S118 LAPAROSCOPIC UPPER POLE HEMINEPHRECTOMY IN ADULTS

Dönmez M.I., Yazıcı M.S., Koni A., İnci K., Bilen C.Y., Özen H.
Hacettepe Universtiy School of Medicine, Dept. of Urology, Ankara, Turkey

Introduction & Objectives: The treatment for duplex kidney associated with a poorly functioning upper-pole segment is upper-pole heminephrectomy which can be safely performed laparoscopically. We describe our technique of laparoscopic upper-pole heminephrectomy in adult patients.
Material & Methods: A total of four patients with an age range of 35 to 46 underwent laparoscopic upper-pole heminephrectomy.One patient needed preoperative percutaneous drainage due to pyonephrosis. Key point of the technique included the placement of a catheter in the normal ureter at the beginning of the procedure. After that, the patient was positioned at 45-60 degrees lateral decubitus position and a four port transperitoneal technique was applied. Then the upper-pole ureter was fully mobilized away from the renal hilum, and the vasculature supplying the upper pole were precisely identified and ligated. After transection of the ureterand its transposition cephalad to the hilum, the upper pole moiety was fully transected by using the harmonic scalpel.
Results: The operative time ranged between 180 to 240 minutes with a mean estimated blood loss of 500 cc (50-900 cc). Hemostasis was achieved with Argon laser in one patient. The lower pole caliceal system was perforated in one patient, which was repaired intracorporally. No major complications occured. All of the patients had their drains removed 48 hours after the operation and two of them were discharged on the 3rd postoperative day.
Conclusions: Laparoscopic upper-pole heminephrectomy for ectopic ureter is safe and reproducible, and offers thepatient the typical postoperative benefits of laparoscopic surgery even in patients with complicated urinary tract infections.

S119 QUALITY OF LIFE AFTER LAPAROSCOPIC VERSUS OPEN PARTIAL NEPHRECTOMY

Koni A., Ozdemir B., Kartal I.G., Inci K., Ozen H., Bilen C.Y.
Hacettepe University, Dept. of Urology, Ankara, Turkey

Introduction & Objectives: To prospectively evaluate the effect of surgery on quality of life in patients undergone laparoscopic partial nephrectomy (LPN) versus open partial nephrectomy (OPN) for small renal masses.
Material & Methods: Between December 2007 - December 2011, 65 patients (M/F = 37/28) underwent partial nephrectomy (open/laparoscopic = 45/20) for small renal masses. Patients demographic data, BMI, ASA score, renal mass characteristics were registered preoperatively and patients were divided in 2 groups; the 1st group (LPN) and the 2nd group (OPN), respectively. Quality of life was evaluated prospectively using SF-36 health survey pre- and post-operatively (1, 6 and 12 months after surgery). Postoperative pain was evaluated 48 hours after surgery using VAS pain score. Per- and post-operative complications, oral feeding time, drain removal time and hospital stay were also registered.
Results: Patients mean age, BMI and ASA score was 53.78 (17-87) years, 28.52 (20.3-45.7) and 1.39 (0-3), respectively. Renal masses were right-sided in 28, left-sided in 26 patients; mean size was 26.4 mm in LPN and 31.6 mm in the OPN group (P=0,244). Mean operative time and blood loss was 137.19 min and 55.26 cc in the LPN group; 133.4 min (P=0,778) and 202.8 cc (P=0,037) in the OPN group. No peroperative complication observed in the LPN group; in the OPN group 1 patient underwent splenectomy due to peroperative lasseration. Postoperative VAS score in the LPN and OPN group was 2.81 and 4.9 (P=0.002), respectively. Oral feding time, drain removal time and hospital stay was 15.71 hrs, 1.94 days, 2.95 days in the LPN group and 24 hrs (P=0,002), 2.72 days (P=0,003), 5.25 days (P=0,000) in the OPN one. Pre- and post-operative SF-36 health survey scores in both groups are shown in Table 1. One postoperative complication was observed in the LPN group and three complications in the OPN one. Open radical nephrectomy was performed in one LPN patient due to wide positive surgical margin. In the OPN group: one patient had wound infection, percutaneous dreinage catheter was placed in two other patients for intraabdominal abces, thereafter one of them showed no progress and underwent surgical exploration and simple nephrectomy thereby.

SF-36 health survey	Preoperative (mean)			Postop 1st month (mean)			Postop 6th month (mean)			Postop 12th month (mean)		
	Phisical	Pain	General	Phisical	Pain	General	Phisical	Pain	General	Phisical	Pain	General
LPN	82,89	81,84	71	69,47	77,26	68,16	81,33	85,53	70,27	81,67	86	70,83
OPN	72,11	70,27	57,98	42,93	46,17	51,69	66,07	65,54	59	75,19	76,31	64,38
P value	,107	,085	,006	,001	,000	,006	,096	,009	,068	,420	,292	,155

Conclusions: There was no difference in preoperative phisical functioning and bodily pain scores between two groups, although preoperative general health scores were significantly higher in the LPN group. All postoperative 1st month health survey scores were significantly higher in the LPN group. Difference between bodily pain scores was still significant after 6 months, however no difference observed between phisical functioning and general health scores at that time. No difference observed between all health survey scores twelve months after surgery. LPN is an effective treatment modality in patients with small renal masses offering less postoperative pain, shorter hospital stay and smaller reduction of postoperative quality of life.

