Spontaneous resorption of osteochondromatosis of the hip

A case report

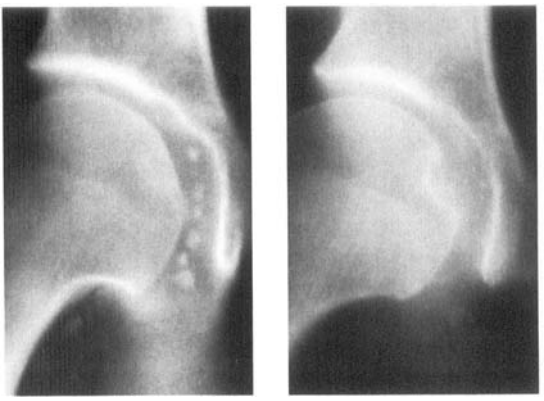
Keiichi Kawanabe[1], Hisashige Tanaka[2], Naoyuki Tanebe[2] and Takuji Hayashi[2]

[1]Department of Orthopedics, Faculty of Medicine, Kyoto University, 54 Shogoin Kawahara-cho, Sakyo-ku, Kyoto 606, and [2]Department of Orthopedics, Seirei Mikatahara Hospital, 3453 Mikatahara-cho, Hamamatsu 433, Japan. Tel +81-53 436 1251. Fax -53 436 7678

Submitted 92-02-17. Accepted 92-07-19

A 28-year-old woman complained of stiffness and pain in the right hip joint for 2 years; 13 years earlier the same hip had been treated for synovitis. On admission, motion of the hip joint was slightly restricted. Radiographs showed numerous osteochondral bodies in the hip joint. In October, 1986, we performed arthrotomy via the Smith-Petersen approach, without dislocating the femoral head; more than 30 small bodies, many with thin synovial attachments, were removed. Portions of the synovium were excised where accessible, but considerable parts of the osteochondromatous synovial tissue were not excised. Radiographs postoperatively revealed numerous calcified bodies in the joint (Figure 1). Synovial biopsy findings were typical of synovial osteochondromatosis. Because of the potential hazard of necrosis associated with dislocation of the femoral head, arthroscopy was done to remove the residual calcified bodies 3 weeks after the original operation, but this was not successful.

Figure 1. Tomograms of the right hip.



Immediately after the operation, many calcified bodies in the joint space are seen.

6 months after the operation; spontaneous resorption of several of the calcified bodies.

Radiographs 6 months after the operation showed that the number of calcified bodies had markedly decreased and that only 1, larger, body was present in the inferior portion of the joint and 2 smaller ones in the middle portion. She had no pain, but slight stiffness of the hip remained. Radiographs 2 years later showed no evidence of recurrence.

Discussion

Synovial osteochondromatosis is a benign condition, characterized by slow expansive growth of osteochondral bodies and a low recurrence rate after complete removal (Jaffe 1959, McIvor and King 1962). Another theory considers it to be a reactive process, in which there is a cycle of proliferation and resorption (Freund 1937, Milgram 1977). Numerous free bodies may become reattached to the synovial membrane, revascularized and subsequently resorbed, and resorption of the intrasynovial osteochondral nodule may be common as well (Milgram 1977). Our review of the literature revealed that synovial osteochondromatosis is often spontaneously resorbed 6 months to 1 year after incomplete attempts to remove the loose bodies (Freund 1937, Milgram 1977). It is not known if this resorption is simply part of the natural course of synovial osteochondromatosis.

Considering the risk for femoral head necrosis (Brav 1962), we suggest that, at least in young patients with no severe symptoms, it may be better to observe the progress of synovial osteochondromatosis of the hip joint rather than to dislocate the femoral head to completely remove loose bodies.

References

Brav E A. Traumatic dislocation of hip. Army experience and result over a 12-year period. J Bone Joint Surg (Am) 1962; 44: 1115–34.

Freund E. Chondromatosis of the joints. Arch Surg 1937; 34: 670–86.

Jaffe H K. Tumors and tumorous conditions of the bones and joints. Lea and Febiger, Philadelphia 1959.

McIvor R R, King D. Osteochondromatosis of hip joint. J Bone Joint Surg (Am) 1962; 44: 87–97.

Milgram J W. Synovial osteochondromatosis: a histopathological study of thirty cases. J Bone Joint Surg (Am) 1977; 59 (6): 792–801.