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Letter to the Editor

Prophylactics of Osteoporosis

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Dear Editor-in-Chief

Osteoporosis is a progressive disease characterized by a decrease in bone density. It is considered a public health problem, a socially significant disease, due to its "epidemic" prevalence among middle-aged women causing osteoporotic fractures (1) and leading to disability.

It is estimated that globally every third woman and every fifth man over 50 yr receive an osteoporotic fracture for the rest of their lives. Risk factors for fractures vary among individuals and include presence or absence of fragility fractures, family history, lifestyle factors, as well as bone mineral density (BMD)."Therefore, in clinical practice, the risk of fracture should be comprehensively evaluated based on these clinical risk factors for each individual" (2). For Europe in 2010-2015, the highest increase was seen in femoral fractures in women: 131026 (29%), men: 68405 (41%), with the increase being higher than in men (3).

This letter aims to provide information on the preventive measures taken to reduce osteoporosis.

Regular physical activity, eating healthy for bones foods, maintaining a healthy weight, and knowing personal risk factors are recommended to limit osteoporosis and the risk of fractures. Maintaining good physical activity has a positive effect on the bones. Anti-gravity exercises, dancing, intensive aerobics, exercises with elastic bands are recommended. Although bone growth stops in adults, there is evidence that exercises result in a moderate increase in BMD of 1-2% (4). For good bone health, it is necessary to include adequate amounts of calcium, vitamin D, proteins and other nutrients. Calcium supplements should be limited to 500-600 mg per day (5).

Vitamin D intake should be between 800 and 1000 mg per day in people over 60 yr of age to prevent fractures (6). The administration of hormone replacement therapy over 10 yr in women with naturally occurring menopause helps prevent fracture risk without increasing the risk of breast cancer (7). It is necessary to maintain a healthy weight, to avoid smoking, to improve neuromuscular function (8).

Taking some medications from the group of glucocorticosteroids, immunosuppressants, steroid hormones, antipsychotics, and some anticonvulsants contributes to bone damage and increase the risk of fractures (9).

The FRAX ® calculation of fracture risk is of particular importance. The FRAX tool computes the 10-yr probability of hip fracture or a major osteoporotic fracture. A major osteoporotic fracture is a clinical spine, hip, forearm or humerus

fracture. The tool has been externally validated in independent cohorts The FRAX assessment takes no account of prior treatment or dose responses for several risk factors (10).

Conflict of interest

The authors declare that there is not conflict of interest.

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