

Pathologic Fracture of the Hip Due to Severe Gouty Arthritis

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A 51-year-old woman with chronic kidney disease and tophaceous gout presented with severe left groin pain. Examination revealed multiple tophi, polyarticular synovitis, and exquisite left groin tenderness. Plain radiographs revealed a large, focal lytic lesion involving the left femoral neck (Figure 1). Magnetic resonance imaging of the pelvis showed bilateral hip effusions, sacroiliitis, and a 1.5 cm lytic lesion of the left femoral neck (Figure 2). Aspiration of the hip joint revealed monosodium urate crystals consistent with a diagnosis of gout. While awaiting surgical intervention, she fractured her left femur at the site of the lytic lesion (Figure 3). She was then hospitalized for open reduction and internal fixation of the left femur. Pathologic examination of bone tissue removed from the site of the lytic area revealed monosodium urate crystals with no evidence of malignancy.

Gouty lesions involving the spine, pubic symphysis, patella, prepatellar bursa, and sacroiliac joints have been reported¹⁻⁴. To our knowledge, this is the first reported case of a pathologic femoral fracture secondary to gout. This case highlights a unique cause of hip pain, which, although rare, should be considered in the differential diagnosis for hip pain in patients with tophaceous gout.

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Figure 1. Anteroposterior radiograph of the proximal left femur reveals a lytic lesion (arrows), measuring about 6 cm in diameter. No calcification is seen within the lesion, but a small focus of calcification projects over the acetabular labrum laterally.

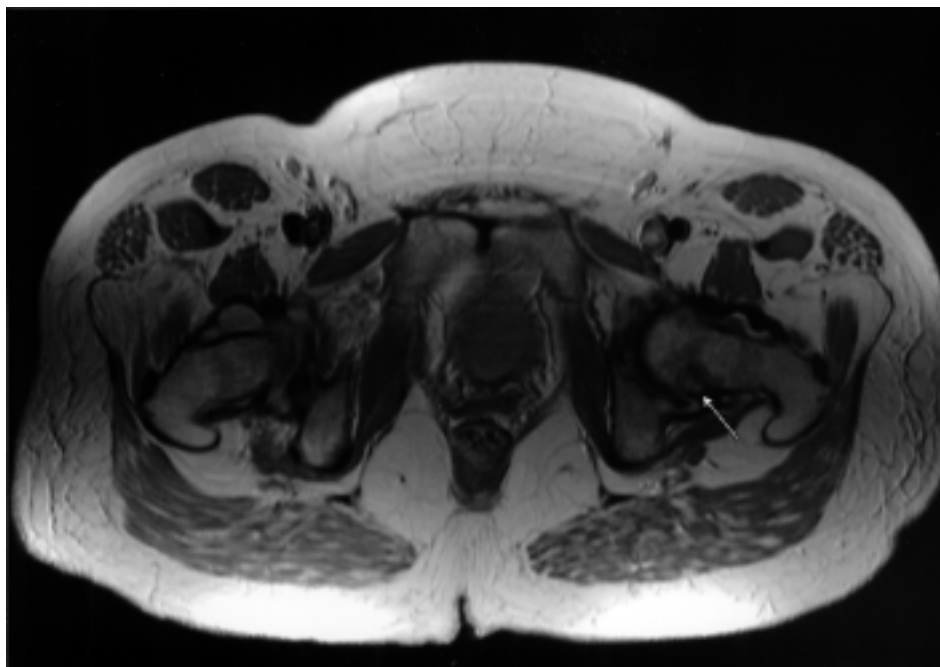


Figure 2. MRI of the left hip. A transverse proton-density image shows an area of decreased signal intensity in the posterior aspect of the left femoral neck (arrow). This position corresponds with the increased area of signal intensity on the STIR image.



Figure 3. Anteroposterior radiograph of the proximal left femur shows an impacted pathologic fracture through the femoral neck and the lytic lesion (arrows).