A 51-year-old man presented to an urgent care facility 2 weeks after onset of left lateral hip and buttock pain. Radiographs were noncontributory (FIGURE 1). He received an intra-articular hip injection without improvement. Due to persistent pain at 4 weeks, he sought assessment by an orthopaedist, who referred him to physical therapy starting the subsequent week.

The patient’s medical history was unremarkable and negative for risk factors of avascular necrosis. Primary impairments included hip pain, hypomobility, and weakness consistent with gluteal tendinopathy. He responded to femoroacetabular joint mobilization and hip-strengthening exercises, with decreased pain and improved hip mobility in the initial 2 visits. Following 2 weeks of international travel, the patient returned to physical therapy and reported an increase in pain without any associated injury or change in activity level. Reassessment identified elevated symptom irritability, new onset of night pain, altered gait, and decreased hip motion. Joint mobilization and exercise did not improve the symptoms, unlike the initial treatment sessions. Tramadol and cyclobenzaprine, prescribed by his primary care physician, did not provide relief. Due to the worsening clinical presentation, he was referred back to the orthopaedist for additional evaluation.

Magnetic resonance imaging was ordered and demonstrated abnormal femoral head and acetabular contour, extensive bone marrow edema, and a complex joint effusion (FIGURE 2). He was diagnosed with femoral head avascular necrosis. There was no laboratory evidence of infection or other systemic disease. Repeat radiographs (FIGURE 3) demonstrated marked femoral head deformity. He underwent a left total hip arthroplasty 7 months following initial onset. Intraoperative tissue biopsy was negative for infection or neoplasm. He recovered without complications.

This case describes a rapid progression of hip avascular necrosis in the absence of characteristic risk factors or trauma, and the integration of musculoskeletal imaging into physical therapy practice.

References