

# THE EFFECTIVENESS OF PREVENTION AND ADHERENCE TO OSTEOPOROSIS THERAPIES IN ELDERLY POPULATION

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**Célkitűzések:** An assessment on effectiveness of pharmacological strategies applied for treatment or prevention of OP.

The influence of multiple co-morbidities observed that may further complicate the management of osteoporosis in elderly population.

To identify the characteristics related to OP and fractures in hospitalized elderly patients. Options for prevention in elderly, that presents unique challenge that involve effective therapies applied and sustained adherence over years.

**Eredmények:** Seasonality of fractures varies in seasons. Odd Ratio „OR” very low level (<10 ng/ml) of 25OHD and fractures: 2.83; 95%CI: 1.51-5.31; p=0.00076. Mean 25OHD level among patient with and without fracture or significantly differs. Prior the fracture only 23.4% of patients received vitamin D supplementation. As a Post-fracture therapy 89.4% of patients received vitamin D supplementation, 51% vitamin D only and 38.3% a combination of vitamin D+Ca. It was estimated that approx. 25% of subjects were non-adherent to at least a part of the given OP therapies - mainly due to lack of persistency that may have critical impact on their health. The efficacy of standard daily dosing were compared with a combination of monthly or weekly loading+maintenance supplementation resulted in better adherence. Barthel activities of daily living (ADL) index in general correlates with increased vitamin D levels.

**Módszerek:** Observational study on hospitalised elderly people. Collected specific data on: OP therapies

BMI, demographics, age, gender 25(OH)D; Barthel-index (for Activities of Daily Living, ADL)

Fractures; Adherence to given OP therapy

**Következtetések:** Osteoporosis is a common and preventable disorder of the older adult skeleton that predisposes an individual to an increased risk of fracture, a major cause of disability in elderly hospitalized people. Effective pharmacologic agents are available for the prevention and treatment of osteoporosis. A large percentage of non-adherent to OP therapy - mainly due to lack of persistency may have critical for incidence of fractures. Adherence to therapies requires more attention in elderly patients. Higher figures in Barthel-index supports positive correlation to higher vitamin D levels in elderly population. Fracture prevention requires identification and management of co-morbidities disorders that contribute to fractures and falls, including vitamin D deficiency.