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Osteochondromatosis of the Knee and Wrist with Resorption of the Carpal Bones (Commented Images)

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Abstract

A 35-year-old patient was admitted to our clinic with a painless, slow-growing mass on the medial part of his left knee, which had been evolving for 5 years. the clinical presentation and radiological picture were compatible with the diagnosis of osteochondromatosis.

Keywords: osteochondromatosis, joint, cartilage

Comment

A 35-year-old patient was admitted to our clinic with a painless, slow-growing mass on the medial part of his left knee, which had been evolving for 5 years. Clinical examination revealed a soft swelling on the medial side of the left knee (figure 1) and a swelling on the dorsal aspect of the right wrist (figure 2).X-ray revealed multiple ossified lesions on the left knee (figure 3) and carpal bone resorption on the right hand (figure 4). Magnetic resonance imaging (MRI) revealed an intra-articular lesion formation in the right wrist, predominantly at the radiocarpal joint, with moderate focal contrast. This formation is responsible for erosion of the carpal bones, notably the scaphoid, semilunar and capitate (figure 5), and in the left knee, multiple formations of variable shape and size, inside and outside the joint visible in the sub-quadricipital suprapatellar synovial recess. These formations are responsible for an outward displacement of the central pivot, with erosions of the medial tibial plateau and lateral femoral condyle (figure 6). Given this clinical and radiological picture, the diagnosis of osteochondromatosis was retained pending histological confirmation, and the patient was referred to the traumatology department for surgical management of his lesions.

Osteochondromatosis is a benign tumor of the synovium in which connective cells have chondrogenesis properties, and thus cartilage foci are capable of constructing pedunculated bodies that may subsequently detach and form chondromas (chondromatosis), calcify or ossify, and become radiopaque (osteochondromatosis) (1). These benign tumors are often articular, but extra-articular involvement is also possible, particularly in the synovial tendon sheaths and para-articular bursae (2-3). This pathology most often affects large joints, particularly the knee (4-5).

Figure 1 : Soft swelling on the inside of the left knee

Figure 2 : Swelling on the dorsal surface of the right wrist

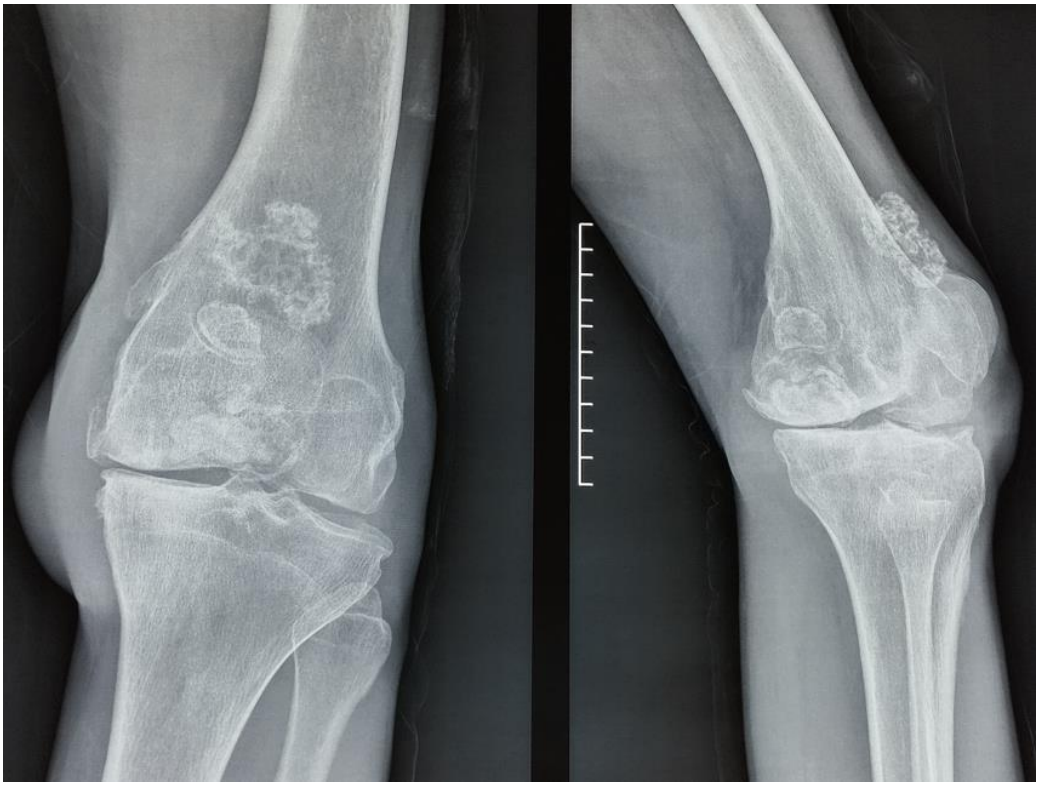

Figure 3 : x-Ray of the left knee, front and profile, showing multiple radiopaque ossified lesions on the medial aspect of the left knee.

