

Total Loss of Femoral Head and Acetabulum in Rapidly Destructive Hip Disease

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Rapidly destructive disease of the hip can result in total destruction of the hip cartilage. We describe a case of rapidly destructive hip disease.

An 81-year-old woman presented with complaints of mechanical left hip pain since the beginning of 2006. In September 2006, radiographs (Figure 1A) demonstrated mild osteoarthritic changes. One year later, she reported progressive worsening of pain and disability, with no experience of intraarticular injection or recent infection or trauma. Examination revealed preservation of range of motion. In November 2007, new radiographs (Figure 1B) showed shaft bone destruction of the femoral head, associated with a “beheaded-like” appearance, a partial destruction of the acetabulum in the anterior part, superolateral subluxation, widening of the joint space, and no osteophytes. The patient’s

clinical history, laboratory tests, radiography of other joints, and pathologic examination of surgical specimens ruled out infectious or inflammatory arthritis, primary osteonecrosis, crystal deposition, and iatrogenic drug-induced, neuropathic or diabetic arthropathies. Resected tissue, obtained from surgical specimens, revealed extensive cartilage and subchondral bone loss surrounded by multinucleated giant cells and hypervascular fibrous connective tissue.

In our patient, total destruction of the hip cartilage was associated with unusual rapid and massive osteolysis of the femoral head and acetabulum. This case may be an uncommon subset of rapidly destructive osteoarthritis of the hip. However, it may fit with idiopathic rapidly destructive disease of the hip¹, as described for the shoulder². Whatever the name of this condition, major osteoclastic activation is



A



B

Figure 1. Radiographs show: A. Mild osteoarthritis. B. Shaft bone destruction of the femoral head and acetabulum, associated with a “beheaded-like” appearance, superolateral subluxation, widening of joint space, and no osteophytes.

probably involved, as suggested by the recent identification of mature and activated osteoclasts in the synovium in rapidly destructive osteoarthritis of the hip³.

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