



OSTEOPOROSIS AND ITS PREVENTION

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<https://doi.org/10.5281/zenodo.7549636>

ARTICLE INFO

Received: 09th January 2023

Accepted: 18th January 2023

Online: 19th January 2023

KEY WORDS

Porous bone, postmenopausal and involutinal osteoporosis, parathormone, calcitonin, senile osteoporosis, climax period, climacteric osteoporosis, local and general osteoporosis, deossification, osteogenesis, osteolysis.

ABSTRACT

The article talks about the osteoporosis disease that has been common among the residents of Surkhandarya in recent years and the measures aimed at its prevention. According to the 2021 report, information was collected and analyzed from the regions with a high incidence of the disease in the region. Conclusions and opinions were discussed based on the obtained data. If we can reduce the rate of harmful habits and reduce the rate of harmful habits among the population, the percentage of the indicators in the obtained data will be reduced by about 50%. We can achieve a reduction of up to 50%.

Introduction: Today, one of the most important tasks facing traumatologists is the prevention of osteoporosis. Once defined as deformity, it is now defined as improper bone strength leading to skeletal deformity and increased risk of fracture.

The disease can be found in primary and secondary cases: the primary type is related to metabolic changes and occurs mainly in people aged 50-70, it is often described as senile or climacteric osteoporosis because it occurs in women in the period of climax. The secondary type of the disease is different. Pathological syndromes, for example, malabsorption related to protein deficiency in food, various endocrinopathies, including Cushing's syndrome, types of osteoporosis due to long-term bone immobilization are distinguished.

Depending on age and gender, we can distinguish several types of osteoporosis, including;

- which manifests itself in the form of back pain and bone cramps in minors aged 8-14 years
- the 30-50-year-old group, where the majority of patients are smoking men and partly women, in which the disease manifests itself in the form of fractures of the vertebral bodies
- postmenopausal osteoporosis is a process that occurs in women aged 51-75 as a result of the cessation of ovarian function, 30% of all women develop this condition after menopause.



-involutional osteoporosis is associated with a decrease in physical activity, hormonal changes and nutritional disorders, and is observed in both sexes.

Preventing and maintaining structural and functional bone integrity can be achieved by creating and following a 10-step action plan!!!

It is especially designed for people without osteoporosis, and it requires a person's willpower and determination to practice it.

Step 1. A diet rich in calcium. More than 1 kg of calcium is in the body of an adult, and 99% of it is in the bones.

- Depending on age, 500-5000 mg of calcium should be consumed every day, only this indicator is higher in young people than in adults
- For teenage children, 1 cup of yogurt alone can cover 1/3 of the daily requirement.
- During pregnancy and lactation, the daily requirement may increase to 1.5 grams

Step 2. Sufficient supply of the body with vitamins

- Vitamin D - helps the absorption of calcium and phosphorus in our intestines, the main part is taken through the skin, and for this, a 15-minute sun bath is recommended every day. but this is not an optimal solution. that is, the living conditions of many people do not correspond to this, and there is a risk of developing skin cancer
- Vitamin C stimulates osteoblasts and promotes calcium absorption. This vitamin reduces susceptibility to colds and we can get it mainly through citrus fruits.
- Vitamin K is produced mainly by intestinal bacteria and can be found in dark green vegetables, i.e. spinach. since it is a fat-soluble vitamin, it is useful to consume it with fat products
- Vitamin A is also fat-soluble and tends to accumulate in the body. it affects the development of bone cells
- Vitamin B12 is necessary for healthy bones
- In addition, we need to pay special attention to the proteins in our food

Step 3. Protect your spine

Step 4. Regular physical activity

Muscle strength also declines with aging, and after age 40, men lose 64% of their muscle strength and women lose 50% of their muscle strength.

- Physical activity stimulates blood flow
- Stabilizes blood pressure
- This in turn reduces vertigo attacks, a common cause of falls in the elderly
- Step 5. Please! Do not smoke!
- Stopping smoking can reduce the risk of disease up to 2 times
- Smoking mainly affects our hip bones and 20% of fractures are caused by it
- Estrogen production in women
- Testosterone in men
- To the adrenal glands
- Affects the lungs

Step 6. Reduce nutrition.

- Harmful food products, i.e. "bone robbers"
- Excessive consumption of alcohol



- Coffee and other potentially harmful drinks
- Sugar (sadly, consumption has increased 1000 times over the last 100 years)
- Salt
- Phosphate
- Fats

Step 7. Aim for an ideal body weight!

- Women with low body fat produce less estrogen, but obesity should not be encouraged for them, which can cause comorbidities.
- The fear of gaining weight is called anorexia nervosa, and it occurs mainly in young women and causes menstrual irregularities.

Step 8. Beware of over-medication!

- A list of medications that increase the risk of osteoporosis in adults is provided by the National Osteoporosis Foundation
- Glucocorticoids are the most common cause of secondary osteoporosis
- These include prednisolone and dexamethasone

The development of the disease is mainly affected by the amount of the drug and the time of administration, so we should use their minimum amount

Step 9. Identify diseases that damage bones

- Primary polyarthritis—the most important factor in osteoporosis—may be exacerbated by corticosteroid use, limited mobility, and low weight in patients
- Chronic lung diseases
- Emphysema
- Chronic pulmonary diseases
- Chronic heart failure
- Diabetes
- Inflammatory gastrointestinal diseases

Step 10. Management of patients with pre-existing fractures

- The most important aspect to pay attention to in this process is the prevention of future fractures

Focusing on special diet and exercises with an individual approach for each patient

Conclusion: The spread of the disease depends on the population's lifestyle, working conditions, drug consumption and physical activity. In order to reduce the indicators of the disease, first of all, it is necessary to pay special attention to a healthy lifestyle, reducing the consumption of tobacco products and alcohol, physical labor, especially from teenagers, to vitamins and quality food products.

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