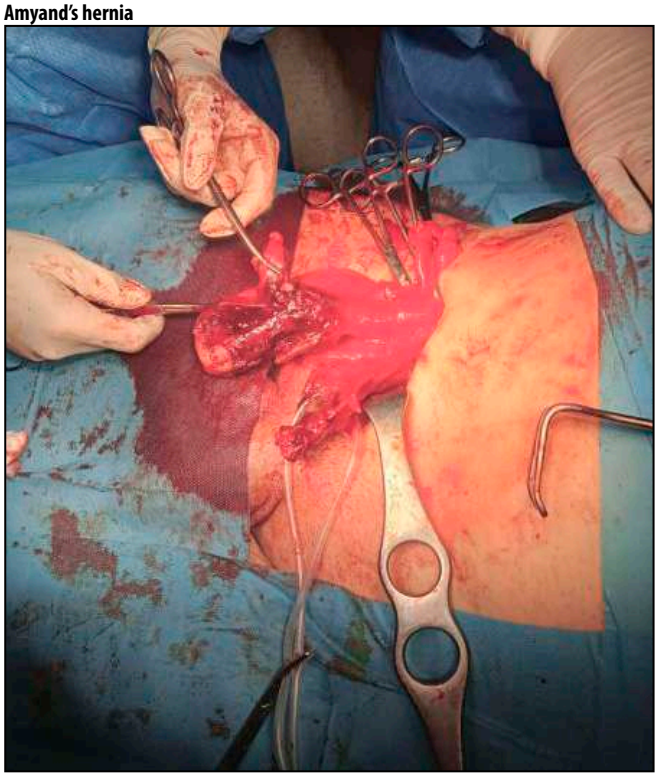
Amyand's hernia with autoamputaded appendix



Autoamputaded appendix



Amyand's hernia



Education for Emergency Surgery

PP-073

EXPERIENCE REPORT ON THE IMPACT OF SOCIO-EDUCATIONAL EXTENSION ACTIVITIES ON THE DEVELOPMENT OF SOFT SKILLS AMONG MEDICAL STUDENTS

Andrea De Melo Alexandre Fraga, Beatriz Pinheiro De Jesus, Jun Igor Valente Inenami

Unicamp

Introduction: In medical education, the development of technical skills is essential, however, socio-emotional competencies — also known as *soft skills* — have increasingly been recognized as fundamental to effective and humanized clinical practice. Socio-educational extension activities, which promote interaction between students and the community through educational and social initiatives, represent important strategies for enhancing these competencies.

The project aims to promote preventive health and social inclusion among children and adolescents in public schools, integrating education, sports, and citizenship. Additionally, it contributes to the humanistic training of medical students, who apply their academic knowledge in real-life contexts and develop essential skills for their future professional practice.

Experience Report: Through the project, students are exposed to real social contexts, engaging with environments and situations they would often not encounter until clinical practice. This interaction — both in organizing and implementing the socio-educational activities — demonstrated a meaningful impact on their professional development.

Contact with real communities enables students to apply technical knowledge in a practical manner while simultaneously developing essential human competencies such as empathy, social responsibility, communication, leadership, conflict resolution, teaching ability, and professional ethics.

Participants showed great enthusiasm for community engagement and a strong sense of responsibility in conducting the activities. They expressed a genuine desire to give back — through practical actions directed at children and adolescents — a portion of what they receive from the university in the form of high-quality, tuition-free education.

Methodology: The project carries out sports activities and thematic workshops on a semiannual basis, covering topics such as first aid (cardiopulmonary resuscitation, airway obstruction maneuvers, initial care in cases of seizures, burns, and fractures) and mental health, according to the demands of the participating institutions. Medical students are involved in both the planning and execution of these activities, reinforcing experiential learning through practical engagement.

Discussion: In Brazil, opportunities to promote the integrated development of technical and socio-emotional skills through extension practices remain limited. The experience provided by this project highlights the importance of expanding such initiatives, which bring students closer to social realities and foster a more humanized medical education, committed to the needs of the community.

Conclusion: Participation in extension projects proves essential for strengthening soft skills among future physicians, promoting effective integration between university and community. This experience contributes to the holistic development of medical students, preparing them to act in a conscious, collaborative, and socially engaged manner, aligned with the principles of public health.

Keywords: Extension, Soft Skills, Medical Education

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Students teaching beisebol



Students teaching judo



All the members of the team who teaches the children



The Professor explaining the activity to the students



Education for Emergency Surgery

PP-074

IMPLEMENTATION OF A PRACTICAL DISCIPLINE IN THE FIRST YEAR OF MEDICAL SCHOOL: EXPERIENCE REPORT ON THE DEVELOPMENT OF ESSENTIAL CLINICAL SKILLS

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Unicamp

Introduction: Medical education requires early integration of theoretical knowledge with practical skills, especially in view of the increasing complexity of health care delivery. Starting this process in the first year of medical school can increase student engagement and stimulate interest in the profession, in a curricular phase that is usually focused on basic content. To report the implementation of a practical discipline aimed at developing fundamental clinical skills from the beginning of the medical course, with a focus on emergency care and pediatric training.

Methods: This is an experience report regarding the implementation of a mandatory practical discipline in the curriculum of a medical course. A cohort of 120 first-year students was divided into three groups, which participate in weekly supervised practical sessions. The activities are structured in thematic stations that cover several areas of medicine: pediatrics, surgery, gynecology and obstetrics, internal medicine, and medical emergency. Each station is led by faculty and health professionals trained in simulation methodologies, using mannequins and clinical scenarios appropriate to the level of knowledge of the students, with feedback immediately after the training.

Experience Report: In the pediatric module, students are introduced to fundamental concepts of pediatric care, with an emphasis on recognizing signs of severity using the Pediatric Assessment Triangle, cardiopulmonary resuscitation (CPR) techniques, and airway clearance maneuvers in children and infants. Each station targets a fundamental component of emergency response, encompassing assessment, immediate intervention, and basic treatment strategies. The practices are carried out in simulated environments that recreate the emergency context, providing a realistic and safe learning experience.

This specific integrated approach aims to develop the clinical reasoning and practical skills of first-year medical students by introducing them early on in the curriculum to core concepts in pediatric emergency care. The use of realistic simulations and direct interaction with experienced healthcare professionals enhances student engagement and facilitates a smoother transition into clinical practice.

Notably, this early exposure has demonstrated a positive impact on students' confidence, critical thinking, and connection to the medical field, while also establishing a solid foundation in essential life support protocols. Moreover, the use of immediate and constructive feedback encourages critical reflection and continuous improvement in performance.

Overall, students demonstrated enthusiasm and growing interest during training in real pediatric emergency situations, demonstrating confidence in performing basic life support techniques.

Conclusion: Introducing a practical discipline with clinical simulation from the first year of the medical course proves to be an effective strategy for bringing students closer to the reality of the profession from the beginning of their training. This experience highlights the value of active learning, early exposure to simulated clinical scenarios and the development of essential clinical skills, promoting greater motivation, confidence and social responsibility among students from the first steps in medical graduation.

Keywords: Clinical skills, education, Medical school

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Practical activity



Practical activity



Practical activity



Practical activity



Emergency Surgical Complications

PP-075

DUAL BLADDER INJURY DUE TO TROCAR INSERTION DURING LAPAROSCOPIC APPENDECTOMY: A RARE CASE DIAGNOSED POSTOPERATIVELY

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Introduction: A bladder injury is a rare complication of laparoscopic surgeries and may lead to significant morbidity. While these injuries are usually identified intraoperatively, in some cases diagnosis may be established during the postoperative period. In this report, we present a rare case of bladder injury caused by trocar insertion during laparoscopic appendectomy, which was diagnosed postoperatively and required surgical repair.

Case Presentation: A 45 year old male patient was admitted for laparoscopic appendectomy with a diagnosis of acute appendicitis. A Foley catheter was in place during the operation, and the bladder was empty. No complications were observed during the procedure, which was completed using standard techniques. On the first postoperative day, drainage volume reached 1800 mL, prompting suspicion of a urinary leak. Creatinine measurement was performed on the drainage fluid, revealing a creatinine level of 41 mg/dL. Based on these findings, a CT-scan was ordered and a urology consultation was requested. The CT-scan showed contrast leakage from the bladder. Cystoscopy performed by the urology team identified two separate iatrogenic perforation sites in the bladder. These injuries were attributed to trocar placement. The patient was scheduled for surgery the same day, and open surgical repair of the bladder was performed using primary double-layer closure. The Foley catheter was left in place postoperatively.

No complications were observed during postoperative follow-up.

A cystogram performed on postoperative day 10 was normal and the patient was discharged. A voiding ciystography was per-

formed on outpatient control 14 days after discharge and the Foley catheter was removed.

Discussion: Bladder injuries are more commonly observed in laparoscopic pelvic surgeries but are quite rare in laparoscopic appendectomies. Despite the use of a Foley catheter, trocar placement in close proximity to the bladder wall can lead to this complication, particularly in cases involving anatomical variations or technical difficulties.

In this case, an intraoperative bladder injury that went unrecognized was suspected due to an increase in drainage volume, and the diagnosis was confirmed by creatinine measurement and cystoscopy. Early intervention and surgical repair allowed for successful treatment without complications. Such cases underestimate the necessity of always considering the risk of bladder injury during laparoscopic procedures.

Conclusion: As demonstrated in this case, an intraoperative injury that goes unrecognized may be detected postoperatively through increased drainage volume and creatinine analysis. Early cystoscopy and appropriate surgical intervention can lead to successful outcomes. Such cases emphasize the importance of surgeons exercising caution during trocar placement and the significance of monitoring for signs of urinary leakage in the postoperative period.

Keywords: Laparoscopic Appendectomy, Bladder İnjury, Trocar İnjury

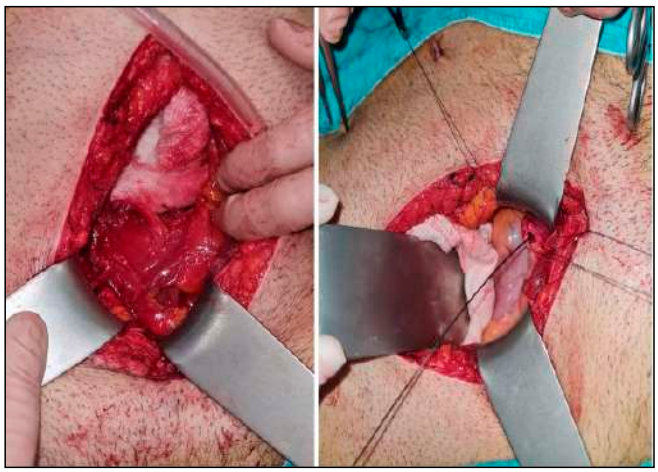


Figure 2. İntraoperative Findings

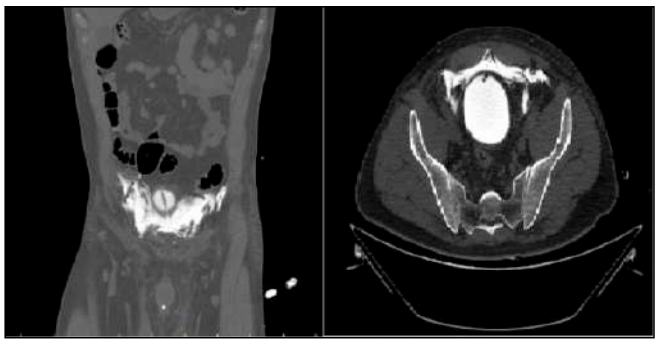


Figure 1. Postoperative Cystogram

Acute Abdominal and Gastrointestinal Emergencies

PP-076

ANASTOMOSIS VERSUS OSTOMY IN MESENTERIC ISCHEMIA: SINGLE-INSTITUTION RETROSPECTIVE ANALYSIS

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Introduction: Mesenteric ischemia is a surgical emergency with high mortality. The optimal reconstructive strategy following bowel resection—anastomosis or ostomy—remains debated. This study compared short-term outcomes across surgical approaches in a tertiary care center.

Methods: Retrospective study of patients undergoing bowel resection for mesenteric ischemia (April 2021 – June 2024). Patients were grouped by reconstruction type: anastomosis, ostomy, or no reconstruction (maximum benefit strategy). Main outcomes included hospital mortality, length of stay, and short bowel syndrome. Preoperative predictors of mortality were analyzed, including ASA classification and lactate levels.

Results: Thirty patients were included: 10 had anastomosis, 14 ostomy, and 6 no reconstruction. Hospital mortality was 10% in anastomosis (1 death due to hospital-acquired pneumonia), 28.5% in ostomy, and 100% in no reconstruction. Hospital stay was longer in the ostomy group (median 19 vs 8 days), due to ostomy output monitoring, metabolic stabilization, and management of short bowel syndrome. Elevated lactate >4 mmol/L ($p = 0.031$) and ASA ≥ III ($p = 0.047$) were significantly associated with increased mortality.

Conclusion: In our cohort, primary anastomosis was associated with the lowest mortality, particularly in hemodynamically stable patients without extensive ischemia. Ostomy, while offering safety in unstable patients, was linked to longer hospitalization and higher mortality. ASA score and lactate level remain key predictors and should guide surgical decision-making. A risk-adapted approach is essential to optimize outcomes in mesenteric ischemia.

Keywords: Mesenteric ischemia, anastomosis, ostomy, ASA score, lactate, mortality, emergency surgery.

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Table 1. Baseline characteristics by group

Variable	*Anastomosis*	*Ostomy*	*Without reconstruction*
Mean age (years)	58	62	72
ASA ≥ III (%)	40%	71%	100%
Lactate >4 mmol/L (%)	20%	57%	100%
Days of symptoms	2	3	3

Table 2. Postoperative Results

Variable	*Anastomosis*	*Ostomy*	*Without reconstruction*
Hospital mortality	10%	28.5%	100%
Stay (median, days)	8	19	-
Short bowel	10%	14%	-

Table 3. Factors associated with mortality

Variable	*Survivors*	*Deceased*	*p value*
Lactate >4 mmol/L	26%	81%	0.031
ASA ≥ III	42%	73%	0.047
No reconstruction	0%	100%	<0.01

Emergency Surgical Complications

PP-077

IATROGENIC PERFORATIONS POST COLONOSCOPY

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Iatrogenic perforation is a rare complication following colonoscopy with a globally reported rate of 0.016-0.8% for diagnostic procedures and slightly higher at 0.02%- 8% for therapeutic procedures. In this retrograde study, we looked at the complication rate of iatrogenic perforations within our local trust hospitals within the last 10 years to assess the incidence as well as the management of such complications in accordance with the recommendations from the WSES 2017 guidelines.

