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# MIGRATORY TRANSIENT OSTEOPOROSIS OF THE HIP - WHAT ARE THE TREATMENT POSSIBILITIES? - A CASE REPORT

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## SAŽETAK

Transient idiopathic osteoporosis (TIO) is a rare pathology that predominantly affects middle-aged men and pregnant women. It is marked by a temporary reduction in bone mineral density, and the presence of bone marrow oedema, commonly resulting in spontaneous joint pain in the lower extremities. Treatment of this condition may include analgesics and protected weight bearing, bisphosphonates, teriparatide, physical therapy and hyperbaric oxygen therapy to prevent bone fracture and decrease pain. In very rare cases, symptoms may recur and it is referred as Migratory transient idiopathic osteoporosis (MTIO). This case report present details of a 39-year-old man with MTIO involving the right hip, developed without a history of trauma, and treatment possibilities. He presented at physiatrist clinic in November 2022, three months after the initial onset of pain and limited ROM. MRI revealed a marked increase in the bone marrow signal and oedema of the head and neck of the right femur with a suspicion on minimal stress fracture. To relieve pain and prevent possible fractures he was provided with crutches. Also, he received a single dose of denosumab along with physical therapy. The follow-up MRI of the right hip after 6 months showed complete resolution of the disease. Almost a year after the initial onset of pain, the patient returned

with same symptoms in the right hip. Again, MRI revealed increased bone marrow signal intensity, indicative of MTIO. Due to migratory nature of the disease, hyperbaric oxygen therapy (HBOT) was recommended to prevent reoccurrence of the disease. After 35 HBOT sessions, a follow-up MRI revealed complete regression of the disease after just four months. In young patients with non-traumatic joint pain, consideration should be given to TIO, a condition for which denosumab and HBOT could be effective therapies as shown in this case.