Synovial chondromatosis in the knee joint

Diz Ekleminde Sinoviyal Kondromatozis

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Synovial chondromatosis of a joint develops as a result of the formation of chondral focus in the synovium with proliferative metaplasia of the synovial membrane of the bursa or tendon sheath. The changing of these cartilaginous lesions into a free mass within the joint may cause secondary degenerative changes (1,2). It is frequently seen between the ages of 30-50 years. The knee joint is most often involved, then less frequently, the hip, the ankle, shoulder and elbow. It is generally seen in males and is located in a single joint. Although synovial chondromatosis is generally a primary event, it may develop secondary to arthritis (3). We aimed to represent a case with synovial chondromatosis of the knee joint, although described as a benign disease; it can be very destructive and can cause severe osteoarthritis and pain.

A 45-year old male presented with complaints of pain and feelings of locking in the right knee. On the direct radiograph, many calcified nodules were observed in the knee joint, surroundings and popliteal fossa (Figure 1). On the MRI, chondroid calcifications with lobular contours were observed in the right knee suprapatellar recess, the intra-articular and extra-articular areas, the Hoffa’s fat pad and the popliteal fossa (Figure 2). The findings were evaluated as conforming with synovial chondromatosis. The diagnosis was confirmed by pathology following open synovectomy.

The most common symptoms of synovial chondromatosis are pain, swelling, loss of movement and locking. Pain and limited movement in the joint are progressive. Effusion and repeated locking in some cases may be caused due to osteoarthrosis. The diagnosis of synovial chondromatosis is often delayed due to non-specific clinical symptoms. Synovial chondromatosis is generally progressive and in the early stages may cause osteoarthritis. Spontaneous regression of the disease or change to chondrosarcoma is rare. MRI is the most useful method in early diagnosis of the disease (3).

Figure 1. On the direct radiograph, many calcified nodules were observed in the knee joint, surroundings and popliteal fossa.

Figure 2. On the MRI, chondroid calcifications with lobular contours were observed in the right knee suprapatellar recess, the intra-articular and extra-articular areas, the Hoffa’s fat pad and the popliteal fossa.
References