



# Osteoporoza u menopauzi

## Osteoporosis in Menopause

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### Apstrakt

Menopauza označava poslednju menstruaciju u životu jedne žene, ali se kao termin koristi u cilju opisivanja čitavog perioda u životu žene u kome provede 1/3 svoga života. Promene koje menopauzu prate odnose se na neuroendokrini sistem, imuni sistem, kardiovaskularni i koštani sistem. Jedine vrste za koje je poznato da doživljavaju menopauzu su: ljudi, gorile, kitovi ubice i kitovi piloti kratkih peraja.

Preduslov za očuvanje zdravlja u ovom periodu je održavanje integriteta organizma, prava i racionalna suplementacija, redovni preventivni pregledi i fizička aktivnost, uz dijetetski režim ishrane.

Faktori koji utiču na godine u kojima će doći do menopauze su: starost, hemioterapija, zračenje karlice, pušenje i starost u kojoj je majka ušla u menopauzu. Nedostatak estrogena uslovljava povećanu opasnost od vazomotornih simptoma, estetskih problema, demencije, ali je gubitak mineralne gustine kostiju, pored kardiovaskularnih bolesti najopasnija posledica menopauze.

Osteoporoza je povezana sa ranim gubitkom estrogena kod žena i sve žene koje su ušle u menopauzu pre 45. godine su u povećanom rizikom od osteoporoze. Mala telesna masa, fizička neaktivnost, nedovoljan unos kalcijuma i vitamina D, određeni lekovi, posebno kortikosteroidi, dovode do dodatnog gubitka koštane mase. Svaki prelom koji se na malu traumu dogodi znači i dijagnostiku osteoporoze. Pacijentkinje sa dijagnostikovanom osteopenijom i visokim rizikom za pojavu preloma podvrgavaju se terapiji.

Prevenција osteoporoze podrazumeva adekvatan unos proteina, kalcijuma, vitamina D i fizičku aktivnost. Osteoporoza se leči bifosfonatima, biološkim lekovima i lekovima sličnim hormonu parašititaste žlezde.

### Abstract

Menopause means the last menstrual period in a woman's life, but as a term, it is used to describe the entire period in a woman's life in which she spends 1/3 of her life. The changes that accompany menopause refer to the neuroendocrine system, the immune system, the cardiovascular and bone systems. The only species known to experience menopause are humans, gorillas, killer whales, and pilot whales.

The prerequisite for preserving health in this period is maintaining the integrity of the organism, proper and rational supplementation, regular preventive examinations, and physical activity, along with a dietary regime.

Factors that affect the age at which menopause will occur are age, chemotherapy, radiation of the pelvis, smoking, and the age at which the mother entered menopause. Lack of estrogen leads to an increased risk of vasomotor symptoms, aesthetic problems, and dementia, but the loss of mineral density bones, in addition to cardiovascular diseases, is the most dangerous consequence of menopause.

Osteoporosis is associated with the early loss of estrogen in women and all women who enter menopause before the age of 45 are at increased risk of osteoporosis. Low body weight, physical inactivity, insufficient intake of calcium and vitamin D, and certain medications, especially corticosteroids, lead to additional bone loss. Every fracture that occurs due to minor trauma means a diagnosis of osteoporosis. Patients with diagnosed osteopenia and a high risk of fracture undergo therapy.

Prevention of osteoporosis involves an adequate intake of protein, calcium, vitamin D, and physical activity. Osteoporosis is treated with bisphosphonates, biologics, and parathyroid hormone-like drugs.