As a smaller centre, our numbers of colonoscopies are impressive with an average of 8438 colonoscopies per year. From the data over the last 10 years, only 13 of these patients were diagnosed with an iatrogenic perforation. This meant that our incidence rate is encouraging and is well below the expected rate at 0.0002% regardless of the procedure being therapeutic or diagnostic. As expected, the rate of the iatrogenic perforation was slightly higher in those undergoing polypectomies.

The most common site of perforation was found to be in the caecum at 23%, followed by the sigmoid, rectum and hepatic flexure all being equivalent at 15%. The location of 15% of the perforations were not found and thought to be small enough that it sealed and was able to be treated conservatively.

The management of these patients were assessed in accordance with the guidelines and were very reassuring. 66.7% of those who were suspected of an iatrogenic perforation during the procedure underwent an endoscopic repair with clips and subsequent antibiotics as per the recommendations. The remaining patient became unresponsive during the procedure and was taken to theatre for a laparoscopic repair of the caecal perforation.

Of those that were diagnosed post procedure, 2 were acutely unwell with sepsis and taken to theatres for a laparotomy, 1 of whom subsequently died likely due to a delayed presentation as well as existing co-morbidities.From the remaining patients diagnosed post procedure, 4 were managed conservatively with antibiotics, 1 underwent IR drainage and 4 patients were taken to theatre for surgical management of the perforation.

With respect to the surveillance of these patients, none on these patients were found to have had a colonoscopy within the recommended 3–6-month period. Furthermore only 23% of patients underwent a surveillance colonoscopy at all, averaging 6-8 months post procedure. With this respect, there is much we can do within our trust to improve patient care follow up post iatrogenic perforations.

Overall this study has been reassuring with respect to our trust incidence rates of perforations and on the immediate management of the patient, however I believe that there is still room for growth for the surveillance of these patients. Limitations of this study include those patients that did not present to our local trust.

Keywords: Colonoscopy, intestinal perforation, Endoscopy, gastrointestinal, laparotomy

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Abdominal Trauma

PP-078

THE MACKLIN EFFECT – AS A CAUSE OF TENSION PNEUMOPERICARDIUM.

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Introduction: Tension pneumopericardium is an uncommon but potentially fatal complication of blunt chest trauma (1,2). In 1944, Macklin described the pathophysiological process of this phenomenon, characterized by alveolar rupture, dissection of the bronchovascular sheaths, and the spread of pulmonary interstitial emphysema toward the mediastinum and pericardium, which typically occurs after severe thoracic trauma (3,4,5,6). The present case documents this rare phenomenon.

Case: 75-year-old male patient, brought in by EMS 107 after a 6-meter fall. Transport time: 30 minutes.

BP 100/70; HR 125; RR 23; SpO_2 92%; Glasgow Coma Scale: 9/15; Shock Index: 1.2

Hemodynamically unstable. Orotracheal intubation performed prehospital. Symmetrical chest with generalized hypoventilation. Hypophonic heart sounds, mild jugular vein distension, and present peripheral pulses. Soft, depressible abdomen; stable pelvis. Subcutaneous emphysema on the right hemithorax.

Hematocrit 37, Hemoglobin 12.2, pH 7.38, HCO_3 19, Base Excess -5.3, Lactate 5.1, CPK 1348, Calcium 0.89, Troponin 350.

E-FAST: Negative lung sliding on both pleural spaces, no pericardial fluid, no free abdominal fluid.

Initial management: Left forearm IV access, infusion of 800 cc Ringer's Lactate (10 ml/kg). Loading and maintenance doses of tranexamic acid. Endotracheal intubation. Administration of calcium gluconate. Transferred to CT scan.

Whole-body CT scan findings: Pneumopericardium, pneumomediastinum, bilateral pneumothorax, multiple right rib fractures (4th–8th ribs), right clavicle fracture, subcutaneous emphysema.

The Macklin Phenomenon: Despite the absence of an identifiable bleeding source on computed tomography, the patient remained hemodynamically unstable. Bilateral chest tubes were placed, revealing minimal aerorrhagia without significant output, and no clinical improvement was observed. Blood pressure was 80/60 mmHg, heart rate 130 bpm, and electrocardiogram showed low-voltage QRS complexes, with a progressive need for vasopressors.

Given the suspicion of obstructive shock secondary to tension pneumopericardium, an ultrasound-guided pericardiocentesis was performed, successfully aspirating air from the pericardial cavity, resulting in immediate hemodynamic improvement.

Evolution

- Serial hemodynamic monitoring and echocardiogram showed preserved systolic and diastolic function.
- Extubation was performed at 48 hours.
- Transferred to general ward at 72 hours.
- Chest drains were removed on day 4, and the patient was discharged from hospital.

Discussion: The Macklin effect explains the development of obstructive shock secondary to tension pneumopericardium, particularly in the context of blunt chest trauma with high kinetic energy transfer (5,6,7,8). In the present case, the initial exclusion of tension pneumothorax through bilateral chest drainage, the presence of clinical signs compatible with cardiac tamponade, the absence of free fluid in the pericardial sac, and progressive hemodynamic decompensation with increasing vasopressor requirements allowed the suspicion of this rare entity and guided appropriate action. There are very few reports in the international literature attributing hemodynamic compromise directly to the Macklin effect as a cause of tension pneumopericardium (7,8,9). This rarity highlights the importance of maintaining a high index of clinical suspicion and achieving early diagnosis—key factors for timely intervention by the trauma team.

Keywords: Macklin effect Tension pneumopericardium Blunt chest trauma Obstructive shock Ultrasound-guided pericardiocentesis

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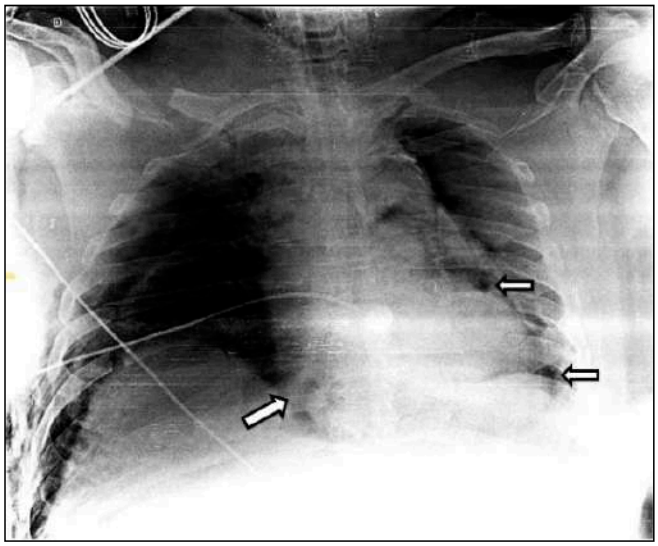


Figure 1. Pneumopericardium, pneumomediastinum, and thoracic subcutaneous emphysema are observed.

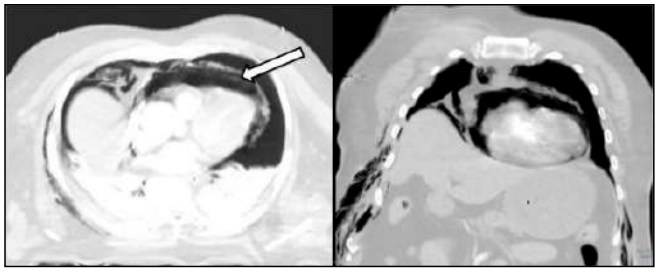


Figure 2. Chest computed tomography.



Figure 3. Ultrasound-guided pericardiocentesis.

Damage Control Surgery

PP-079

BIBLIOMETRIC ANALYSIS OF DAMAGE CONTROL SURGERY

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Introduction: Damage control surgery (DCS) is a critical surgical approach for managing severely injured or physiologically unstable patients, especially in trauma settings. The strategy focuses on rapid, temporary control of bleeding and contamination, followed by physiological stabilization and delayed definitive repair. DCS has evolved to include a broader range of injuries and is now integrated with advanced resuscitation techniques.

Bibliometric analysis refers to the use of quantitative analysis techniques to evaluate scientific literature. In medicine, bibliometric analysis has been utilized to assess the trends, impact, and evolution of research within specific medical fields or topics. It offers a statistical approach to understanding various aspects of the scientific community, including publication trends, research impact, collaboration networks, and the development of specific research fields over time.

In this analysis, we aim to perform the bibliometric analysis of damage control surgery

Methods: We use the "Scope" database and conduct a search on English written articles between the years 2015-2025 using the keyword "damage control surgery"

Bibliometric analysis was conducted via the "Pyhton" program. Top authors, top journal, most cited articles, most profiling countries were analyzed. Trending topics and funding institutions were also analyzed.

Results: 187 articles were found.The number of publications on damage control surgery has shown notable fluctuations over the past decade, with a marked increase in research output in recent years. The annual publication trend demonstrates a growing interest in this field, peaking in 2017 and maintaining a steady output thereafter.

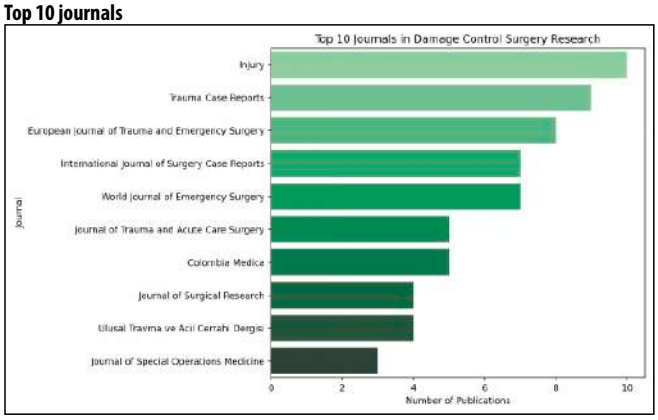
Research on damage control surgery is disseminated across a variety of journals, with Injury, Trauma Case Reports, and the European Journal of Trauma and Emergency Surgery leading in publication volume. These journals serve as primary platforms for sharing advancements and clinical experiences in the field.

The most prolific contributors to the literature include Boddaert G., Ordoñez C.A., and Kirkpatrick A.W., each with multiple publications. Their work has significantly shaped the discourse and development of damage control surgery practices.The United States leads in research output, followed by Japan, France, and Italy. This distribution highlights the global interest and collaborative efforts in advancing damage control surgery.The most cited articles focus on the indications, techniques, and outcomes of damage control surgery, reflecting the field's emphasis on evidence-based practice and clinical guidelines. Notably, the article by Roberts D.J. et al. (2016) stands out with over 100 citations, underscoring its influence.

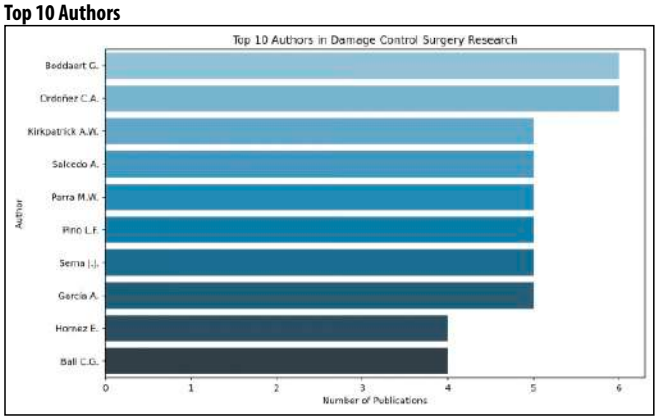
Conclusion: The field of damage control surgery is characterized by dynamic growth, international collaboration, and a focus on optimizing clinical practice through research. Continued bibliometric monitoring will be valuable for identifying emerging trends, guiding future research priorities, and fostering global cooperation in trauma care.

Keywords: damage control surgery, bibliometrics

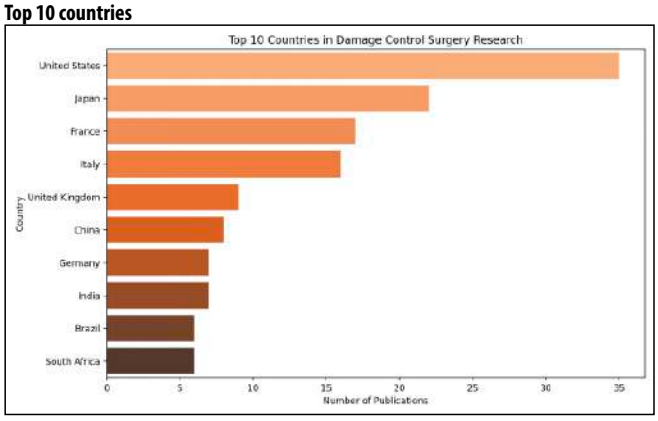
Top 10 journals



Top 10 Authors



Top 10 countries



Acute Abdominal and Gastrointestinal Emergencies

PP-080

BIBLIOMETRIC ANALYSIS OF SUBTOTAL CHOLECYSTECTOMY

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Introduction: Subtotal cholecystectomy is a surgical technique used when cholecystectomy is too risky, often due to severe inflammation or unclear anatomy. It is increasingly recognized as a safe "bailout" option to avoid major complications, especially bile duct injury, in complex cases. Lately, by Strasberg et al, two types were described as fenestrating and reconstitutional, which can be performed according to the surgeon's pReferences with some degree of morbidity.

Bibliometric analysis refers to the use of quantitative analysis techniques to evaluate scientific literature. In medicine, bibliometric analysis has been utilized to assess the trends, impact, and evolution of research within specific medical fields or topics. It offers a statistical approach to understanding various aspects of the scientific community, including publication trends, research impact, collaboration networks, and the development of specific research fields over time.

In this analysis, we aim to conduct a bibliometric analysis of subtotal cholecystectomy to identify trends in this topic.