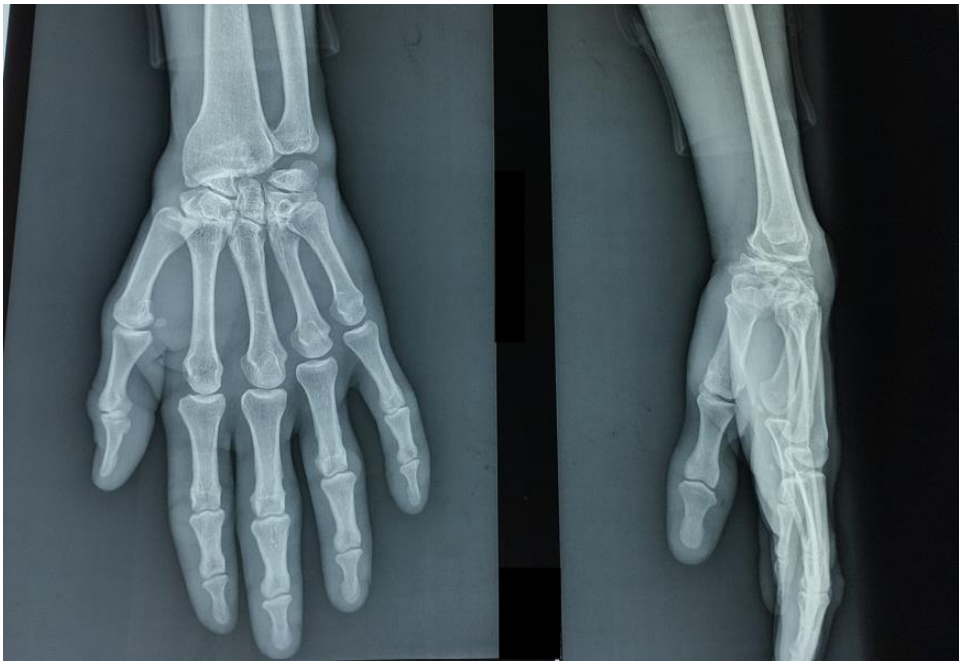

Figure 4 : X-ray of the right hand, front and profile, showing resorption of the carpal bones

Figure 5 : MRI of the right wrist

showing an intra-articular lesion formation predominantly at the level of the radiocarpal joint, with moderate focal contrast. It is responsible for erosion of the carpal bones,

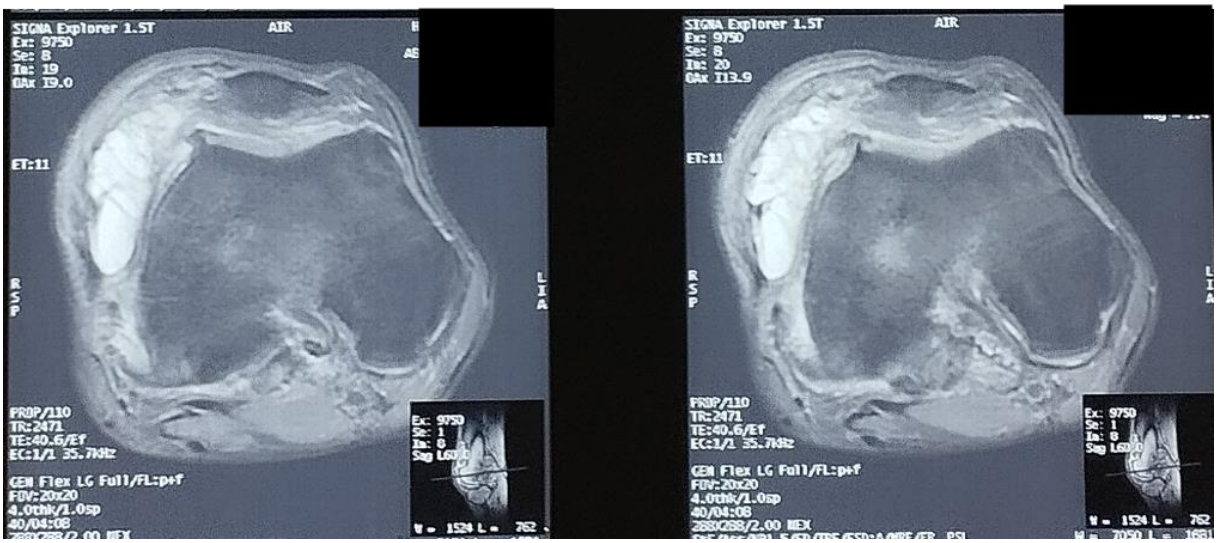

Figure 6 : MRI of the left knee

showing multiple intra- and extra-articular formations , visible at the level of the sub-quadricipital cul de sac and synovial recesses, they are hypersignal T2 and STIR.

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