S120 LAPAROSCOPIC TRANSVAGINAL NEPHRECTOMY

Hinev A.I., Anakievski D., Chankov P.K.
"St. Marina" University Hospital, Clinic of Urology, Varna, Bulgaria

Introduction & Objectives: In search of better cosmetic results after laparoscopic surgery, the hybrid and pure natural orifice translumenal endoscopic surgery (NOTES) technique had recently been developed. The aim of this study was to assess the feasibility and safety of the laparoscopic transvaginal nephrectomy, and to describe the surgical technique applied.
Material & Methods: In the last few months we treated 4 female patients (mean age 52.5 years), who had been admitted for surgical treatment of a non-functioning hydronephrotic kidney, developed as a result of a previous gynecological surgery /2/ or urolithiasis /2/. Using 3-4 abdominal ports and 1 additional working port through the vagina, a transperitoneal laparoscopic nephrectomy was implemented. The surgical technique included the following steps: lateral incision of the posterior peritoneum along the colon; mobilization and incision of the ureter; mobilization of the kidney; puncture and aspiration of the renal contents; dissection of the vascular pedicle; placement of Hem-o-Lok clips and division of the renal vessels; translocation of the specimen into the pelvic cavity; resection and extirpation of the renal parts through the vaginal port without enlarging the vaginal incision; closure of the vaginal defect by a 3-0 running polyglactin suture; insertion of a drainage tube into the abdominal cavity; cosmetic wound closure.
Results: All operations were performed with minimum blood loss, within a mean operative time of 113 ± 39 (SD) min. There was only 1 per operative complication – an unrecognized at the time of surgery lesion of the epigastric vessels, which led to the formation of a hematoma on the abdominal wall, and necessitated a secondary surgical revision. The postoperative period of the rest of the patients ran smoothly and without complications. The first check-up examination one week after surgery confirmed the excellent cosmetic effect of the operations performed.
Conclusions: The vaginal approach is a good alternative to remove abdominal organs after laparoscopic operations in women. It allows safe insertion of various working instruments through the vagina and makes unnecessary the additional incision on the abdominal wall for removal of the specimen.

S122 PROTECTIVE AND THERAPEUTIC EFFECT OF DEXPANTHENOL ON ISCHEMIA-REPERFUSION-INDUCED RENAL INJURY IN RATS

Altintas R.[1], Parlakpinar H.[2], Beytur A.[1], Vardi N.[3], Polat A.[4], Sagir M.[2]
[1]Inonu University Medical Faculty, Dept. of Urology, Malatya, Turkey, [2]Inonu University Medical Faculty, Dept. of Pharmacology, Malatya, Turkey, [3]Inonu University Medical Faculty, Dept. of Embriology and Histology, Malatya, Turkey, [4]Inonu University Medical Faculty, Dept. of Phsiology, Malatya, Turkey

Introduction & Objectives: This experimental study was designed to investigate protective and therapeutic effects of Dexpanthenol (Dxp), an alcoholic analogue of pantothenic acid, on kidney damage induced by Ischemia-reperfusion (I/R) in rats.
Material & Methods: The rats were randomly divided into 5 groups as follows: 1) control; 2) I/R (1 h ischemia followed by 23 h reperfusion); 3) 500 mg/kg Dxp given (i.p.) 30 min before the ischemia; 4) 500 mg/kg Dxp given (i.p.) 30 min before the end of reperfusion; 5) 500 mg/kg Dxp given (i.p.) 30 min after the beginning of the ischemia.Right nephrectomy was done in all groups. Following 1 hour of ischemic period, reperfusion period was achieved during 24 hours and all rats were sacrificed. The histopathological findings including apoptotic changes, and also, tissue malondialdehyde (MDA), superoxide dismutase (SOD), catalase (CAT), glutathion peroxidase (GPX), blood urea nitrogen (BUN), serum creatinine (Cr) and albumin (Alb) levels were determined.
Results: Kidney tissue MDA levels were found to be significantly higher in the I/R group, whereas the values of GPX were lower when compared to the control group. The levels of SOD and CAT did not reach to statistical meaning level in I/R group. Dxp given 30 min after the beginning of the ischemia reduced the elevated MDA levels to the nearly control levels and this ameliorating effect was found as parallel to the result of GPX. Serum levels of BUN and Cr were significantly higher in the I/R group. Dxp given 30 min after the beginning of the ischemia reduced the elevated BUN and Cr levels to the control levels. Renal I/R injury also induced extensive tubular necrosis, glomerular damage and apoptosis in the histological evaluation. Dxp ameliorated these histological damages in different amounts in all treatment groups.

Table 1: The serum levels of BUN, Cr, albumin and renal tissue weights

Group Names	BUN (mg/dL) Mean+SD	Cr (mg/dL) Mean+SD	Albumin (g/dL) Median (Min-Max)	Renal Tissue Weight (g) Median (Min-Max)
Group 1	28,86±2.23	0.58±0.02	1.10 (0.7-1.1)	0.76 (0.65-0.93)
Group 2	139±8.44*	2.02±0.24*	0.85(0.7-1.1)	0.94(0.85-1.26)*
Group 3	139.28±6.50*	2.05±0.18*	1(0.8-1.2)	1.17(0.74-1.37)*
Group 4	116.57±16.65*	1.82±0.29*	1(0.8-1.2)	0.96(0.96-1.61)*
Group 5	97.28±8.72*,**,***	1±0.09*,**,***	0.7(0.6-0.9)*,***,****	0.86(0.8-1)*,***,****