

Transient Osteoporosis of the Hip in a Middle-Aged Male Construction Worker

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Transient osteoporosis of the hip (TOH) is an underdiagnosed idiopathic condition mostly affecting healthy middle-aged men and pregnant women, with the presence of functional disability out of proportion to clinical examination¹. Magnetic resonance imaging (MRI) features sharply demarcated femoral head bone marrow edema (BME) up to the intertrochanteric line without osteonecrotic signs or articular collapse².

A 54-year-old male construction worker presented with a 6-week history of right hip arthralgia upon weight-bearing. He was constitutionally well and a rheumatological review of systems was negative. On examination, stress pain was elicited along with restriction in right hip flexion and external and internal rotation. Radiograph of the right hip was unremarkable. An MRI of his right hip revealed elements suggestive of TOH, including well-delineated edema in the femoral head and neck, a small joint effusion, and the absence of osteonecrotic signs or collapse of the femoral head (Figure 1). He was discharged home with acetaminophen as needed for analgesia. The patient was seen in followup 3 months later

with marked improvement of his joint symptoms along with normal right hip range of motion (ROM).

The patient's occupation as a construction worker initially placed a diagnosis of soft tissue injury higher on the differential. However, given persistence of arthralgia symptoms along with restriction in ROM, primary joint etiology was suspected. Clinically, normal radiographic and MRI findings are hallmarks of TOH. Further, the self-resolving characteristic of this condition excluded the presence of more insidious causes of BME such as avascular necrosis³.

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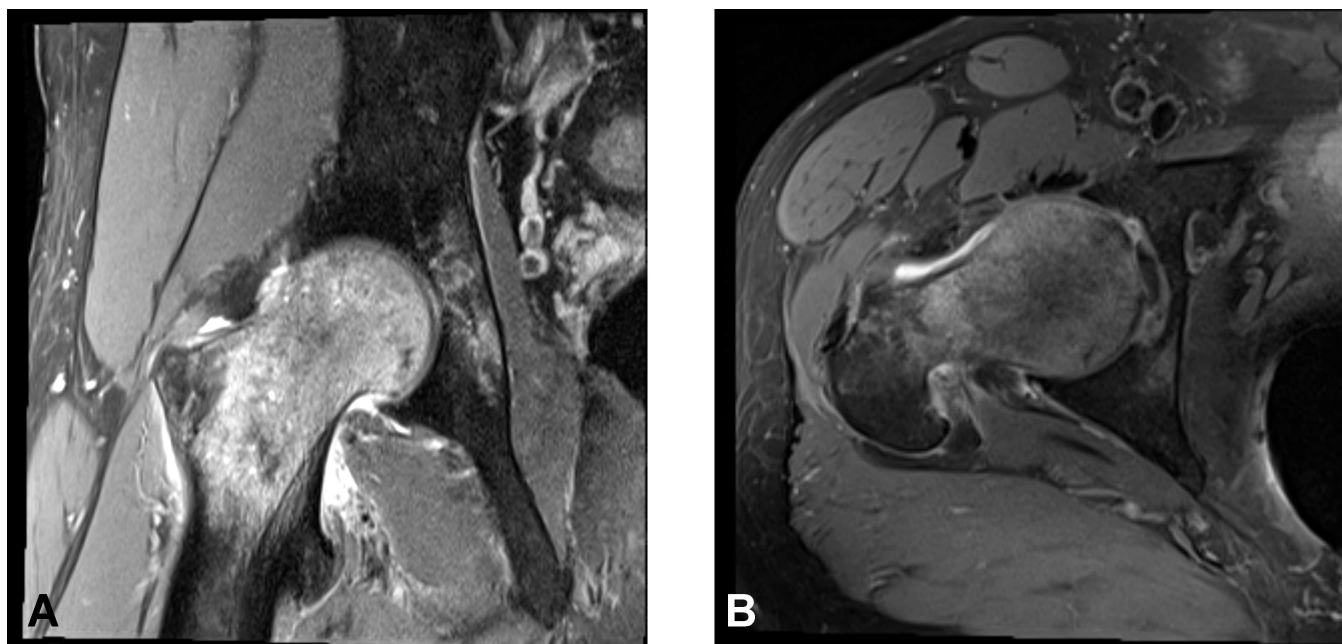


Figure 1. Coronal (A) and axial (B) T2 fat-saturated magnetic resonance images of the right hip revealed extensive marrow edema in the femoral head and neck. Mild edema in the medial acetabulum and a small joint effusion can also be seen.