National Center for Geriatrics and Gerontology, Obu, Japan; [3]Department of Endocrinology, Metabolism and Diabetes, National Center for Geriatrics and Gerontology, Obu, Japan; [4]Deputy Director, National Center for Geriatrics and Gerontology, Obu, Japan

Objective: Hearing impairment, diabetes, and frailty are three conditions that are increasingly prevalent in older people. Recently, the assessment of frailty has been recommended for older patients with diabetes mellitus. However, the relation between hearing impairment and frailty is still unclear in patients with diabetes. The purpose of this study was to clarify the relationship between hearing impairment and frailty among older diabetes patients.
Research design and methods: We used a finger friction test as a simple auditory screening for the assessment of hearing impairment and the Kihon Checklist (KCL) for the assessment of frailty. Cognitive function was assessed using the Mini Mental State Examination (MMSE). Logistic regression analysis was used to investigate cross-sectional associations between frailty and patient characteristics.
Results: The study participants were 283 diabetes patients with an average age of 75.3 years; the prevalence of frailty using the KCL was 30%. Hearing impairment was present in 32.8% of those without frailty and 57.6% of those with frailty ($p<0.01$). In multivariable analysis, frailty in diabetes patients was associated with the prevalence of hearing impairment (odds ratio: 1.96, 95% confidence interval: 1.07–5.59).
Conclusions: These data suggest that hearing impairment as determined using a finger friction test could be an important factor contributing to frailty among diabetes patients.

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Reliability of the sarcopenia screening test (SARC-F) in elderly patients

A. Doventas[1], D.C. Ercelebi[1], H. Yavuzer[1], M. Cengiz[2], S. Avci[1], F. Demirdag[1], Z. Kara[1], S. Yavuzer[2], M. Yuruyen[3], D.S. Erdincler[1]. *[1]Cerrahpasa School of Medicine, Department of Internal Medicine, Division of Geriatrics/University of Istanbul, Istanbul, Turkey; [2]Cerrahpasa School of Medicine, Department of Internal Medicine/University of Istanbul, Istanbul, Turkey; [3]Bakirkoy Dr. Sadi Konuk Training and Research Hospital, Department of Internal Medicine, Division of Palliative Care/Republic of Turkey, Ministry of Health, University of Health Sciences, Istanbul, Turkey*

Aim: The aim of this study was to investigate the presence of sarcopenia in the hospitalised geriatric patients and the role of following measurements for diagnosis: antropometric measurements, bioimpedance analyses, handgrip strength, 6 meter walk test, Barthel index and SARC-F scale.
Method: 116 hospitalised elderly patients in the internal medicine, cardiology, pulmonology and infectious disease clinics were followed. The patients were grouped according to the diagnostic criteria for EWGSOP. Age, gender, medical history, drugs, lenght of hospitalization, Barthel index, SARC-F scale were questioned and the anthropometric parameters were measured.
Results: 85 of 116 patients were mobile, whereas the other 31 patients were immobile. Sarcopenic patients were older than normal patients with statistical significance (p=0,001). Weight, BMI, circumference of hip, waist, upper-middle arm and calf were lower in sarcopenic patients. The handgrip strength of normal group was stronger (18.2±12 kg) than sarcopenic patients (13±9.1 kg) with statistical significance (p=0.018). Number of comorbidities and drugs were higher in normal group (p=0.034; p=0.024, respectively). SARC-F was positively correlated with age, length of hospitalisation, number of comorbidities and drugs, nutritional support, Barthel index and calf circumference and negatively correlated with walking speed, hand grip strength and fat free body mass. SARC-F scale results were 5.1±3.3 in normal group and 5.8±2.8 in sarcopenic group (p=0.24).
Discussion: SARC-F scale was not efficient for evaluation of sarcopenia in the hospitalised geriatric patients; but Barthel index, BIA, hand grip strength and walking speed were relevant with it.

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Sarcopenia and sarcopenic obesity in Japanese geriatric ward

A. Sampei, S. Harada, K. Shibasaki, Y. Yoshioka, M. Yakabe, A. Yonenaga, K. Toyoshima, T. Kojima, M. Ishii, Y. Kameyama, Y. Yamaguchi, T. Urano, S. Ogawa, M. Akishita. *Department of Geriatric Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan*

Introduction: Sarcopenia is a syndrome characterized by progressive and generalized loss of skeletal muscle mass and strength. It is correlated with physical disability, poor quality of life. We evaluated the characteristics of sarcopenic elderly patients.
Methods: We analysed 117 patients discharged from the geriatric ward in the University of Tokyo Hospital, from April 2016 to March 2017. We divided them first into two categories; sarcopenia or non-sarcopenia. Secondly we also looked at the sarcopenic obese, sarcopenic non-obese, non-sarcopenic obese and non-sarcopenic non-obese group. In those groups, we assessed various characteristics such as age, sex, duration of hospitalization and comorbidities (hypertension, diabetes mellitus, dyslipidemia, cerebrovascular diseases, and cardiovascular diseases).
Results: After exclusions, we collected 117 patients (47 men and 70 women), aged 81 on average. Out of them, 72 sarcopenic (10 sarcopenic obese, 62 sarcopenic non-obese) and 45 non-sarcopenic (20 non-sarcopenic obese and 25 non-sarcopenic non-obese) patients were identified. No statistically significant differences were found between sarcopenic and non-sarcopenic patients as for age and sex. However, in sarcopenic patients, we detected longer hospitalization by approximately one week, and lower complication rates with diabetes mellitus or with cerebrovascular diseases compared to non-sarcopenic patients. Especially sarcopenic non-obese patients showed lower complication rates with diabetes mellitus.
Conclusions: In sarcopenic patients, we observed longer hospitalization and lower prevalence of diabetes or cerebrovascular diseases. We assume that sarcopenia itself can be the influential factor for longer hospitalization. And we suspect obesity has stronger relations with diabetes mellitus or cerebrovascular diseases than sarcopenia.

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Self-assessed kyphosis and chewing disorders predict disability and mortality in community-dwelling older adults

M. Okura[1], M. Ogita[2], M. Yamamoto[3], T. Nakai[3], T. Numata[3], H. Arai[4]. *[1]Kyoto University Graduate School of Medicine; [2]Shiga University of Medical Science; [3]Kami-cho Municipal Office; [4]National Center for Geriatrics and Gerontology*

Background: Degenerative changes affecting the spine accumulate and contribute to an overall trend of kyphosis with increased age. Since there is no widely accepted definition of hyper-kyphosis, current estimates of the prevalence of this condition range between 20 to 40 percent among community-dwelling older people. Particularly, hyper-kyphosis is associated with several adverse health conditions including thoracic pain, decreased pulmonary function, limited physical functioning, increased fall risk, increased health-related quality-of-life, increased fractures, and increased mortality. There was no significant difference between depressive mood and kyphosis. However, it should be noted that these are studies of hyper-kyphosis and not of general kyphosis. Research questions: Our research questions focused on chewing power in common