

PP027-MON**THE ROLE OF LP(A) IN DIABETES MELLITUS AND INSULIN RESISTENCE – INVESTIGATION WITHIN THE BERLIN AGING STUDY BASE-II**

N. Buchmann¹, U. Kassner², K. Norman¹, E. Steinhagen-Thiessen¹, I. Demuth^{1,3}, R. Eckardt¹. ¹Charité Research Group on Geriatrics, Charité-Universitätsmedizin, ²Internal Medicine with Gastroenterology and Nephrology, Lipidclinic, Charité-Universitätsmedizin, ³Institute of Medical and Human Genetics, Charité-Universitätsmedizin, Berlin, Germany, Berlin, Germany

Rationale: Earlier studies suggested that Lp(a) concentrations are related to type 2 Diabetes (T2DM). Several studies showed increased Lp(a)-levels in T2DM whereas recent analysis found an inverse association of Lp(a)-levels to T2DM. So far little is known about the influence of Lp(a) on insulin resistance. One of the aims within the Berlin Aging Study II was to describe correlations of Lp(a) with insulin resistance and Diabetes.

Methods: A total of 1071 subjects (women = 52%; 60–84 years old) were analysed. T2DM was assessed according to the DDG (German Diabetes Society) Guidelines. Glucose tolerance test (oGTT) was performed in subjects with no self-reported T2DM. Lp(a)-levels were divided in quintiles for further analysis.

Results: The prevalence of T2DM was 17.4% in men and 9.2% in women. Lp(a)-levels were significantly lower in elderly men with T2DM (15.9 mg/dl in T2DM, 24.3 mg/dl in non-T2DM; $p=0.015$), similar results were calculated for women. HOMA-IR levels used as marker for insulin resistance were significantly higher in subjects belonging to the lowest quintile of Lp(a) in both men and women. There were low correlations between Lp(a) and fasting glucose, 2h-glucose and HOMA-IR-levels only in men.

Conclusion: Prevalence of T2DM was high in subjects of the Berlin Aging Study II. Lp(a)-levels were inversely related to T2DM in elderly men and women and were associated with insulin resistance. Whether insulin resistance leads to a decrease of Lp(a)-levels or low Lp(a)-levels are a risk for T2DM remains unclear. In a next step, the influence of fasting and non-fasting insulin-levels on Lp(a) will be investigated.

Disclosure of Interest: None Declared

PP028-MON**NUTRITION AS CHALLENGE FOR COMMUNITY-DWELLING OLDER ADULTS WITH DEMENTIA AND THEIR CAREGIVERS**

G. Sieber¹, C. Kolb¹, C.C. Sieber¹, D. Volkert¹. ¹Institute for Biomedicine of Aging, Friedrich-Alexander-Universität Erlangen-Nürnberg, Nürnberg, Germany

Rationale: Dementia is associated with nutritional disorders. The aim of this project was to describe the nutritional situation in community-dwelling older adults with dementia and their main family caregiver within the context of the burden of care.

Methods: This abstract describes part of the results of a mixed methods research study in a home care setting. In a convenience sample of 67 dyads (demented persons [80.0±7.5y; 22.4% mild, 44.8% moderate, 25.4% severe cognitive impairment] and caregivers [66.6±12.5y]), socio-economic, medical, functional, psychological and nutritional factors were assessed in standardized personal interviews.

Qualitative interviews were conducted with a subsample of 12 selected caregivers. Descriptive statistics and qualitative content analysis were used to analyze the data.

Results: *Participants with dementia.* According to the Mini Nutritional Assessment (MNA) 49.3% were at risk of malnutrition (MN), 29.9% malnourished; 10% had a BMI <20 kg/m²; 55.2% lost weight, 14.9% gained weight during illness trajectory. *Caregivers >65 years (n=43):* 11.6% were at risk of MN, 2.2% malnourished; 5% had a BMI <20 kg/m²; 19.4% lost weight, 22.4% gained weight. 9.5% were frail, 52.4% prefrail. Of all caregivers (n=67): 47.8% felt little, 29.9% moderately, and 22.4% severely burdened. 92% believed “that the person with dementia eats enough”; 58% indicated that they have no training needs on the topic “ nutrition” in dementia. The qualitative interview data indicate that caregivers slide into the challenging responsibility to ensure an adequate and balanced diet and that they had difficulties to recognize early signs of nutritional disorders.

Conclusion: Weight loss and (risk of) malnutrition in dementia are common and not adequately recognized by caregivers. Consequently, there is need to assess nutritional problems within the dyads and to integrate the topic “ nutrition” in interventional programs.

Disclosure of Interest: None Declared

PP029-MON**PREVALENCE OF MALNUTRITION IN PATIENTS WITH DIFFERENT GERIATRIC BONE FRACTURE TYPES**

M. Basrai¹, L. Klueber¹, S. Pevny¹, U.C. Liener², S.C. Bischoff¹. ¹Department of Nutritional Medicine, University of Hohenheim, ²Department of Orthopedics and Trauma Surgery, Vinzenz von Paul Kliniken gGmbH Marienhospital, Stuttgart, Germany

Rationale: To examine whether patients with typical geriatric fracture types show signs of malnutrition more often than peers, in order to implement selective risk screenings.

Methods: 93 patients aged 81.44±6.83 years took part in the case-control study, 22 with osteoporotic vertebral fracture (OVF), 22 with distal radius fracture (DRF), 25 with femur fracture (FF) and 24 with elective knee or hip replacement (ER, control group). All patients received nutritional and geriatric assessment, e.g. handgrip strength measurement (HGS), Mini Nutritional Assessment (MNA), anthropometric and body composition measurements. 4 weeks after interview all patients obtained a follow-up questionnaire. Statistical analysis comprised Shapiro-Wilk-test, MANOVA/ANOVA coupled with Bonferroni correction and the Mann-Whitney-U-test.

Results: In MNA 39.77% of all patients had risk of malnutrition, especially FF-patients (12 in 35). HGS was significantly higher in ER- (mean: 52.94±20.84 pounds) compared to OVF-group (mean 37.54±15.85 pds; $p=0.032$) and FF-group (mean 35.56±16.86 pds; $p=0.009$). BMI was significantly lower in FF-group (22.66±4.04 kg/m²) than in ER-group (26.09±3.94 kg/m², $p=0.034$). Serum parameters indicated that 29 of 91 patients (31.87%) had albumin concentration below DGEM standard normal value of 3.5g/dl. Body fat mass (FM) shows tendency to differ between FF-group (mean: 21.31±9.33%) and ER-group (mean: 28.7±7.13%, $p=0.051$). Serum parameters indicated that 63 of 70 patients (90%) had vitamin D concentration below recommended value of 30 ng/ml.