Methods: We use the "Scopus" database and conduct a search on English-written articles using the keyword "subtotal cholecystectomy". Only articles in medical fields were included.

Bibliometric analysis was conducted via the "Python" program. Top authors, top journal, most cited articles, and most profiling countries were analysed.

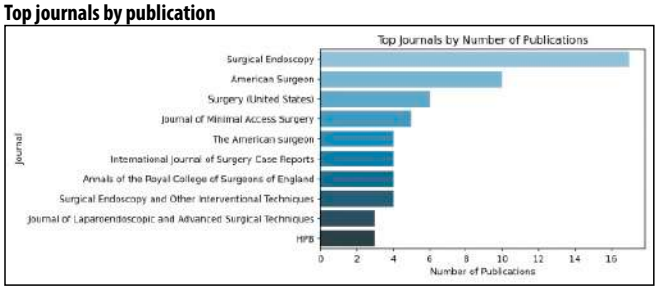
Results: 133 articles were found.The bibliometric analysis revealed that "Surgical Endoscopy" is the leading journal in terms of the number of publications on subtotal cholecystectomy, followed by "American Surgeon" and "Surgery (United States)." When considering total citations, "Surgical Endoscopy" and "Journal of the American College of Surgeons" stand out as the most influential journals, indicating their central role in disseminating high-impact research in this field.The most cited authors in the field include Elshaer M., Gravante G., and Thomas K., each with 264 citations, reflecting their significant contributions to the literature on subtotal cholecystectomy. Other highly cited authors, such as Strasberg S.M. and Pucci M.J. also demonstrate strong influence through their published work.

The most cited article is "Subtotal cholecystectomy for 'Difficult gallbladders': Systematic review and meta-analysis" by Elshaer M. et al., published in JAMA Surgery, with 264 citations. Other highly cited articles focus on surgical techniques, outcomes, and the prevention of bile duct injury, highlighting the clinical challenges and evolving strategies in subtotal cholecystectomy.

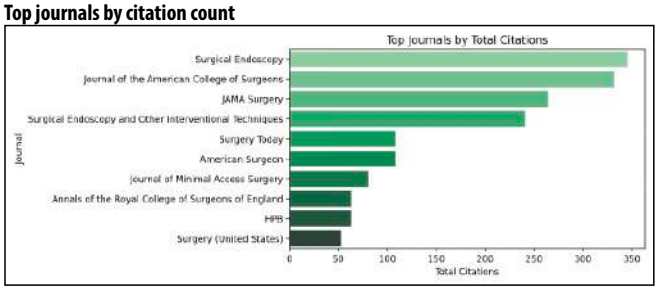
Conclusion: This bibliometric analysis demonstrates that research on subtotal cholecystectomy is both active and highly focused, with a few journals and authors leading the field. The most influential studies address critical surgical challenges and have significantly shaped clinical practice. These findings highlight the importance of continued research collaboration and dissemination in high-impact journals further to advance the understanding and management of subtotal cholecystectomy.

Keywords: subtotal cholecystectomy,cholecystectomy,bile duct injury

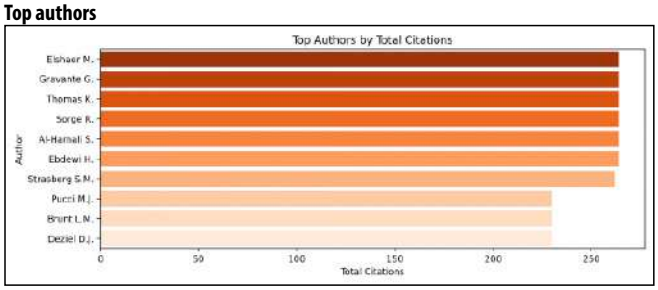
Top journals by publication



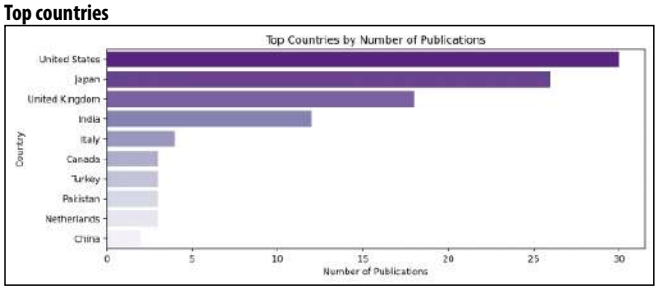
Top journals by citation count



Top authors



Top countries



Vascular Emergencies

PP-081

TRAUMATIC THORACIC AORTIC INJURY IN BLUNT THORACOABDOMINAL TRAUMA: ENDOVASCULAR AND NONOPERATIVE MANAGEMENT

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Municipal Emergency Hospital

Introduction: Traumatic thoracic aortic injury (TTAI) is rare but potentially fatal, occurring in 1.5–2% of patients with blunt chest trauma, especially due to high-speed deceleration. It commonly affects the aortic isthmus, just distal to the left subclavian artery. Survival depends on early diagnosis and the severity of associated injuries. This case highlights the importance of early detection and a multidisciplinary approach.

Case Report: A 27-year-old male sustained blunt thoracoabdominal trauma after a motorcycle accident. On admission, he was stable (Glasgow 15/15, shock index 0.51) with mediastinal widening on chest X-ray. CT angiography showed a descending thoracic aorta pseudoaneurysm distal to the left subclavian, classified as moderate (Harborview) and Grade III (SVS). He also had Grade III hepatic laceration and Grade I colonic injury.

Management: He was admitted to ICU. Nonoperative management (NOM) was selected for hepatic and colonic injuries, while an endovascular repair (TEVAR) was planned for the aortic lesion. On day 7, after hemodynamic and coagulation stabilization, a thoracic endograft (Valiant Captivia® 22 mm × 12.4 cm) was successfully deployed via right femoral access under spinal anesthesia.

Outcome: The patient remained stable postoperatively, tolerated oral intake after 48 h, and was discharged on day 10. A 30-day follow-up CT confirmed proper stent positioning, no leaks, and hematoma resolution. Long-term imaging controls were scheduled at 6, 12 months, and annually.

Discussion: Endovascular repair has become the standard of care for TTAI due to lower perioperative morbidity and mortality compared to open surgery. The case supports delayed TEVAR in stable patients with associated injuries. Success depends on early diagnosis, injury grading, and institutional experience. TEVAR offers fewer complications, shorter stays, and improved survival in selected cases.

Keywords: Traumatic thoracic aortic injury; blunt thoracoabdominal trauma; endovascular repair; pseudoaneurysm; nonoperative management; TEVAR; vascular trauma.

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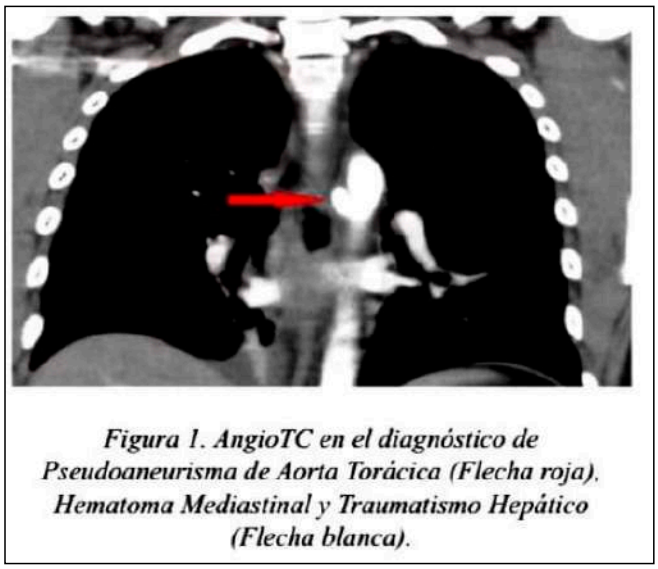


Figura 1. AngioTC en el diagnóstico de Pseudoaneurisma de Aorta Torácica (Flecha roja). Hematoma Mediastinal y Traumatismo Hepático (Flecha blanca).

Figure 1. CT Angiography in the diagnosis of Thoracic Aortic Pseudoaneurysm (Red arrow), Mediastinal Hematoma and Hepatic Trauma (White arrow).



Figure 2. TEVAR and CT scan follow-up at 30 days (bottom right).

Organ-Specific Emergencies

PP-082

A CASE OF LATE POSTPARTUM RIGHT UPPER QUADRANT PAIN CAUSED BY HEPATIC ABSCESS FOLLOWING A CESAREAN SECTION

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[2]Tekirdag Ismail Fehmi Cumalioglu City Hospital, Department of Interventional Radiology, Tekirdag/Türkiye
[3]Tekirdag Ismail Fehmi Cumalioglu City Hospital, Department of Surgical Oncology, Tekirdag/Türkiye
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Aim: Hepatic abscess is a relatively rare condition reported after delivery.We would like to share our management of a case in which a hepatic abscess was the cause of postpartum pain.

Case: A 26-year-old patient who had undergone a cesarean section three weeks earlier due to a difficult delivery was admitted to the emergency department with abdominal pain in the right upper quadrant that had lasted for one week.Non-contrast computed tomography revealed two cystic foci in close proximity in the liver parenchyma.Ultrasonography was performed to determine the cause of the pain, as there was no evidence of gallbladder pathology.This confirmed the presence of two abscess lesions, measuring 2.5 and 2 cm in diameter, located in segments 6 and 7 of the right lobe of the liver.No biliary pathology was observed.The CBC and blood biochemistry laboratory results were normal except for mild elevation in WBC and CRP. The patient had an unremarkable medical history and was not taking any medication.This was her first labor.No postnatal drugs were used except low-molecular-weight heparin.She was admitted with severe pain; her vital parameters were normal, and she had a subfebrile fever.She was given paracetamol and ampicillin+sulbactam intravenously and referred to a tertiary center for interventional radiology within two days.Contrast-free diffusion magnetic resonance imaging was requested to make a differential diagnosis of a hydatid cyst and percutaneous drainage was performed after excluding other diagnoses besides a hepatic abscess.Following the procedure,the patient was readmitted to the rural hospital,pain was dramatically relieved.She was discharged on the same day,having been prescribed the same group of oral antibiotics and breastfeeding was not interrupted.No growth was observed in the patient,whose culture results showed an intense presence of leukocytes.Control ultrasonography is planned, and the patient is being followed up as an outpatient without any complications or pain.

Discussion: Liver abscesses usually arise from direct spread caused by peritonitis or a biliary tract infection, or indirectly via hematogenous spread.They are rare,with all different types (pyogenic, amoebic and fungal) included, the annual incidence rate can be as high as 10 cases per 100,000 people.The main risk factor for a pyogenic liver abscess is the presence of a concomitant biliary tract anomaly, which was not observed in our patient. Although a case of pyogenic liver abscess with hematogenous spread presenting with chorioamnionitis after cesarean delivery has been reported,no specific gynecological pathology was observed in our patient.Surprisingly, cholestasis and transaminase enzymes were unaffected.Pregnancy follow-up was reported to be uneventful.In the presence of cystic liver lesions, radiological diagnoses to consider include infections,cystic or necrotic tumors and cysts containing blood.We initially suspected a liver abscess based on imaging and treated the patient with ultrasound-guided percutaneous drainage. The lack of growth in the culture result was insufficient to identify the pathogen. The influence of the intravenous antibiotherapy for only two days is debatable. Due to the high mortality rate reported in cases suggesting a septic condition,prompt diagnosis and treatment are essential. In our case, treatment was rapid and since the patient had no abnormal coagulation test results, drainage of the liver abscess was not delayed.

Keywords: Liver Abscess [C01.830.025.020.455] Puerperal Infection [C01.674.715]

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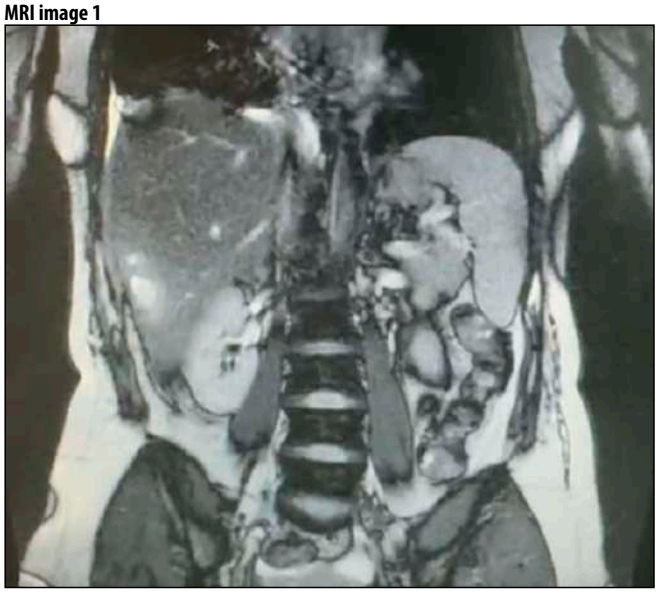
MRI image 3



MRI image 2



MRI image 1



Acute Abdominal and Gastrointestinal Emergencies

PP-083

A RARE SYMPTOM OF LUNG CANCER: ACUTE ABDOMEN DUE TO SMALL BOWEL PERFORATION

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Istanbul Başakşehir Çam and Sakura City Hospital

Background: Lung cancer is a leading cause of cancer-related mortality, with common metastatic sites including the brain, liver, bones, and adrenal glands. Gastrointestinal metastases are rare and often asymptomatic, but they can lead to severe complications such as bowel perforation.

Case Presentation: We report the case of a 59-year-old male with a history of smoking and occupational exposure who presented with acute abdominal pain, nausea, and vomiting. Imaging revealed pneumoperitoneum and jejunal thickening, prompting an emergency laparotomy. Intraoperative findings included multiple mass lesions and a perforation in the small bowel. Histopathological analysis confirmed metastatic pleomorphic carcinoma from a primary lung tumor. Postoperatively, the patient was treated with broad-spectrum antibiotics and initiated on chemotherapy (paclitaxel and carboplatin).

Discussion: While gastrointestinal metastases from lung cancer are rare, they may present with life-threatening complications. Early recognition of acute abdominal symptoms in lung cancer patients is crucial for timely diagnosis and intervention. Advances in imaging techniques and targeted therapies may improve detection and patient outcomes.

