

CASE 9. DIAGNOSIS

OSTEOCHONDRITIS DISSECANS

The “frog leg” lateral radiograph of the left hip in the presentation shows a 5 × 5 mm subchondral bone fragment of the femoral head (arrows). The computed tomography scan confirms the presence of the osteochondritic fragment with no evidence of an intra-articular loose body.

The radiologic features described are pathognomonic of osteochondritis dissecans. Because the osteochondritic fragment was completely attached, according to computed tomography-arthrography and magnetic resonance imaging criteria, the patient initially was managed nonoperatively. However, because of persistent hip pain the patient underwent operation 11 months after consultation. Diagnostic arthroscopy confirmed the radiologic findings. No loose bodies were identified.

Although the roentgenographic finding of an osteochondral fragment is pathognomonic, in more occult cases, magnetic resonance imaging or computed tomography-arthrography is required to make the diagnosis.^{1,2} Furthermore, the latter two modalities are essential in determining the presence of a loose fragment, a critical factor in making a decision as to whether the patient should be treated conservatively or operatively.

Osteochondritis dissecans is a benign condition of diarthrodial joints affecting adolescents. It is characterized by the separation of a subchondral fragment of bone from a convex articular surface. It is a relatively common entity in the knee, elbow and talus. This presentation in the femoral head is quite unusual.

A host of causes have been proposed for osteochondritis dissecans, including trauma, ischemia, accessory ossification centres and genetic factors.

References

1. De Smet AA, Fisher DR, Graf BK et al: Osteochondritis dissecans of the knee: value of MR imaging in determining lesion stability and the presence of articular cartilage defects. *AJR* 1990; 155: 549–553
2. Mesgarzadeh M, Sapaga AA, Bonakdarpour A et al: Osteochondritis dissecans: analysis of mechanical stability with radiography, scintigraphy, and MR imaging. *Radiology* 1987; 165: 775–780

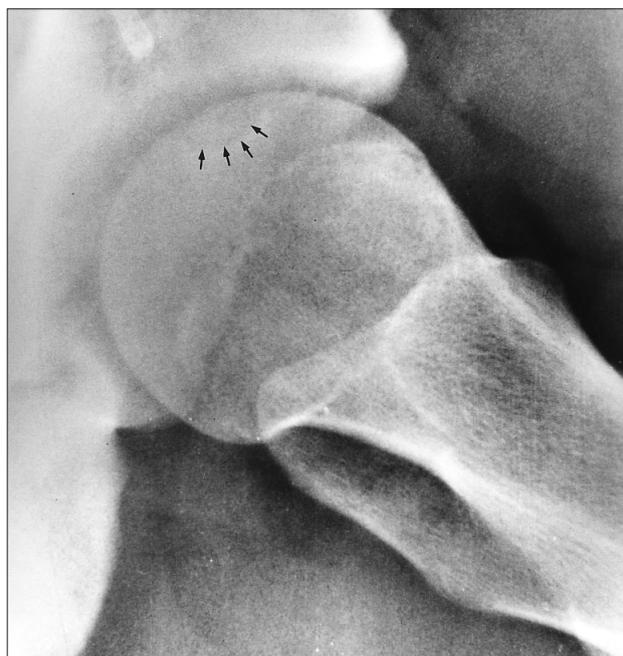


FIG. 1