

# Uticaj kortikosteroidne terapije na razvoj osteoporoze

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## APSTRAKT

Osteoporoza je sistemski skeletni poremećaj sa smanjenom koštanom masom i oštećenjem mikroarhitekture koštanog tkiva. Cilj rada je da prikaže teškoće u lečenju osteoporoze kod bolesnice sa dva direktna etiološka činioca, dugotrajnom primenom kortikosteroida i reumatoidnim artilisom i više predisponirajućih faktora za nastanak ovog koštanog poremećaja.

Bolesnica ženskog pola, stara 57 godina, gojazna, pušač i nedovoljne fizičke aktivnosti, se razbolela od reumatoidnog artilisa 2004. godine. U terapiju je, kao prvi izbor, uveden hlorkin i metilprednizolon, naizmenične dnevne doze od 4 mg i 8 mg. Posle dve godine hlorkin se obustavlja, a nastavlja se lečenje glukokortikoidima i metotreksatom. Dodatna medikacija je uključila i sledeće: folna kiselina, diklofenak, naproksen, gvoždje (oralni preparati), pantoprazol i betametazon dinatrijum fosfat plus betametazon dipropionat. Nalaz osteodenzimetrije kostiju je dokazao osteoporozu (T-skor, od 1.8-2.5) pa je prevencija i terapija gubitka koštane mase vršena primenom sledećih lekova: kalcijum glukonat plus askorbinska kiselina, holekaciferol (1000 IJ dnevno), alfacalcidol (100 mcg dnevno), alendronat (70 mg, 1 nedeljno, p.o.). Uprkos dugotrajnoj terapiji bolest je progredirala tako da je zbog izrazito funkcionalnog ograničenja bolesnica operisana i ugrađena je totalna cementna endoproteza desnog kuka. Antireumatski medikamentozni protokol je početkom 2012. godine uključivao metilprednizolon i metotreksat. Operacija drugog kuka je odložena do pojave sledeće remisije osnovnog oboljenja.

Prevencija i terapija gubitka koštane mase je bila nedovoljno efikasna zbog postojanja višestrukih faktora rizika za osteoporozu: starija životna dob, ženski pol, menopauza, konzumiranje duvana, loše navike u ishrani, nedovoljna fizička aktivnost i boravak na dnevnoj svetlosti, osnovno oboljenje (reumatoidni artilitis) i dugotrajna, višegodišnja terapija kortikosteroidima.

Ključne reči: osteoporoza; artilitis, reumatoidni; glukokortikoidi; faktori rizika; terapija.

## The effect of corticosteroid therapy on development of osteoporosis

## ABSTRACT

Osteoporosis is a systemic skeletal disorder with reduced bone mass and deterioration of bone tissue microarchitecture. The aim of this paper is presenting difficulties in osteoporosis treatment in patients with two direct etiologic agents- rheumatoid arthritis and long-term corticosteroid use and with multiple predisposing factors for metabolic bone disorder development.

A female patient, 57 year old, obese, smoker, with insufficient physical activity, suffered from rheumatoid arthritis in 2004. The first treatment included chloroquine and methylprednisolone (daily doses of 4 mg and 8 mg successively). After two years, chloroquine has been stopped and the treatment with methotrexate and glucocorticoids sustained. Additional medications included: folic acid, diclofenac, naproxen, iron (oral preparations), pantoprazole and betamethasone disodium phosphate plus betamethasone dipropionate injection (occasionally). Osteodensitometry findings proved osteoporosis (T-score, 1.8-2.5), and prevention and treatment of bone loss was performed with: calcium gluconate plus ascorbic acid (500 mg and 50 mg), cholecalciferol (1000 IU daily), alfacalcidol (100 mcg daily), alendronate (70 mg, weekly). Despite the therapy, the disease worsened and, due to significant functional limitations, the patient was operated and total cemented right hip arthroplasty was performed. Antirheumatic drug protocol in early 2012 included methylprednisolone and methotrexate. Arthroplasty of contralateral hip was postponed until the next remission of underlying disease.

Prevention and treatment of bone loss was suboptimal due to multiple risk factors for osteoporosis: older age, female gender, menopause, smoking, poor diet habits, lack of exercise and daylight exposure, primary disease (rheumatoid arthritis) and long-term corticosteroid therapy.

Key words: osteoporosis; arthritis, rheumatoid; glucocorticoids; risk factors; therapeutics.

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