Conclusion: Small bowel perforation should be considered in lung cancer patients presenting with an acute abdomen. Prompt surgical management and oncological treatment can significantly influence prognosis and overall survival.

Keywords: Keywords: Lung Neoplasms, Gastrointestinal Neoplasms, Small Intestine, Intestinal Perforation, Intra-abdominal Metastasis.

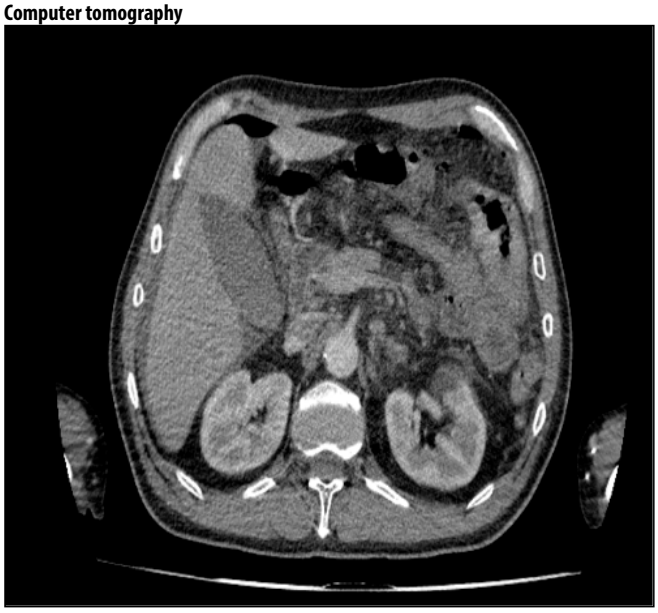
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Direct abdominal radiograph



Computer tomography



Abdominal Wall Emergencies

PP-084

UNEXPECTED EARLY POSTOPERATIVE ILEUS CAUSED BY FASCIAL DEHISCENCE AND BOWEL HERNIATION

Ayşe Tuğba Kurt, Saim Taşpınar, Halil İbrahim Dündar, Ali Cihat Yıldırım, İbrahim Üney, Sezgin Zeren, Yalçın Sönmez

Kütahya University of Health Sciences Medical School General Surgery Depertmant

Incisional hernias are known complications of abdominal surgery. In geriatric patients, delayed presentation with bowel obstruction may present diagnostic and therapeutic challenges. (1)

A 77-year-old male patient with a background of multiple comorbidities was evaluated for hematochezia. Colonoscopy revealed an obstructive mass at the rectosigmoid junction. Anterior resection with primary anastomosis was performed. On postoperative day 10, intestinal obstruction developed. Abdominal CT revealed a 4 cm fascial defect with herniation of a bowel loop. Surgical exploration confirmed herniated small intestine without signs of strangulation or perforation. The bowel was viable and fascial repair was performed.

The patient recovered well, with no complications during follow-up. Oral intake was reintroduced gradually and the patient was discharged on the 7th postoperative day after the second operation.

Postoperative ileus caused by early fascial dehiscence can occur and lead to incarcerated incisional hernia. Therefore, caution must be taken in the presence of high-volume seroma drainage in the early postoperative period. In this matter early intervention including radiological imaging should be considered. Timely imaging and surgical intervention are essential in preventing bowel compromise. (1)

Keywords: Hernia, Ventral [MeSH]; Hernia, Incarcerated [MeSH]; Postoperative Complications [MeSH]; Ileus [MeSH]; Intestinal Obstruction [MeSH]; Geriatrics [MeSH]; Laparotomy [MeSH]; Wound Dehiscence [MeSH]

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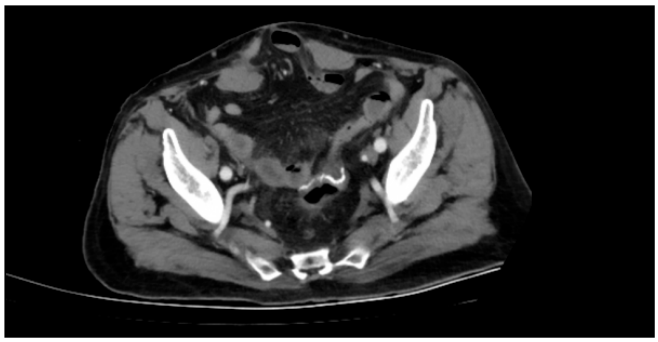


Figure 1. CT showing fascial defect with herniation of a bowel loop

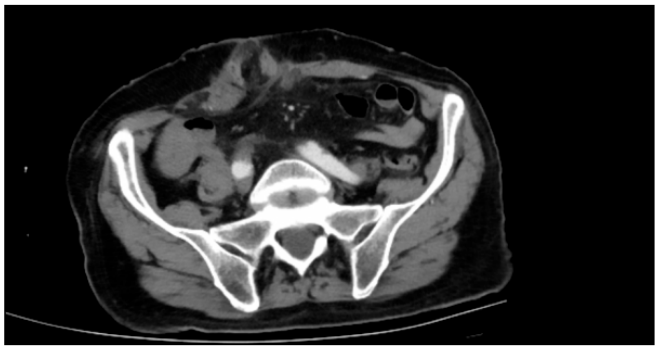


Figure 2. CT showing fascial defect with herniation of a bowel loop



Figure 3. Air liquid level in direct standing abdominal X-ray

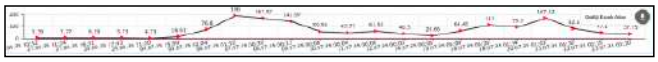


Figure 4. CRP Trend Reflecting the Clinical Course During Hospital Stay

Hernia

PP-085

A RARE CASE OF INTERNAL HERNIATION AND UNEXPECTED APPENDICEAL NEOPLASM IN A NONSURGICAL ABDOMEN

Ayşe Tuğba Kurt, İbrahim Üney, Esra Oğuz, Aylin Kökver, Yalçın Sönmez, Ali Cihat Yıldırım, Sezgin Zeren

Kütahya University of Health Sciences Medical School General Surgery Depertmant

Internal hernias are rare but potentially serious causes of small bowel obstruction, particularly in patients with no prior abdominal surgery. Additionally, incidental intraoperative findings can significantly alter prognosis and postoperative management.(1)

A 67-year-old male patient with a history of diabetes and hypertension presented with nausea, vomiting, and abdominal distension. Abdominal CT revealed signs of small bowel obstruction. Emergency laparotomy revealed herniation of the ileocecal junction into a peritoneal recess in the right abdominal wall. The appendix appeared edematous and was resected. Enterostomy was performed, and bowel contents were evacuated. The patient

had an uneventful postoperative recovery and was discharged on the 9th postoperative day.

Histopathological examination of the appendix revealed a Low-Grade Appendiceal Mucinous Neoplasm (LAMN), with negative surgical margins. No additional treatment was needed. (2)

This case highlights two rare but clinically relevant findings: internal herniation in a patient without prior abdominal surgery, and incidental detection of an appendiceal neoplasm. Awareness and timely intervention are essential for favorable outcomes. (2)

Keywords: Hernia, Internal [MeSH]; Intestinal Obstruction [MeSH]; Appendiceal Neoplasms [MeSH]; Mucinous Adenocarcinoma [MeSH]; Incidental Findings [MeSH]; Appendectomy [MeSH]; Laparotomy [MeSH]

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Figure 1. Abdominal CT showing dilated small bowels



Figure 2. Abdominal CT showing dilated small bowels

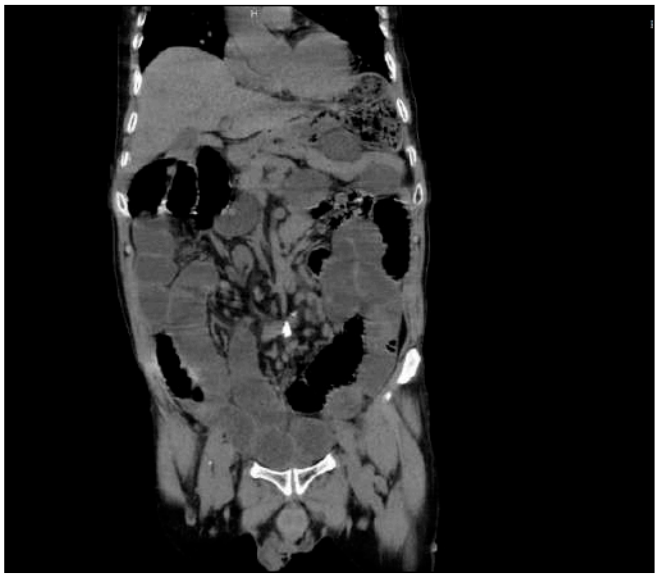


Figure 3. Abdominal CT showing dilated small bowels

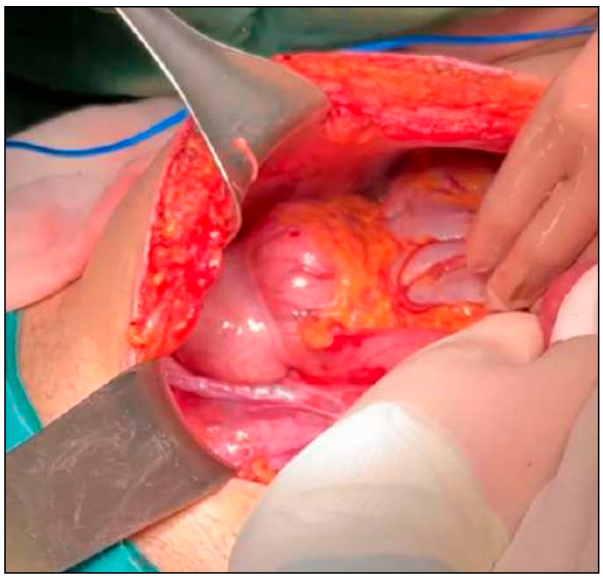


Figure 4. Herniation of the ileocecal junction into a peritoneal recess in the right abdominal wall

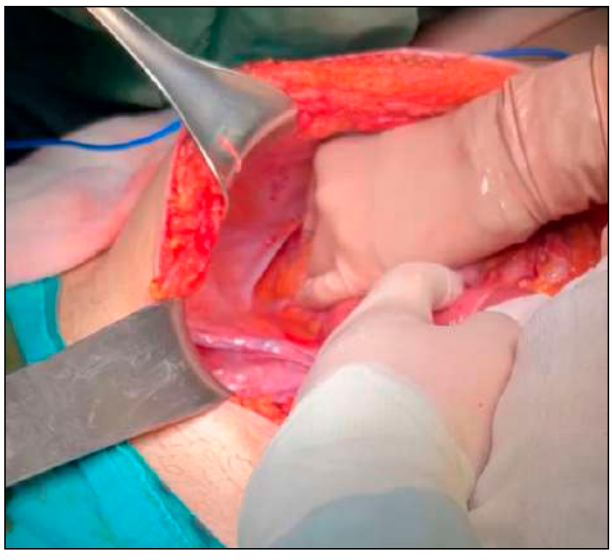


Figure 5. Internal herniation area peritoneal pocket

Acute Abdominal and Gastrointestinal Emergencies

PP-086

A MACHINE LEARNING-BASED RADIOMICS MODEL FOR DISTINGUISHING COMPLICATED FROM UNCOMPLICATED ACUTE APPENDICITIS

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[2]Shanghai Jiao Tong University ,school of Medicine
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Background and Purpose: Acute appendicitis is a common abdominal emergency requiring rapid and accurate differentiation between uncomplicated and complicated forms, as treatment strategies differ significantly. This study aimed to develop a machine learning-based radiomics model using CT imaging to improve diagnostic accuracy for complicated appendicitis and assess the additive value of integrating radiomic features with clinical data.

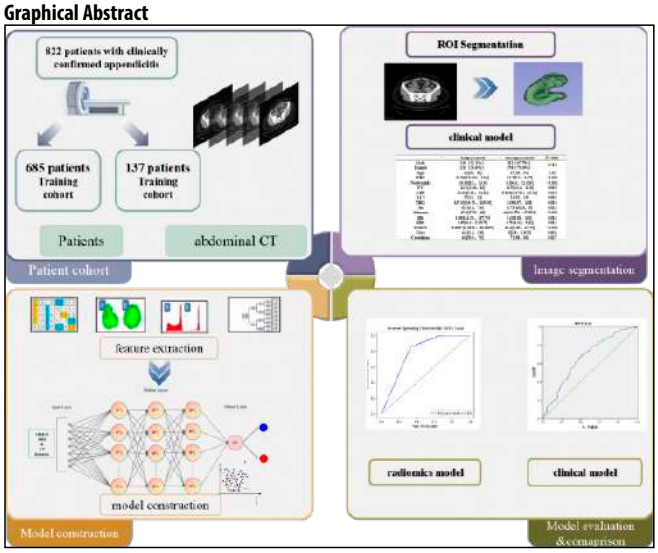
Methods: A retrospective cohort of 822 patients with clinically confirmed appendicitis (2020-2024) was enrolled. CT images were acquired using a standardized protocol (Siemens SOMATOM Force, 120 kV, 1 mm slice thickness). Radiomic features (shape, intensity, texture, and wavelet-based) were extracted from manually segmented ROIs of the appendix using PyRadiomics. Five-fold cross-validation was applied to evaluate multiple classifiers (decision tree, SVM, CNN, ResNet, MLP). A logistic regression model using clinical variables (CRP, lymphocyte percentage, hemoglobin, neutrophil count) was also constructed. Diagnostic performance was assessed via ROC analysis (AUC, accuracy, sensitivity, specificity).

Results: The radiomics-based decision tree model achieved an AUC of 0.786 (95% CI: 0.75-0.82), accuracy of 0.80, sensitivity of 0.857, and specificity of 0.667 for distinguishing complicated from uncomplicated appendicitis. The clinical-only logistic regression model yielded an AUC of 0.667. Radiomics features significantly outperformed clinical variables alone ($p < 0.01$).

Conclusion: The radiomics model demonstrates superior discriminative capability for complicated appendicitis compared to traditional clinical indicators. While promising for clinical decision support, further multi-center validation and automated ROI segmentation are warranted to enhance robustness and mitigate false-negative risks.

