Risk factors of the hip fractures in elderly patients

abstract

Background and purpose: The hip fractures are the most frequent cause of traumatic death after the age of 75 years, occurring more frequently in women that will make a negative impact of the patient's life style. The purpose of this research was to evaluate the risk factors of the hip fractures in elderly hospitalized in centers of education and treatment of Kerman and Rafsanjan cities in 1998-2000.

Methods and Materials: This study was a descriptive method of sampling during 27 months (from 19 April 1998 to 21 July 2000) in hospitalized patients of orthopaedic wards of Aliabo Abbaieh hospital of Rafsanjan and Shahid Bahonar hospital of Kerman. 257 patients who were afflicted with hip fracture were evaluated by a questionnaire with 20 statements (risk factors of hip fractures) that was used to record the informations about this study. This risk factors were including age, sex, type of fracture, osteoporosis, milk consumption, muscle atrophy, environmental hazards, body mass index diseases, diabet, previous fracture, smoking, antidepressant and anticonvulsion drugs, heart disease, low mobility and activity, perception disorders, age of menopause, impaired visual and nonuse external hip protector (padding).

Results: The results of this study showed that many of above risk factors were effective (>50%) than others. These factors were including environmental hazards (81.7%), muscle atrophy (72.8%), previous fractures (52.1%), low mobility and activity (70.8%), low milk consumption (100%), low BMI (79.8%), osteoporosis (52.1%) and nonuse external hip protector (100%).

Conclusion: The results of this study recommened that environmental hazards of elderly should be modified (e.g. well lighted, stable case with secure hand rail) to prevent from falling. Exercise and faradic current prevent muscle atrophy and improve physical fitness, muscle strength, balance and coordination. Treatment of impaired visual is important because risk of falling is decreased. Regular load-bearing exercise such as walking, adequate milk consumption and calcium intake prevent of osteoporosis so the risk of hip fracture is decreased. The use of external hip protector (padding) is very important in elderly because energy from falling is absorbed so it can decrease probability of hip fracture.

Key words: Hip fracture / Risk factor / Elderly / Fall