STRONTIUM RANELATE IN TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS

Maksimyuk K.M., Savokhina M.V. The National University of Pharmacy, Kharkiv, Ukraine ekaterina1231@yandex.ua

Increased interest in osteoporosis is mainly caused by high incidence of the disease and its consequences, such as peripheral bone and vertebral fractures, which cause temporary incapacity, disability, and increased mortality in the population.

The question of osteoporosis medical treatment remains relevant despite the large variety of approved medications. Side effects and poor adherence to long-term therapy are the main reasons of anti-osteoporosis treatment low efficacy.

In the last decades this problem became increasingly important due to closely related two demographic processes: dramatic increase of elderly and senior people in the population, in particular, women in the postmenopausal period. Approximately in every third woman over 65 years at least one fracture is observed. Femoral fractures lead to decrease of the average life expectancy by 12-15 %.

The aim of osteoporosis pharmacotherapy is to prevent fractures and their consequences, as well as ensure mobility and quality of patient's life. Pharmaceutical preparations should possess the ability to enhance bone formation, inhibit bone resorption, or act on both mechanisms of bone tissue remodeling, as well as calcium homeostasis.

Since 1990s numerous experiments and latter clinical trials appeared and showed that strontium salts taken as bone-stimulating agent have antiresorbtive effect, while strontium ranelate (medical drug based on strontium and ranelic acid) can reduce the risk of fractures in postmenopausal osteoporosis.

Bivalos (strontium ranelate) is an effective drug in treating postmenopausal osteoporosis and preventing the risk of both vertebral and extravertebral fractures. It significantly improves the bone mineral density, has a double effect on bone remodeling by stimulating new bone formation and reducing the rate of bone resorption, and increases the bone strength. Strontium ranelate results in an increase of trabecular bone mass, number of trabecule and their thickness, and improves mechanical properties of bone.

Bivalos is administered in a dose of 2 g (one sachet) once a day. Before administration the sachet content should be dissolved in glass of water to form a homogeneous suspension. It should be taken immediately after preparation.

Bivalos is safe at long-term treatment, does not affect bone mineralization and crystal lattice structure, is well tolerated by patients, easy to use, and provides high level of adherence to treatment.