Keywords: Radiomics model, Machine Learning, Uncomplicated Acute Appendicitis, Complicated Acute Appendicitis, Computed tomography

Graphical Abstract



Acute Abdominal and Gastrointestinal Emergencies

PP-087

SOLITARY BRAIN METASTASIS AS THE INITIAL PRESENTATION OF COLORECTAL CANCER: A DIAGNOSTIC CHALLENGE

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Introduction: CRC (Colorectal Cancer) is still a leading cause of cancer-related illness and mortality worldwide. Early gastrointestinal symptoms are subtle and nonspecific. Brain metastases from CRC occur in 1–4% of cases and usually occur after the cancer has spread. In rare circumstances, intracranial metastases may induce neurological symptoms that indicate an undiagnosed primary colorectal cancer. Sudden neurological impairments often lead to an urgent MRI, which reveals intracranial lesions and a tentative diagnosis of primary brain tumour. However, brain metastases present with concerning clinical symptoms than early-stage CRC, making neuro-oncological evaluation easier. This instance emphasises the need to suspect metastatic illness in patients with unexplained brain lesions. A comprehensive diagnostic workup, including systemic examination, is needed to uncover hidden primaries like CRC. Early detection of primary tumours is crucial for informed treatment decisions, prediction, and patient outcomes. Herein, we describe a case of a metastatic CRC patient who presented with amnesia as the first symptom of brain metastases.

Case: A 63-year-old man with sigmoid colon adenocarcinoma is the subject of this report. After a fall, the patient arrived at the emergency department with amnesia. Imaging tests revealed a brain mass lesion with malignant features. He underwent surgery to remove the brain tumour, which was initially identified as a primary brain neoplasm. He was discharged without complications on the sixth postoperative day.

During the follow-up, the patient experienced gastrointestinal symptoms. Further examinations revealed that the main tumour was metastatic sigmoid colon carcinoma. The patient needed

surgery after presenting with an incarcerated scrotal hernia and ileus related to the tumour while receiving adjuvant therapy.

He underwent an emergency surgery in which Hartman's Procedure. He is still being followed in the intensive care unit.

Discussion: KRAS mutations, BRAF V600E, PIK3CA, and TP53 mutations are the most common genetic changes observed in colorectal tumours. Brain metastasis usually happens after liver or lung metastasis; however, in rare circumstances, the main tumour can spread directly to the brain parenchyma without any local or lymph node metastasis first.

As in our case, it is quite rare for the central nervous system to be the first place where cancer spreads. A presentation with neurological symptoms but no gastrointestinal complaints can make diagnosis and treatment challenging for both the doctor and the patient.

In cases like ours, brain metastases symptoms usually show up as headaches, seizures, changes in mental status, or focal neurological impairments. These indicators may mask or precede the traditional symptoms of primary colorectal tumours, such as rectal bleeding, weight loss, or changes in bowel habits.

Brain parenchymal involvement as the primary metastatic location is uncommon. This is mostly because of neurological problems that make systemic treatment less likely to work, the fact that local treatments like surgical resection or stereotactic radiosurgery don't work for everyone, so the patient's general performance status may get worse quickly.

In conclusion, this case may point out that brain metastasis, even though it is rare, might be the first sign of colorectal cancer. It emphasises that molecular profiling and a multidisciplinary approach are essential in those patients.

Keywords: Colorectal Cancer, Brain Metastases, Diagnose

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Resected Colon



Open Abdomen

PP-088

EARLY RESULTS FROM THE USE OF AN INNOVATIVE VERTICAL FASCIAL TRACTION SYSTEM FOR THE MANAGEMENT OF PATIENTS WITH OPEN ABDOMEN

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Background: Management of the open abdomen remains challenging due to difficulties in timely fascial closure and high morbidity from prolonged open abdomen duration. Traditional methods often require complex reconstruction. This study reports early clinical experience with a novel vertical fascial traction system aimed at improving fascial closure rates.

Methods: We conducted a prospective observational study including 13 patients with open abdomen treated using the vertical fascial traction device combined with negative pressure wound therapy. Patient demographics, indications, fascial gap measurements, closure rates, revisions, and complications were analyzed.

Results: Thirteen patients (8 men, 5 women; mean age 58.8 years) were treated over 24 months. Indications included peritonitis (8 patients), intra-abdominal hemorrhage (3), abdominal compartment syndrome (2), and bowel obstruction from carcinomatosis (1). Five patients had pre-existing abdominal wall hernias with major postoperative complications requiring open abdomen management.

Initial fascia-to-fascia (FTF) distances averaged 16.3 cm (17.8 cm in the hernia subgroup). Following 48–72 hours of device application, this distance decreased significantly to 11.8 cm ± 2 cm, promoting gradual fascial approximation. Definite fascial closure was achieved in 84.6% (11/13) of cases, with 81.8% (9/11) closed by primary midline suture and the remainder closed using mesh. Among patients with hernias, 4 of 5 achieved closure. Patients required an average of 2.53 revisions, with a mean duration from device initiation to closure of 9.1 days (9.25 days in the hernia subgroup).

No device-related complications were observed, and there were no cases of intra-abdominal abscesses, entero-atmospheric fistulas, or wound infections during device use. Post-closure, only one superficial wound infection occurred, managed effectively with NPWT. No fascial dehiscence or additional laparotomies were required during follow-up.

These outcomes suggest that vertical fascial traction combined with NPWT is a feasible and safe technique that significantly reduces fascial gaps, facilitates timely closure, and may reduce the need for complex abdominal wall reconstruction, even in high-risk patients with hernias.

Conclusions: This innovative system shows promising potential in improving fascial closure rates and patient outcomes in open abdomen management. Larger studies with longer follow-up are recommended to further validate these results and optimize protocols.

Keywords: Open abdomen, fascial traction, abdominal closure, emergency surgery, innovative device

Acute Abdominal and Gastrointestinal Emergencies

PP-089

MANAGEMENT OF COMPLICATED APPENDICITIS IN A PATIENT WITH PARAPLEGIA SECONDARY TO GUILLAIN–BARRÉ SYNDROME

Parmenion Patias[1], Konstantinos Marios Liosis[1], Effrosyni Stavropoulou[1], Marianna Anagnostopoulou[1], Effrosyni Papadima[2], Georgios Fougias[1], Iraklis Anastasiadis[1], Konstantinos Koumarelas[1], Sarantis Mourtarakos[1], Ioannis Massalis[1]

[1]Nafplion General Hospital, Department of Surgery
[2]Nafplion General Hospital, Department of Radiology

Introduction: Guillain–Barré Syndrome (GBS) is one of the most common acute acquired polyneuropathies. The exact cause remains unclear. However, a large proportion of patients report a preceding respiratory or gastrointestinal infection within up to four weeks before the onset of the syndrome with Campylobacter jejuni being the most frequently identified pathogen.

Objectives: To present and evaluate the laparoscopic management of complicated appendicitis in a paraplegic patient secondary of Guillain–Barré syndrome.

Materials and Methods: A 55-year-old male with a body mass index (BMI) of 34.6 kg/m^2 and a history of Guillain–Barré syndrome - diagnosed 14 years prior, was admitted to the Emergency Department due to severe abdominal pain and fever persisting for three days. On clinical examination, paraplegia from the L3 level was noted, along with marked tenderness and a palpable mass in the right iliac fossa (RIF). Laboratory tests revealed elevated inflammatory markers, while abdominal CT scan demonstrated appendicitis with a plastron and a small amount of ascites. Considering the rapid amelioration of symptoms, the complicated presentation of appendicitis, the patient's medical history, and the delayed presentation, an initial decision for conservative management was made. The following 48 hours, although the patient remained afebrile and exhibited substantial improvement in laboratory indices, the persistence of abdominal pain warranted proceeding with surgical intervention.

Results: The anesthetic management involved induction with minimal doses of propofol and rocuronium, followed by maintenance with desflurane, propofol, and remifentanil. Neuromuscular blockade reversal was achieved with sugammadex.

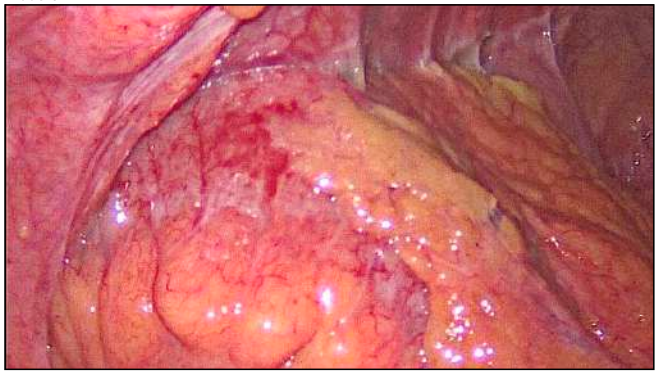
Intraoperatively, a well-formed plastron associated with a periappendiceal abscess was identified. The abscess cavity was drained, the appendix was isolated and securely ligated and diligent peritoneal lavage was performed. Finaly, two intra-abdominal drains were placed. The total operative time was 65 minutes.

On postoperative day 3, the patient developed ileus, necessitating suspension of enteral feeding and placement of a nasogastric tube (NGT) for four days. The postoperative course subsequently progressed without further complications, and the patient was discharged on postoperative day 12.

Conclusion: The management of complicated appendicitis in patients with a history of Guillain–Barré syndrome should adhere to the same clinical algorithm applied to the general population. Laparoscopic appendectomy represents a safe and effective therapeutic option.

Keywords: Complicated appendicitis, Laparoscopic appendectomy, Guillain–Barré Syndrome (GBS)

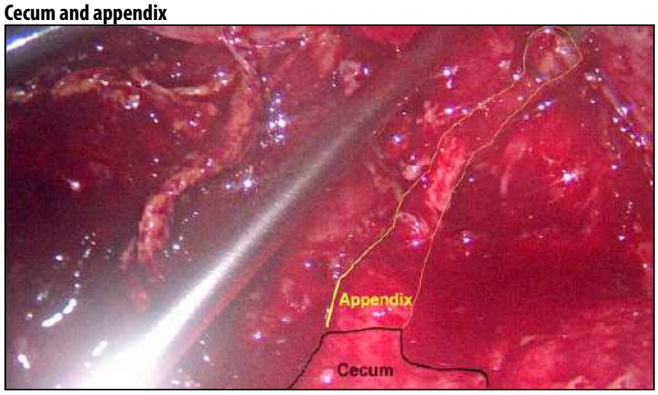
Plastron



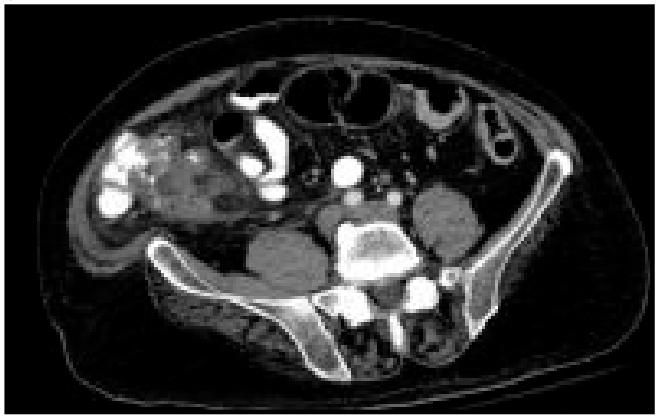
Trocars placement



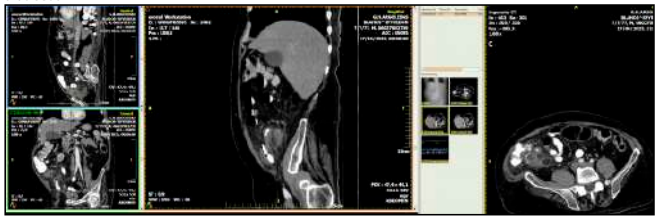
Cecum and appendix



CT



abscess



Hernia

PP-090

LAPAROSCOPIC REPAIR OF INCISIONAL HERNIA IN A PATIENT WITH HISTORY OF MULTIPLE OPEN ABDOMINAL OPERATIONS

Parmenion Patias[1], Marianna Anagnostopoulou[1], Effrosyni Stavropoulou[1], Konstantinos Marios Liosis[1], Effrosyni Papadima[2], Georgios Fougias[1], Iraklis Anastasiadis[1], Konstantinos Koumarelas[1], Sarantis Mourtarakos[1], Ioannis Massalis[1]

[1]Nafplion General Hospital, Department of Surgery
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Introduction: Incisional hernias are among the most common complications of laparotomies and in the literature are reported to occur in up to 23%. Even though the complication rate is low for obstruction or strangulation, the clinical presentation varies from completely asymptomatic to signs and symptoms of acute abdomen. Regarding the management, open or minimal invasive techniques can be performed.

Aim: To highlight the laparoscopic management of an incisional hernia in a patient with a history of multiple laparotomies.

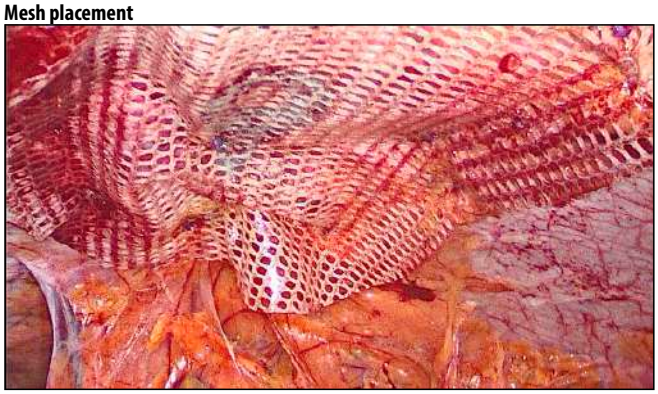
Material and Method: A 55-year-old female with a BMI of 34.9 kg/m2 was scheduled to laparoscopic Intraperitoneal Onlay Mesh (IPOM) repair of incisional hernia. Her surgical history consists of open biliopancreatic diversion (BPD) followed by cholecystectomy and appendectomy due to morbid obesity, 13 years ago. Two years ago, underwent second laparotomy with midle line incision for recreation of the entero-enteric anastomosis due to diarrheal syndrome. Incisional hernia of the supra-umbilical midleline incision was identified by the patient one year post operatively.

