Urban-Rural Differences In Hip Fracture Mortality. A NOREPOS Study
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Purpose: To study urban-rural differences in mortality 30 days and 1 year post hip fracture, and to explore whether possible differences were associated with level of education. Methods: The study was based on the NOREPOS hip fracture database (NORHip) using hip fracture outcomes during 2002-2013. The first registered hip fracture was included in the study. Dates on death and emigration were obtained from the National Registry. Information on education and municipality of residence was obtained from the 2001 Population and Housing Census, Statistics Norway. The degree of urbanization was based on the proportion of inhabitants living in densely populated areas (rural: <1/3, semi-rural: 1/3-2/3 and urban: >2/3). Mortality in hip fracture patients living in urban and semi-rural municipalities was compared to mortality in patients living in rural municipalities using a negative binomial model. Analyses on 30-day mortality and 1-year mortality were adjusted for age, and analyses of 1-year mortality were additionally adjusted for education. In the current abstract we have chosen to focus on differences between rural and urban areas only. Results: In 27 748 male and 62 271 female hip fracture patients aged 50-100 years there was a statistically significant urban-rural difference in 30-day hip fracture mortality (incidence rate ratio (IRR) 1.00 (95% CI 0.84, 1.18) in men and 1.03 (95% CI 0.88, 1.22) in women). Among women, 1-year mortality was higher in hip fracture patients living in urban compared to rural municipalities (IRR 1.16 (95% CI 1.01, 1.32), with similar results in men (IRR 1.15, (95% CI 0.98, 1.35)). Differences in 1-year mortality were even more pronounced when adjusting for education (IRR 1.24, (95% CI 1.05, 1.45) in men and 1.21 (95% CI 1.06, 1.37) in women). Conclusions: One-year post hip fracture mortality was 16% higher in women in urban compared to rural municipalities, and similar estimates were found in men. There were no significant differences in 30-day mortality, suggesting that the immediate post-fracture quality of healthcare does not differ substantially between urban and rural areas. On the other hand, the differences in 1-year mortality could possibly be explained by inequalities in follow-up health care services or by differences in general health status between urban and rural hip fracture patients, but this requires further investigations.

Disclosures: Siri Marie Solbakken, None

Factors associated with delayed wound healing longer than 8 weeks after tooth extraction in Japanese patients >60 years of age Akira Taguchi¹, Mikio Kaminura¹, Shigeharu Uchiyama¹, Hiroyuki Kato¹, ¹Department of Oral and Maxillofacial Radiology, School of Dentistry, Matsumoto Dental University, Japan, ²Center for Osteoporosis and Spinal Disorders, Kamimura Orthopedic Clinic, Japan, ³Department of Orthopedic Surgery, Okaya City Hospital, Japan, ⁴Department of Orthopedic Surgery, Shinshu University School of Medicine, Japan

Little is known about whether osteoporosis, use of antiresorptive medication, or duration before tooth extraction is a main risk factor for osteonecrosis of the jaw. We evaluated whether use of bisphosphonate (BP) and/or denosumab (Dmbh), self-reported kyphosis, or duration before tooth extraction were associated with an incidence in delayed wound healing beyond 8 weeks after tooth extraction during the past year in Japanese men and women 60 years of age and older. Among the 586 patients who responded to the structured questionnaire survey, 426 patients (151 men and 275 women) aged 60-96 years participated in this study. Subjects who had waited >2 months for tooth extraction had a significantly higher risk of delayed wound healing compared with those whose tooth was extracted within 1 month (Odds ratio [OR] 7.23, 95% confidence interval [CI] 2.19-23.85). The prevalence of self-reported kyphosis was significantly associated with an increased risk of delayed wound healing (OR 5.08, 95%CI 1.11-23.32). BP and/or Dmbh use was not significantly associated with delayed wound healing (p=0.17). A long waiting time before tooth extraction and self-reported kyphosis but not use of antiresorptive medication may be risk factors for delayed wound healing beyond 8 weeks after extraction.

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Prevalence of Morphometric Vertebral Fractures Does Not Differ in Patients With and Without Clinical Fractures in a Fracture Liaison Service Open Model
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Vertebral fractures are associated with a high risk of new vertebral and non-vertebral fractures and with increased morbidity and mortality. Fracture Liaison Service (FLS), as proposed by the International Osteoporosis Foundation (IOF), focuses in clinical vertebral and non-vertebral fractures as trigger for the search of radiographic vertebral fractures. Since vertebral fractures are generally asymptomatic and occur early in the course of the disease, the lack of a systematic approach for the early detection of morphometric vertebral fractures (MVF) in patients without clinical fractures can lead to a large number of patients with vertebral fractures being undiagnosed. Purpose: To compare the prevalence of MVF in patients with and without clinical fractures at a center with a FLS open model. Methods: From August to December of 2017, 126 Mexican patients aged 50 to 80 years visited our osteoporosis center, 35 patients with clinical fracture where evaluated according to the IOF Capture the Fracture Program Best Practice Framework, and 91 patients with low bone mineral density (BMD) and without clinical fracture were evaluated at primary prevention unit (PPU). For detection of vertebral fractures, a vertebral morphometry was performed in all patients utilizing the High Definition Instant Vertebral Assessment (Hologic) on images obtained from DXA scans. MVF were defined according the Genant’s semiquantitative method. For analysis, sample, was stratified in decenniums. We compared the prevalence of MVF and BMD at three sites between groups using X2 and ANCOVA, respectively, both with a significant level of p<0.05. Results: The overall prevalence of MVF was 46.8% (IC95% 38.0 – 55.6). For the FLS group we observed a prevalence of 51.4% (IC95% 34.0 – 68.9), and 45.1% (IC95% 34.7 – 55.5) for the PPU group. The prevalence per decennium was extended from 18.4% to 66.7% in both groups. No significant differences were observed in prevalence between groups (Table 1). There were significant differences in BMD between the patients with and without MVF. We observed significantly lower BMD at lumbar spine, total hip and femoral neck in patients with MVF. Conclusions: Prevalence of MVF were similar independently of presence or absence of clinical fracture at the moment of initial evaluation. Our findings suggest that evaluating for vertebral fracture is necessary in patients with low BMD with or without clinical fractures at the moment of initial evaluation.

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Increase in Bone Mineral Density in Transwomen and Transmen During the First Ten Years of Gender-affirming Hormonal Treatment Chantal Wiepjes*, Christel De Bliek, Mariska Vlot, Paul Lips, Renate De Jongh, Martin Den Heijer, VU University Medical Center, Netherlands

Purpose: Concerns about the effects of gender-affirming hormonal treatment (HT) on BMD exist, particularly regarding the decrease in estrogen concentrations in transmen. HT in transgender people affects BMD on long-term, but long-term follow-up studies are lacking. Therefore this study aimed to investigate the change in BMD during the first 10 years of HT in transwomen and transmen, in order to determine whether it is necessary to assess BMD during HT. Methods: A retrospective cohort study was performed in adult transgender