



Osteoporosis among hospitalized patients with proximal femoral fractures in Assiut University Trauma Unit, Egypt

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Abstract:

Summary The study was done to investigate osteoporosis prevalence in 275 hip fracture admissions at the Trauma Unit of Assiut University Hospitals and associated factors, which are understudied in our locality. Prevalence was 74.9%. Female sex, older age, low body mass index, and fall on the ground were associated with osteoporosis. **Purpose** This study aims to identify osteoporosis prevalence in hip fracture admissions at the Trauma Unit of Assiut University Hospitals and to study the independent correlates of osteoporosis-related fracture. **Methods** A prospective cross-sectional study was carried out in 275 hip fracture patients admitted to the Trauma Unit of Assiut University Hospitals from January through December 2014 of both sexes aged 50 years and older. Exclusion criteria were polytrauma, major accidents, and history of chronic conditions and long-term medication associated with osteoporosis risk increase and bilateral hip fractures. For every patient, weight, height, and bone mineral density by dual-energy x-ray absorptiometry (DEXA) were recorded. Tests of significance for non-parametric data were used. The questionnaire included sociodemographic characteristics, dietary habits, lifestyle factors such as smoking and physical activity, and female obstetric and gynecological factors. **Results** Mean age was 70.82 ± 11.02 SD; 51.6% were males and 8.4% were obese. Fall on ground was in 81.1% of fractures. Osteoporosis (femoral neck T score ≤ -2.5 SD) prevalence was 74.9%. By univariable analysis, significant correlates were female gender, older age, normal BMI, and fall on the ground. Milk and cheese daily intake was significantly associated with lower prevalence of osteoporosis. In a multivariable logistic regression model, female sex, older age, low BMI, and fall on the ground were associated with osteoporosis. **Conclusions** Osteoporosis prevalence is high among hip fracture patients and associated with female sex, increase in age, low BMI, and fall on ground. Strategies to prevent osteoporosis are needed to decrease hip fracture rates.

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