Results: The patient placed supine in a slight Trendelenburg position. Three trocars were inserted, 12mm suprapubic-5mm right iliac fossa (RIF) and 12 mm left iliac fossa (LIF). Intraoperatively, multiple adhesions between the greater omentum, small and large intestine and the gastric pouch with the peritoneum were found. Extensive adhesiolysis was performed with energy device. Multiple consecutive midleline wall defects were found - the biggest with the diameter of 3cm . A 10*15cm intraperitoneal mesh was placed and fixed using absorbable tackers. The total surgical time was 60 minutes. The patient was discharged on the 1st postoperative day.

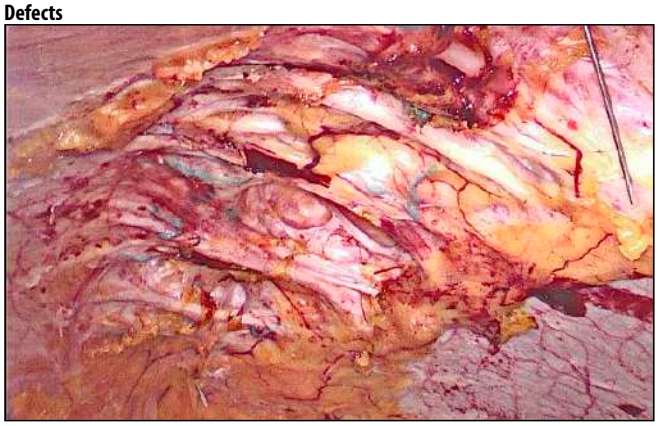
Conclusion: Laparoscopic surgery remains the treatment of choice for incisional hernias repair and can be achieved even in patients with a history of multiple laparotomies.

Keywords: Laparoscopic IPOM repair, Incisional hernia, Bariatric surgery

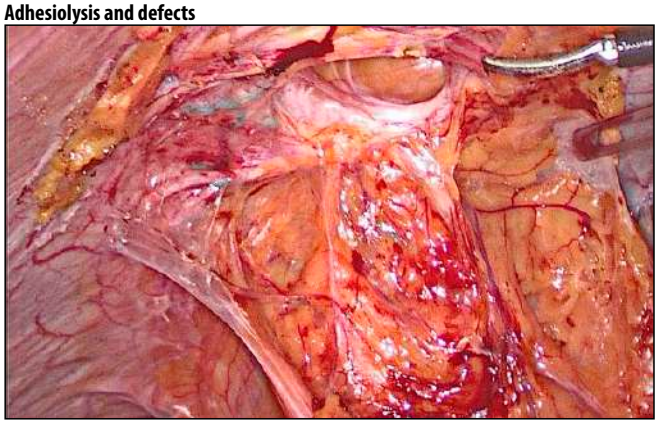
Mesh placement



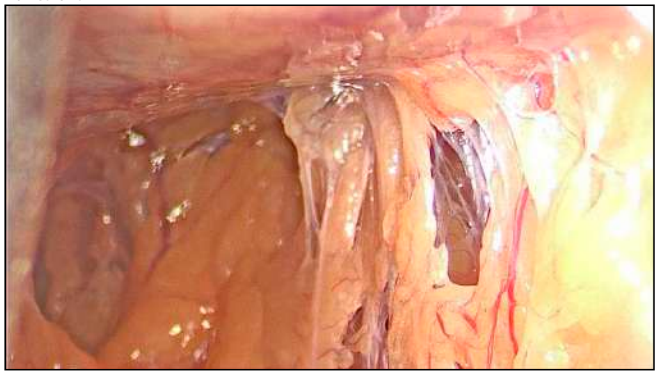
Defects



Adhesiolysis and defects



Adhesions



Open Abdomen

PP-091

ABDOMINAL WALL CLOSURE: THE ROLE OF VAC THERAPY

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Introduction and Aims: Mitochondrial disorders such as MELAS (Mitochondrial Encephalomyopathy, Lactic Acidosis, and Stroke-like episodes) are associated with increased perioperative risk and impaired wound healing. Surgical management in such patients is often complicated by soft tissue friability, mitochondrial metabolic disorders and poor recovery. The aim of this study is to present a patient with MELAS syndrome and duodenal perforation who underwent surgical interventions for open abdomen. Abdominal wall closure was achieved by using negative pressure wound therapy (VAC).

Methods: A 31year-old male with a history of MELAS syndrome, multiple brain ischemic episodes since childhood and feeding gastrostomy was admitted to the neurology department due to status epilepticus. During hospitalization, he developed sepsis, acute abdominal pain and underwent emergency exploratory laparotomy, that revealed a perforated duodenal ulcer. Due to intra-abdominal complications, he required an additional laparotomy. Postoperatively he developed abdominal wall dehiscence and bowel evisceration. Fascial closure was not feasible due to intestinal dilatation, edema, adhesions, and tissue friability. Eventually, a VAC system was applied as part of a delayed closure strategy.

Results: The patient tolerated the surgical interventions despite his underlying mitochondrial disease. VAC therapy was applied and gradually adjusted over a period of several weeks. This approach allowed for effective fluid control, granulation tissue formation, and progressive approximation of the abdominal wall. Definitive closure was achieved without mesh placement. No postoperative infections or wound dehiscence occurred. The patient remains stable one year postoperatively.

Discussion: Surgical management can be very challenging in patients with mitochondrial disorders. VAC therapy proved to be an effective bridge to secondary closure, offering both local control and time for systemic stabilization. In selected cases, negative pressure therapy can be a valuable component in the management of open abdomen.

Keywords: VAC therapy, open abdomen, abdominal wall dehiscence, bowel evisceration

Hernia

PP-092

UMBILICAL RICHTER'S HERNIA WITH ENTEROCUTANEOUS FISTULA — AN UNCOMMON PRESENTATION OF A SURGICAL EMERGENCY

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Introduction - Aim: Richter's hernia is a rare condition in which only part of the bowel wall, typically the antimesenteric border, herniates through a defect in the abdominal wall. Most occur in femoral hernias, while umbilical involvement is uncommon, representing only 5–8% of cases. Because of the initial lack of obstructive symptoms, they may undergo chronic incarceration and, if left unaddressed, may present as an enterocutaneous fistula. We report a rare case of umbilical Richter's hernia with enterocutaneous fistula that was successfully treated in our Surgical Department.

Methods: An obese 76-year-old male with a history of hypertension, coronary artery disease and dyslipidemia presented with a 10-day history of signs indicating inflammation around the umbilicus. No pain or symptoms suggestive of intestinal obstruction were observed. No prior surgical history was reported. Physical examination suggested an enterocutaneous fistula as there was foul-smelling umbilical discharge and skin necrosis. Computed tomography (CT) confirmed enterocutaneous fistula due to Richter's hernia.

Results: Exploratory laparotomy revealed an enterocutaneous fistula with partial involvement of the antimesenteric border of the small intestine at the umbilicus. The involved segment was excised and sutured. The fascial defect was repaired with standard primary closure. Postoperative period was uneventful. The patient was discharged on postoperative day 7 and remains asymptomatic, with no recurrence at 5-month follow-up.

Discussion: Richter's hernia is a rare but potentially life-threatening condition, especially in elderly population. Clinical presentation due to subtle symptoms may delay diagnosis. Early recognition and urgent surgical repair are essential, to achieve favorable outcomes, with resection reserved for non-viable bowel.

Keywords: Richter's Hernia, enterocutaneous fistula, antimesenteric

border, primary closure

Acute Abdominal and Gastrointestinal Emergencies

PP-093

MESENTERIC TORSION DUE TO LADD'S BAND: A RARE CASE OF INTESTINAL MALROTATION

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Istanbul Haseki Training and Research Hospital

Introduction: Intestinal malrotation is a rare congenital anomaly in adults, caused by incomplete rotation and fixation of the midgut during embryonic development. Adult cases often present with vague abdominal symptoms, delaying diagnosis and increasing the risk of severe complications. Ladd's bands, fibrous attachments from the cecum to the retroperitoneum, may cause duodenal compression or compromise mesenteric blood flow, leading to ischemia. We report a rare case of acute mesenteric torsion due to Ladd's bands in an adult female, emphasizing the importance of early recognition and timely surgical intervention.

Case Presentation: A healthy 26-year-old female presented with acute severe abdominal pain for three hours, disproportionate to examination findings, with generalized tenderness, guarding, and rebound. Laboratory tests showed leukocytosis (16,000/mm^3), CRP 6 mg/L, and lactate 3.30 mmol/L. Contrast-enhanced CT revealed mesenteric torsion, ischemic small bowel loops, and a sac-like interloop fluid collection. After consent, emergency surgery was performed.

Surgical Findings: A 10-mm trocar was placed in the left lower quadrant for diagnostic laparoscopy, revealing displacement of small bowel loops and cecum toward the midline, with several loops in a fluid-filled sac lateral to the right colon. Due to suspected ischemia and limited space, conversion to midline laparotomy was performed. The sac was opened, showing edematous loops with impaired mesenteric perfusion. Two dense Ladd's bands from cecum to retroperitoneum compressed the mesenteric root. The bands were divided, torsion reduced, and the cecum repositioned. Warm saline compresses restored perfusion. Given bowel viability, young age, and no infection, resection or second-look surgery was not required.

Postoperative Course: The patient was monitored with frequent exams and lactate checks for 72 hours. She remained stable without ischemia or obstruction. Oral intake began on day 2; she mobilized early and was discharged on day 6 without complications.

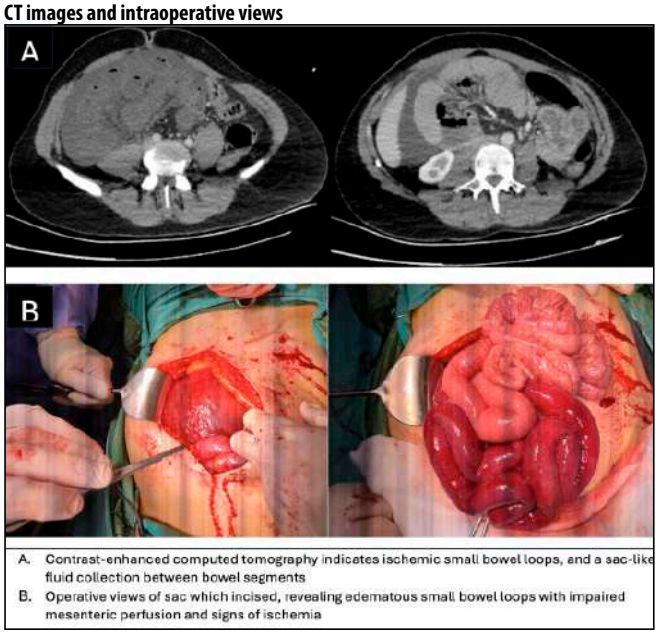
Discussion: Adult intestinal malrotation is rare and challenging to diagnose. Delayed recognition increases ischemia risk, signaled by severe pain and high lactate. CT is the most reliable diagnostic tool, showing whirl sign, abnormal bowel position, and interloop fluid. Malrotation creates a narrow mesenteric pedicle prone to torsion; Ladd's bands can worsen obstruction. Surgical treatment follows Ladd procedure principles: division of bands, torsion reduction, and cecal repositioning, with appendectomy as indicated. Laparoscopy provides diagnostic and therapeutic value but should be converted to laparotomy if bowel viability is questionable or exposure is limited. In this case, conversion allowed safe band division, perfusion restoration, and bowel preservation. Resection was avoided due to viable bowel and intensive follow-up. This case highlights that early imaging, prompt surgery, and tailored intraoperative decisions are key to preventing bowel loss and achieving favorable outcomes in adult malrotation.

Keywords: Intestinal Malrotation; Ladd's Bands; Midgut Volvulus; Acute Abdomen

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CT images and intraoperative views



A. Contrast-enhanced computed tomography indicates ischemic small bowel loops, and a sac-like fluid collection between bowel segments
B. Operative views of sac which incised, revealing edematous small bowel loops with impaired mesenteric perfusion and signs of ischemia

Acute Abdominal and Gastrointestinal Emergencies

PP-094

FIVE YEARS OUTCOMES OF PERCUTANEOUS CHOLECYSTOSTOMY FOR ACUTE CHOLECYSTITIS

Krystal Tan, Wei Shearn Poh

Royal Perth Hospital

Purpose/Introduction: Laparoscopic cholecystectomy is the gold standard for treatment of acute cholecystitis. Percutaneous cholecystostomy (PC) is a minimally invasive procedure that can be an alternative in high risk and critically ill patients.

Methodology: Retrospective study of patients that underwent percutaneous cholecystostomy from 2017 to 2022 at a tertiary centre in Perth. Data collected includes demographic details, length of stay, grade of cholecystitis, 30 days mortality and complications of PC.

Results: 80 patients met the inclusion criteria. Of those, 57.5% (46/80) were male with a mean age of 70 years (range 28-100). Main Tokyo Guidelines 18 (TG 18) grade was grade II and was found in 67.5 % of patients and the remainder were grade III. 31 patients suffer tube related complications including 15% tube dislodgement, 12.5% tube blockage, 2.5% bleeding,

10% recurrent cholecystitis/cholangitis, 3.75% superficial infection and 5% with drain leak. The mean hospital length of stay was 19.4 days. The 30 day mortality was 11.25 (9/80) with overall 1 year mortality rate of 21.25%. Of the patients surviving beyond 30 days, 97.2% (69/71) drain were removed while the remaining 2 had passed away prior to removal. 42% (30/71) underwent interval cholecystectomy.

Conclusion/s: PC is a safe alternative option for acute cholecystitis when immediate cholecystectomy is found to be unsafe. It may be the definitive treatment for cholecystitis or the bridge to interval cholecystectomy.

