

Adjusted Prevalence and Incidence of Fragility Fracture of the Femur and Knee in Adults Over 50 Years Old in Mexico

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Purpose: Osteoporosis affects worldwide 1 in 3 women and 1 in 5 men over 50, causing more than 8.9 million fractures per year. These types of fractures increase morbidity and mortality and substantial health-care costs for older adults. Our objective was to determine the prevalence and incidence of fragility fracture of the femur and knee in adults over 50 years old in a reference hospital.

Methods: This was a prospective, transversal study from secondary sources, registered with the local ethics committee with registration number R-2018-3401-072. The annual prevalence (2014-2017) and incidence were calculated after considering the year 2019.

Results: A 3% prevalence increase was observed between 2014 and 2017. The average age and sex in femur fractures in general was age 71-80 years and female sex 541 (52%). Most frequent supracondylar site was right femur, female sex 247 (23%). The average age and sex in patellar fractures in general and the most frequent site was age of 51-60 years, female sex 247 (23%), and left patellar fracture. The average age and sex in tibia fractures in general was age 51 to 60 years, female sex 264 (25%); most frequent site was right tibial plateau. The prevalence increased year by year, being more representative in 2017, as shown in Figure 1. The punctual incidence was obtained from the susceptible population >50 years of age (9,400,000) is 19.7% (1,851,800). The total that is attended in this unit, incidence of femur and knee fractures (1419) was 0.015%, who will present a fracture due to femur and knee fragility.

Conclusion: Fragility fractures play an important role for the orthopaedist, since as the population pyramid has been reversed they have been increasing. The prevalence and incidence of fractures of the femur, patella, and tibia due to frailty in adults over 50 years of age is a problem that has increased significantly at the regional, national, and international level, which generates damage and most often affects people at this stage of life.