

## Falls and Hip Fractures in Alzheimer Disease, No Ground for Quality of Life, But an Opportunity for an Altered Strategy

**Gregory Tsoucalas\***

*History of Medicine, Anatomy Department, Medical School, Democritus University of Thrace, Alexandroupolis and Saint George Neurological Clinic for Alzheimer Disease and Related Dementia Syndromes, Alykes, Volos, Greece*

**\*Corresponding Author:** History of Medicine, Anatomy Department, Medical School, Democritus University of Thrace, Alexandroupolis and Saint George Neurological Clinic for Alzheimer Disease and Related Dementia Syndromes, Alykes, Volos, Greece.

**Received:** February 18, 2019; **Published:** February 26, 2019

Population life expectancy has increased dramatically over the past century across the globe. It is estimated that by 2050, 1 out of 85 persons will suffer by the Alzheimer disease (AD), while a 43.0% is expected to need a high level of care. The increase of AD patients in numbers among the general population may be attributed to the continued increase of the elderly, especially among those of age 85 years or older. AD represents a significant public health challenge with more implications to be expected in the future [1]. In a 2.5 years time interval, a third of people with AD has a fall leading to hospitalization and necessitating surgical intervention [2]. Other studies suggest an even higher incidence, noting that the annual prevalence of falls in people with A ranges from 47 to 90% [3]. AD is not only considered as the cause to fall but also as an independent predictor of mortality following surgery for fractures of the hip, while age, male gender and previous comorbidities increase the risk of death [4]. Studies shown that a 36.2% died by 180 days after fracture among those patients who were not totally dependent in locomotion at baseline, while 53.5% died or developed new total dependence within the same time period [5]. AD patients after a hip fracture present a severe decrease concerning the quality of life, while minor improvements, no statistically significant, were shown post confrontation, conservative or surgical [3]. In patients with AD, a high-intensity functional exercise program alone does not prevent falls by itself. It seems that a multifactorial fall prevention approach is required. A mixed strategy of physiotherapy, occupational therapy, nursing support group, multidisciplinary medical team, decision making questionnaires is required to enable any possible choice, resulting in high adoption of fall prevention strategies [6]. All these combined with an engagement between physicians and the person with dementia and his caregivers through identification of their needs and preferences should be the strategy proposed towards a new era of orthopaedics and beyond for such a special group of patients.



**Figure 1:** Pelvic-Femoral x-Ray of a female 87 years of age, an intracapsular fracture of the left femoral bone is demonstrated, published under written approval of the care givers (with signature authentication), Saint George Neurological Clinic for Alzheimer Disease and Related Dementia Syndromes, Alykes, Volos, Greece.

## Bibliography

1. Brookmeyer R., *et al.* "Forecasting the global burden of Alzheimer's disease". *Alzheimer's and Dementia* 3.3 (2007): 186-191.
2. Sharma S., *et al.* "Predictors of Falls and Fractures Leading to Hospitalization in People With Dementia: A Representative Cohort Study". *Journal of the American Medical Directors Association* 19.7 (2018): 607-612.
3. Robalino S., *et al.* "Effectiveness of interventions aimed at improving physical and psychological outcomes of fall-related injuries in people with dementia: a narrative systematic review". *Systematic Reviews* 7.1 (2018): 31.
4. Chiu HC., *et al.* "Dementia predicted one-year mortality for patients with first hip fracture". *The Bone and Joint Journal* 100B.9 (2018): 1220-1226.
5. Neuman MD., *et al.* "Survival and functional outcomes after hip fracture among nursing home residents". *JAMA Internal Medicine* 174.8 (2014): 1273-1280.
6. Toots A., *et al.* "The Effects of Exercise on Falls in Older People With Dementia Living in Nursing Homes: A Randomized Controlled Trial". *Journal of the American Medical Directors Association* (2018).

**Volume 10 Issue 3 March 2019**

**©All rights reserved by Gregory Tsoucalas.**