Intra-Capsular Chondroma of the knee: A Case Report

Essekkal M*, Hammani Y, El hayane M, Marzouki A and Boutayeb F
Department of Trauma and Orthopedic Surgery, Morocco, Africa

Abstract
Intra-capsular chondroma of the knee is a rare benign cartilaginous tumor resulting from extra synovial metaplasia. Typically located at the lower part of the patella, some authors view this entity as a late form of Hoffa disease. This would explain the similar localization of these two pathologies.

We describe clinical, paraclinical and perioperative images of an intracapsular chondroma of the right knee evolving for 2 years in a young patient of 35 years.

The standard radiographs of the right knee face and profil showed an opacity in the infra-patellar soft parts, well limited in comparison with the patellar tendon, without any associated bone lesions.

MRI showed the cartilaginous nature of the lesion and indicated its intimate relationship with the patellar tendon which is pushed out. The tumor is in hypo-signal in T1 and hyper-signal in T2.

Internal parapatellar excision revealed a very limited cartilaginous tumor extra synovial within the hoffa and adherent to the patellar tendon. The diagnosis of intracapsular chondroma was confirmed by pathological examination.

The postoperative sequences were simple.

Keywords: Chondroma, knee, Magnetic Resonance Imaging

Introduction
Intra-capsular chondroma of the knee is a rare benign cartilaginous tumor resulting from extra synovial metaplasia [1]. Typically located at the lower part of the patella, some authors view this entity as a late form of Hoffa disease. This would explain the similar localization of these two pathologies.

We describe clinical, paraclinical and perioperative images of an intracapsular chondroma of the right knee evolving for 2 years in a young patient of 35 years.

Case Report
A female patient, 35 years, had a painful palpable mass in the right knee for two years gradually enlarging. On physical examination, there was a firm, movable, tender mass in the infrapatellar area. Ligamentous knee exam was negative (Figure 1).

*Corresponding author: Essekkal Mohamed, Department of Trauma and Orthopedic Surgery A Hassan II Teaching Hospital, Faculty of Medicine and Pharmacy Sidi Mohammed Ben Abdellah University, Fez, Morocco, Africa. Tel: +33659249533 [1]. Email: essekkalmohamed@gmail.com
Radiographs of the right knee revealed an ovoid calcified mass in the Hoffa’s fat pad (Figure 2).

On Magnetic resonance imaging (MRI) this soft-tissue mass is clearly seen, oval shaped and intracapsular (Figure 3).

The tumour was surgically excised. It was intracapsular, extrasynovial oval shaped, 6 x 3 cm (Figures 4-8)

The diagnosis of intracapsular chondroma was confirmed by histopathology (Figure 9).

**Discussion**

Intracapsular and para-articular chondromas have been named capsular osteomas, osteochondromas, or chondromas, depending on the relative proportions of bone and cartilage [2]. The Pathogenesis of these tumours is also controversial.

Intra-capsular chondroma of the knee is a rare benign cartilaginous tumor resulting from extra synovial metaplasia. Typically located at the lower part of the patella.

Some authors view this entity as a late form of Hoffa disease. This would explain the similar localization of these two pathologies,

Our case showed the characteristic features of soft tissue chondroma. Lateral plain radiograph of the knee demonstrated a large soft tissue mass with a wide radiodensity due to calcification. T2-weighted MR imaging demonstrates a heterogenous mass within the infrapatellar fat pad, with the high signal intensity representing chondroid matrix or edema and areas of low signal intensity representing calcification [3].
The diagnosis of these benign tumours is made clinically and radiologically in correlation with the pathological features.

The main differential diagnoses are: calcifying bursitis, tumoral calcinosis, periosteal chondromas, calcified synovial sarcomas, localized nodular synovitis, primary synovial chondromatosis and soft tissue chondrosarcoma [4].

The treatment of choice for these tumours is surgical excision, while being careful not to injure the joint integrity. Malignant transformation has never been reported. With correct diagnosis unnecessary aggressive surgical treatment will be avoided [1].

In conclusion, intracapsular and paraarticular chondromas of the knee is a rare benign lesion and must be differentiated from other benign or malignant tumors which occur in the same region [5].

References