Keywords: percutaneous cholecystostomy, cholecystitis

Damage Control Resusitation

PP-095

DIRECT PERITONEAL RESUSCITATION (DPR) AS AN ADJUNCTIVE STRATEGY IN THE MANAGEMENT OF INTRA-ABDOMINAL SEPSIS

Orestis Ioannidis, Ourania Kerasidou, Aliki Brenta , Elissavet Anestiadou, Savvas Simeonidis, Stefanos Bitsianis, Manousos-Georgios Pramateftakis , Efstathios Kotidis, Ioannis Mantzoros, Stamatios Aggelopoulos

4th Department of Surgery, General Hospital of Thessaloniki "g. Papanikolaou", School of Medicine, Faculty of Health Science, Aristotle University of Thessaloniki

Introduction: The standard management of septic shock primarily involves intravenous fluid resuscitation and timely surgical control of the infectious source. However, despite the restoration of systemic hemodynamics, regional splanchnic perfusion often remains impaired, contributing to the progression of inflammation and subsequent multi-organ dysfunction. Direct Peritoneal Resuscitation (DPR) has emerged as a novel adjunctive modality aimed at improving visceral perfusion and mitigating the deleterious consequences of splanchnic ischemia. This case series outlines our clinical experience with DPR in a cohort of critically ill surgical patients undergoing damage control surgery (DCS) for intra-abdominal sepsis.

Methods: Eight patients (3 males, 5 females; mean age 76.6 years) underwent DPR using a negative pressure wound therapy system with lavage. A hypertonic peritoneal dialysis solution (Physioneal 2.27% glucose, Baxter) was infused at 400 ml over 20 minutes, followed by suction after a 40-minute dwell time. Indications for open abdomen were peritonitis (n=5), mesenteric ischemia (n=2), and obstructive ileus (n=1). Surgical procedures included emergency enterectomy (n=7) and gastric ulcer repair with omentoplasty (n=1). ASA classification: IV (n=6), V (n=2).

Results: All patients required ICU care with dual vasoconstrictors (norepinephrine 20–30 ml/h, vasopressin 0.75–2.25 ml/h). Within 24 hours of DPR initiation, vasopressor requirements decreased, with concurrent improvement in septic markers. Discontinuation of DPR led to relapse of sepsis, vasopressor escalation, and worsening inflammatory indices, progressing to recurrent septic shock. Notably, in all patients, definitive abdominal closure was achieved, and no abdomen remained open following DPR application. Seven patients died from non-sepsis-related causes; one patient, initially deemed moribund, survived.

Conclusion: DPR was associated with early hemodynamic improvement, sepsis control, and successful abdominal closure in high-risk surgical patients. Observed deterioration upon cessation suggests a physiologic benefit, supporting further investigation of DPR as a standard adjunct in damage control strategies for intra-abdominal sepsis.

Keywords: DPR (Direct peritoneal resuscitation), open abdomen, Damage Control Surgery, inta- abdominal sepsis, septic shock

Acute Abdominal and Gastrointestinal Emergencies

PP-096

SURGICAL MANAGEMENT OF FOREIGN BODY INGESTION

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Introduction: Foreign body and food impaction are commonly seen in the emergency department setting. The vast majority (80-90%) can be managed without imaging and intervention. Ingestion of a foreign body (FB) can lodge in the Gastrointestinal (GI) tract causing from airway obstruction to GI bleeding and acute abdomen, depending on the location and the level of the obstruction. The thoracic inlet is the most common site (70%) of obstruction due to anatomical change from the skeletal to smooth muscles of the esophagus.

Material and Method: We present a 69-year-old female, BMI of 26.29 Kg/m^2, with hypertension and hypothyroidism with no previous history of abdominal surgery. She was brought to the Emergency Department (ED) two times with an interval of 2 days, complaining of Right Upper Quadrant and Epigastric Pain after consuming seafood. The first time she was discharged from the ED with U/S evidence consisting of Gallbladder edema and normal blood tests, with diet for gallstone disease, antibiotics and a recommendation for Cholecystectomy. The second time was complaining of worsening abdominal pain and fever. Clinically, she had diffused sensitivity in the palpation of the abdomen and nausea/vomiting. The laboratory investigation showed increase inflammatory markers with Acute Kidney Injury (AKI). Thoracoabdominal CT scan was performed and foreign body obstructed in the descending-second part of the duodenum was revealed.

Results: The upper GI endoscopy was unable to remove the FB. The patient underwent emergency laparotomy. A Kocher maneuver for the mobilization of the duodenum and a duodenotomy was made. The object was not found at the marked area but 5 cm after the Treitz's ligament. A jejunotomy was made with complete removal of the foreign body consisting of mussel shell. Primary repair of both duodenotomy and jejunotomy were made and 2 drains were placed. On postoperative day (POD) 7, leaking from the duodenotomy drain was observed without signs and symptoms of abdominal pain nor peritonitis hence, conservative management was made. The patient discharged from the hospital on POD 9 in good clinical condition with normal bowel movements and on regular diet. On POD 30 the drain was removed.

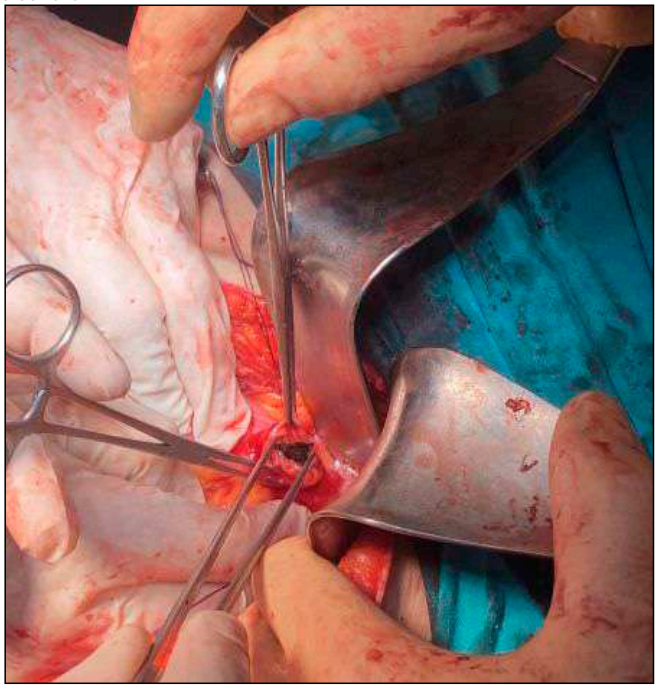
Conclusion: Foreign body ingestion is a frequent complaint in the ER. Clinical examination even with a relevant history is in most of the cases inconclusive. Surgical management and removal of foreign bodies in the GI track remains the mainstay of the treatment when endoscopy fails.

Keywords: Emergency Surgery, Foreign Body Ingestion, GI obstruction

FOREIGN BODY



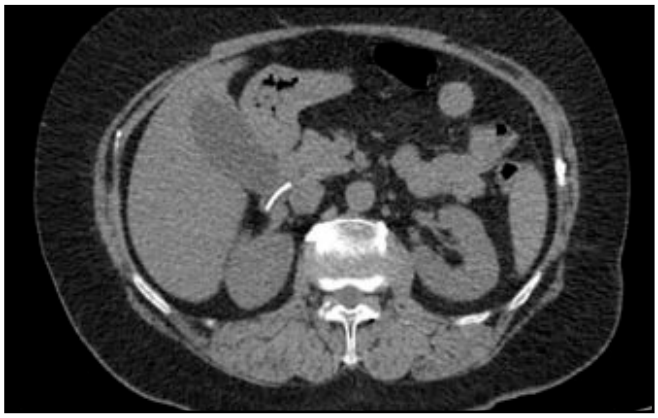
JEJUNOTOMY



ENDOSCOPY



CT



Surgical Infections

PP-097

PRELIMINARY RESULTS OF THE PROPEL STUDY: PROPHYLACTIC SINGLE-USE NPWT IN OBESE PATIENTS UNDERGOING EMERGENCY LAPAROTOMY

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Background: Obese patients undergoing emergency laparotomy are at high risk of postoperative wound complications, particularly surgical site infections (SSIs) and dehiscence, presenting a 1.46-fold increase compared to normal-weight individuals. The prophylactic application of single-use negative pressure wound therapy (sNPWT), has demonstrated promising results in elective surgical settings. However, real-world data in emergency general surgery are limited.

Objective: To present early observational outcomes from obese patients treated with prophylactic sNPWT following emergency laparotomy, as part of the ongoing PROPEL study.

Methods: This is a prospective, single-center observational analysis of the first patients enrolled in the intervention arm of the PROPEL study. All patients had a body mass index (BMI) ≥30 kg/m² and underwent midline emergency laparotomy. The PICO™ system (PICO™ system (PICO™ Single Use Negative Pressure Wound Therapy System; Smith+Nephew, Hull, United Kingdom) was applied immediately postoperatively and maintained as per protocol. At this stage, no data from the control group are included, and no formal comparisons are reported. Outcomes assessed included the 30-day incidence of SSIs, seroma and wound dehiscence, length of hospital stay, and device tolerance.

Results: A total of 45 obese patients undergoing emergency midline laparotomy between January 2024 and May 2025 were treated with the PICO™ single-use negative pressure wound therapy system. The mean duration of dressing application was 5.7 ± 2.6 days, with generally good adherence to protocol. The 30-day surgical site infection (SSI) rate was 3 out of 45 (6.7%), which is lower than typically expected in this high-risk group.

Wound dehiscence occurred in 4 patients (8.9%), all of whom were managed conservatively. Seroma formation was noted in 6 patients (13.3%), with no interventions required. The median length of hospital stay was 10 days (IQR: 7–14). No serious adverse events related to the PICO™ system were reported. Patient satisfaction was favorable, with 34 out of 45 patients (75.6%) reporting they were "very satisfied" with the dressing.

Conclusion: These preliminary results suggest that prophylactic use of PICO™ sNPWT may be a safe and feasible approach in obese patients undergoing emergency laparotomy. Although encouraging, these findings are descriptive and limited to the intervention arm. Definitive conclusions will require completion of the full randomized controlled trial and comparative analysis.

Keywords: Emergency laparotomy, obesity, wound complications, surgical site infection, PICO™, negative pressure wound therapy

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Abdominal Wall Emergencies

PP-098

THE ANSWER SCORE: A TAILORED APPROACH TO NEGATIVE PRESSURE WOUND THERAPY IN MICROANGIOPATHY

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Background: Standard negative pressure wound therapy (NPWT) at −125 mmHg may compromise tissue perfusion in patients with microangiopathy due to diabetes, obesity, and arterial hypertension. Observations from complex surgical site infection (SSI) cases led to the development of the ANSWER score (tAilored Negative presSure Wound thErapy in micRoangiopathy) to guide safe and effective NPWT pressure selection.

Methods: In a prospective case series of three obese, diabetic, hypertensive patients with severe SSIs after abdominal surgery, NPWT parameters were determined by the ANSWER score. One point was assigned for each risk factor (obesity, diabetes, hypertension); 25 mmHg was subtracted per point from the standard −125 mmHg. Adjuvant techniques included NPWT with instillation and dwell time (NPWTi-d), reticulated open cell foam dressings with through holes (ROCF-CC), and ultrasonic-assisted wound debridement.

Results: All patients scored 3, yielding a tailored NPWT pressure of −50 mmHg. Compared with initial higher-pressure settings, reduced pressures were associated with less ischemic necrosis, improved granulation tissue formation, and progression to wound closure. No major adverse events occurred.

Conclusion: The ANSWER score offers a simple, reproducible method for individualizing NPWT pressures in patients with microangiopathy, potentially reducing ischemic complications and improving outcomes. Prospective validation is needed.

Keywords: ANSWER score, negative pressure wound therapy, microangiopathy, surgical site infection, NPWTi-d

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Surgical wound opened, drained, and debrided using ultrasonic-assisted device



Wound drainage and increased exudate discharge of an infected incisional ventral hernia



Granulation tissue formed on the surface of the mesh



Surgical Infections

PP-099

PROPHYLACTIC USE OF PICO™ SINGLE-USE NEGATIVE-PRESSURE WOUND THERAPY IN STOMA CLOSURE WITH PURSE-STRING SUTURE: PRELIMINARY OBSERVATIONAL FINDINGS

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Background/aims: Purse-string suture (PSS) is associated with reduced surgical site infection (SSI) rates after stoma closure but may delay complete wound healing. Prophylactic single-use negative-pressure wound therapy (sNPWT) has shown promise in improving healing and reducing complications in clean-contaminated wounds. This study aimed to evaluate the feasibility, safety, and preliminary effectiveness of PICO™ sNPWT applied over PSS after stoma closure.

Methods: A prospective observational cohort was conducted at a tertiary surgical unit between April 2024 and June 2025. Adult patients undergoing ileostomy or colostomy closure with PSS were treated with PICO™ immediately postoperatively and maintained as per protocol. In all cases, the subcutaneous cavity was filled with a haemostatic collagen sponge containing the aminoglycoside antibiotic gentamicin, prior to sNPWT dressing placement. The primary endpoint was time to complete wound healing. Secondary endpoints included SSI incidence, seroma/hematoma formation, patient satisfaction, and device tolerance.

Results: A total of 20 patients (13 ileostomy, 7 colostomy) were included. Superficial SSI occurred in 1 patient (5%), with no deep or organ-space infections. Mean time to complete wound healing was 12.4 ± 4.7 days, shorter than historical PSS-alone series. No significant seroma or hematoma formation was observed, and no dressing-related adverse events occurred. Patient satisfaction was high, with 16 patients (80%) rating their experience as "very satisfactory."

Conclusion: Preliminary findings suggest that prophylactic use of PICO™ sNPWT over PSS after stoma closure, with adjunctive gentamicin-impregnated collagen sponge placement, is safe, well tolerated, and may accelerate wound healing without increasing SSI risk. Larger comparative studies are warranted to confirm these potential benefits and refine patient selection.

Keywords: Stoma closure; purse-string suture; PICO™; surgical site infection; wound healing; single-use NPWT; ileostomy; colostomy; gentamicin; collagen sponge

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Surgical Infections

PP-100

PRELIMINARY PICO-STAR RESULTS: SINGLE-USE NPWT AFTER STOMA REVERSAL WITH LINEAR CLOSURE SHOWS SAFETY, HIGH SATISFACTION, AND LOW SSI RATES

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Background: Stoma reversal is frequently associated with high rates of surgical site infections (SSIs), particularly due to the contaminated field and midline or peristomal incisions. Single-use negative-pressure wound therapy (sNPWT) has been proposed as a prophylactic measure to reduce wound-related

complications. However, routine sNPWT implementation after stoma reversal has been limited, largely due to cost concerns. This observational study reports preliminary outcomes of using a single-use, mechanically powered negative pressure dressing (PICO™) applied to primarily closed stoma reversal wounds.

Objective: To present preliminary real-world outcomes of prophylactic PICO™ sNPWT following stoma reversal with linear primary skin closure.

Methods: The PICO-STAR study is a prospective, single-arm observational cohort conducted at a tertiary academic surgery unit between April 2023 and June 2025. Adult patients undergoing ileostomy or colostomy reversal with linear primary skin closure were treated with PICO™ applied immediately postoperatively. Subgroup analyses were performed for ileostomy and colostomy reversals. Primary outcome was 30-day SSI rate; secondary endpoints included wound dehiscence, seroma/hematoma, length of stay, and patient-reported satisfaction.

Preliminary Results: A total of 26 patients have been included to date: 16 ileostomy and 10 colostomy reversals. Two patients (7.7%) developed superficial SSIs: 1 ileostomy (6.3%) and 1 colostomy (10%). No deep or organ-space infections occurred. Wound dehiscence was observed in 2 patients (7.7%), and seroma/hematoma in 3 patients (11.5%). No dressing-related adverse events were reported. Mean length of stay was 4.2 days, with no wound-related readmissions. Patient tolerance and satisfaction with PICO™ were high in both subgroups.

Conclusion: These preliminary findings suggest that prophylactic single-use NPWT with the PICO™ system, following linear primary skin closure, is feasible, well tolerated, and may help reduce wound complications after stoma reversal. Completion of the study and comparative analysis will clarify its role in routine postoperative care.

Keywords: Stoma reversal; PICO™; surgical site infection; wound healing; single-use NPWT; ileostomy; colostomy; postoperative care; linear primary skin closure

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Postoperative appearance 7 days after loop ileostomy reversal with linear primary skin closure and prophylactic PICO™ application, showing a clean, well-approximated incision with minimal inflammation and good early healing progress.

Surgical Infections

PP-101

PROPHYLACTIC PICO™ SINGLE-USE NEGATIVE-PRESSURE WOUND THERAPY USE IN CONTAMINATED AND DIRTY SURGICAL WOUNDS (CDC CLASS III–IV): PRELIMINARY DATA

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Background/aims: Surgical wounds classified as CDC Class III (contaminated) and Class IV (dirty) have a high risk of surgical site infection (SSI) and delayed healing. Single-use negative-pressure wound therapy (sNPWT) may reduce complications in these settings, but evidence is scarce. This study presents preliminary results of PICO™ sNPWT in high-contamination emergency surgery.

Methods: A prospective observational study was conducted from January 2024 to July 2025 at a tertiary emergency surgery unit. Adult patients with CDC Class III–IV wounds after gastrointestinal or soft-tissue surgery received prophylactic PICO™ immediately after primary or delayed primary closure. The primary endpoint was 30-day SSI rate. Secondary endpoints included wound dehiscence, seroma/hematoma formation, length of hospital stay, and need for reoperation.

Results: Thirty-five patients (21 Class III, 14 Class IV) were included. Overall SSI rate was 14.3% (5/35): 3 cases in Class III (14.3%) and 2 in Class IV (14.3%). All were superficial and treated conservatively. Wound dehiscence occurred in 3 patients (8.6%), and seroma in 4 patients (11.4%), with no cases of hematoma. No reoperations for wound complications were required. Mean hospital stay was 9.7 ± 4.0 days. No device-related adverse events were reported.

Conclusion: Preliminary data indicate that PICO™ sNPWT is safe and feasible in contaminated and dirty wounds, with complication rates lower than expected for this high-risk group. Further controlled trials are needed to confirm these findings.

Keywords: PICO™; single-use negative-pressure wound therapy (sNPWT); contaminated wounds; dirty wounds; CDC Class III–IV; surgical site infection; wound dehiscence; seroma; emergency surgery.

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Education for Emergency Surgery

PP-102

EXPERIENCE REPORT – WCTEL EMERGENCY PEDIATRIC PRE-COURSE

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Unicamp

Brazil has over half a million active physicians and 35,000 new entrants annually from 448 medical schools (1). However, training in Emergency Medicine (EM) still presents gaps, leaving newly graduated physicians feeling insecure and unprepared to work in this area (2). In addition, the emergency room environment, characterized by long working hours and low pay, discourages specialists and often becomes an entry point for physicians without residency training or previous experience (3). This scenario reinforces the need to strengthen emergency training during medical school, since the number of residency positions—the ideal training environment—is insufficient to meet demand (4).

Several factors contribute to the deficiencies in medical education, including the growing number of medical schools, mostly private (66%), of which 78% lack adequate infrastructure such as emergency departments in teaching hospitals or agreements with external institutions, the absence of simulation laboratories and appropriate equipment, a shortage of qualified faculty in the field, and fragmentation of the specialty (5,6). Added to this is the fact that Emergency Medicine was not recognized as a specialty until 2015, directly impacting investment in the area and the availability of residency programs, which are the main means of training (3). According to the 2025 Medical Demography in Brazil study by USP and the Brazilian Medical Association (AMB), although the specialty has grown significantly, residents in Emergency Medicine represent only 1.2% of the total, and certified specialists just 0.2% (4).

In pediatric emergency medicine, the training gap is even more evident, with only 0.5% of residents and specialists in the country. In pediatric surgery, this number is even lower, reaching 0.3% (4). In this context, a pediatric emergency pre-course was developed during the International Congress of Trauma Leagues, held in Campinas, São Paulo, Brazil. The initiative sought not only to help reduce part of the training gap but also to provide a dynamic learning environment, combining theoretical foundations with the practical experiences of speakers in handling urgent and emergency situations in childhood, in both public and private healthcare settings. This experience report presents the conception, execution, and results of this initiative, aiming to contribute to the expansion of educational practices for medical training in this essential field.

Keywords: Pediatric Emergency, Health Education, First Aid.

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Damage Control Surgery

PP-103

SURGICAL MANAGEMENT OF SPONTANEOUS LIVER TUMOR RUPTURE

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Introduction: Spontaneous rupture of solid liver neoplasms is a rare occurrence. The most common ruptured liver tumors are in order, Hepatocellular carcinoma (HCC), Hepatocellular adenomas (HCA), and Hemangiomas mainly the giant ones (>5 cm). Malignant tumors have the highest mortality rate after rupture, especially without immediate treatment. For HCAs, there are no clear data on mortality from rupture however occurring in lesions 5cm and larger. Hemangiomas have a relatively lower mortality rate.

Aim: To highlight that the damage control surgery (DCS) is the appropriate approach in the management of hypovolemic shock due to intrabdominal bleeding secondary to spontaneous liver tumor rupture, in a hospital with lack of facilities such as Interval Radiology (IR) Department.

Case report: A 55-year-old male with medical history of hypertension, arrhythmias, angina pectoris, dyslipidemia, Alzheimer's disease, depression, loss of vision secondary to ophthalmic artery thrombosis and Percutaneous Coronary Intervention (PCI), was admitted to the emergency department (ED) after reporting Loss of consciousness (LOC) followed by acute abdominal pain. At the presentation, he was hemodynamically unstable with a BP: 75/45mmHg, HR: 129/min, RR: 26/min. Laboratory tests revealed Hb 9.4g/dl. The patient was a transient responder and an abdominal ultrasound followed by a CT scan were performed which revealed a large amount of free fluid in the abdomen as well as solid lesion (around 6*6*7cm) of the Left liver with active intraperitoneal bleeding.

Material and Method: Due to the lack of IR in the hospital, the patient underwent exploratory laparotomy. Intraoperatively, approximately 3 liters of blood and 600gr of blood clots were found. Packing and unpacking of the abdomen was performed and the rupture of the liver tumor with active bleeding was confirmed. During the operation, the patient was unstable, coagulopathic and hypothermic. Local hemostatic agents were used without control the bleeding hence, DCS approach was followed with liver packing, 2 drains were placed and temporary abdomen closure (TAC) technique was performed. The total operative time was 45 mins. The patient remained intubated and transferred to tertiary hospital with ICU and IR facilities. In 1st POD underwent embolization, unfortunately on POD 2 the patient diseased.

Conclusion: The concept of DCS is vital in cases of severe intra-abdominal bleeding, such as ruptured liver tumors. Especially, it should be performed when embolization is not a possible option.

Keywords: Damage Control Surgery, Liver Tumor Rupture, Temporary abdominal Closure

CT axial



CT Coronal



CT Sagittal



Emergency Surgical Complications

PP-104

AFFERENT LOOP OBSTRUCTION DUE TO ADHESION AFTER ONE-ANASTOMOSIS GASTRIC BYPASS: A RARE LATE COMPLICATION MANAGED LAPAROSCOPICALLY

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Uls São José

Introduction: Bariatric surgery, including one-anastomosis gastric bypass (OAGB), is an effective treatment for morbid obesity but may lead to early or late postoperative complications. Late small bowel obstruction after OAGB is uncommon and may be caused by internal hernias, strictures, or adhesions. Prompt

recognition and surgical management are essential to prevent ischemia and preserve bowel function.

Case Presentation: We report the case of a 27-year-old male with a history of OAGB performed two years earlier, who presented to the emergency department with acute, severe epigastric pain and abdominal discomfort. There was no associated vomiting or fever. Physical examination revealed abdominal tenderness without peritoneal signs. Laboratory tests were unremarkable. Contrast-enhanced abdominal computed tomography demonstrated marked distension of jejuno-ileal loops and the gastric pouch, raising suspicion of mechanical obstruction at the level of the afferent limb.

Management and Outcome: The patient underwent urgent diagnostic laparoscopy, which revealed a fibrous adhesion encircling and constricting the afferent limb, causing proximal dilatation. The adhesion was carefully divided, restoring bowel continuity and relieving the obstruction. No bowel resection was necessary. The postoperative course was uneventful: the patient was mobilized on postoperative day 1, resumed oral intake without difficulty, and was discharged home on postoperative day 2 in good condition.

Discussion: Afferent loop obstruction is a rare but potentially serious late complication of OAGB. The mechanism often involves internal herniation or adhesions, which can lead to rapid onset of symptoms and risk of bowel compromise. Cross-sectional imaging is key to diagnosis, while prompt surgical intervention is required to avoid ischemia. Minimally invasive approaches, such as laparoscopy, allow for effective treatment with reduced morbidity and faster recovery.

Conclusions: This case highlights the importance of considering afferent loop obstruction in post-bariatric surgery patients presenting with acute abdominal pain, even years after the primary procedure. Early diagnosis and laparoscopic adhesiolysis can provide excellent outcomes, minimizing hospital stay and complications. Awareness of such rare entities is essential for timely management in specialized centers.

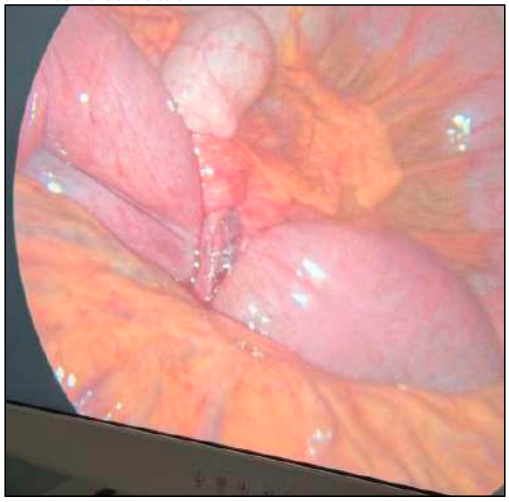
Keywords: Bariatric surgery; One-anastomosis gastric bypass; Afferent loop obstruction; Small bowel obstruction; Adhesions; Laparoscopic surgery; Late complication

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Small bowel obstruction



Damage Control Surgery

PP-105

USE OF NEGATIVE PRESSURE WOUND THERAPY IN THE MANAGEMENT OF COMPLEX INJURIES IN SEVERE ABDOMINOPELVIC TRAUMA

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Background: Negative pressure wound therapy (NPWT) has significantly transformed the field of advanced wound care, particularly in the management of complex injuries. NPWT, specifically V.A.C. Therapy, employs a hydrophobic, reticulated polyurethane sponge for the treatment of wounds that do not respond to conventional therapy. It stimulates the formation of granulation tissue, angiogenesis and reduces inflammation by applying negative pressure to the wound bed. However, its application requires careful patient selection and thorough wound assessment to identify potential complications. Severe abdominopelvic trauma represent a therapeutic challenge, as they often result in extensive damage—from soft tissues to bones and internal organs. The indication and use of NPWT depend on the patient's age and comorbidities, wound contamination, the condition of the wound bed, and the exposure of vascular and nerve structures.

Case Report: This case report focuses on a 16-year-old male patient (105 kg, 180 cm) admitted to the intensive care unit following a severe abdominopelvic trauma caused by an agricultural vehicle. He was hospitalized for a total of 181 days: 100 in intensive care, 50 in general surgery, and 31 in rehabilitative medicine. He underwent 24 surgeries under general anesthesia for issues involving general surgery, plastic surgery, urology, and orthopedics. The patient presented with multiple injuries, including a burst injury of the recto-sigmoid junction, bladder and urethral rupture, acute renal and hepatic failure, and splenic contusions. Additional injuries included a perineal burst wound, a large wound in the left gluteal region with necrosis of the gluteus maximus muscle and femur exposure, bilateral injury to the lumbosacral plexus, and left sacroiliac joint dislocation. Regarding the treatment of the necrosis in the gluteal region (25x10 cm) that appeared 10 days after the trauma, thorough debridement was performed, which led to the exposure of the femoral head. Subsequently, NPWT was applied to the gluteal and perineal regions, with a pressure of –125 mmHg and dressing changes every 2–3 days. Additionally, tension sutures were applied to the wound edges. The distance between the skin edges gradually decreased until complete healing, which occurred one year after the trauma.

Conclusion: This case highlights the effectiveness of NPWT in managing Severe abdominopelvic trauma. Although successful wound closure was achieved, postoperative recovery challenges remain, emphasizing the importance of a multidisciplinary approach for long-term recovery. The case reaffirms NPWT as a valuable treatment option for managing extensive injuries resulting from road traffic accidents.

Keywords: Catastrophic wound management, Negative pressure wound therapy, Abdominopelvic trauma, Multidisciplinary care, Agricultural vehicle accident

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