

Case Report

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Synovial Osteochondromatosis of Knee – A Case Report

Alankruta R Rao^{1*} and Sachin Mahajan²

¹Resident Medical Officer, Abhishek Nursing Home, Mumbai, Maharashtra, India

²Consultant Orthopaedic Surgeon, Abhishek Nursing Home, Mumbai, Maharashtra, India

*Corresponding author

Alankruta Rao, Resident Medical Officer, Abhishek Nursing Home, Mumbai, Maharashtra, India.

Received: March 05, 2024; **Accepted:** March 13, 2024; **Published:** March 25, 2024

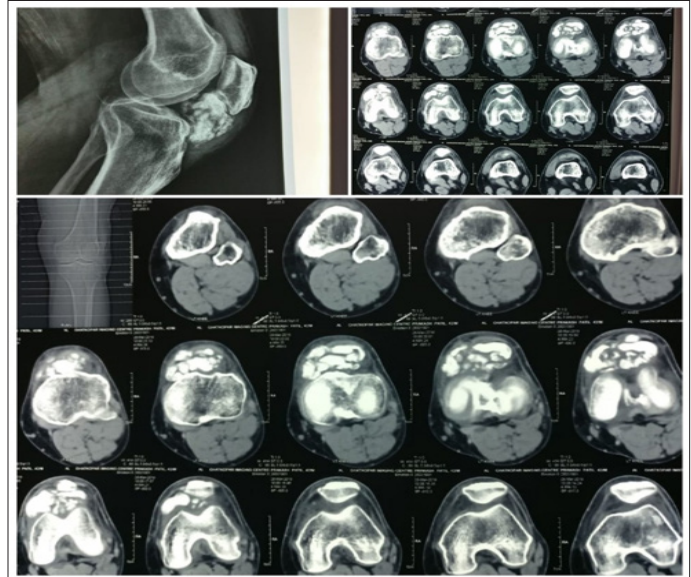
Synovial osteochondromatosis is a rare, non-malignant condition affecting the joints. It is a result of metaplastic changes in the bones causing formation of cartilaginous nodules that may or may not ossify ultimately resulting in loose bodies [1]. This can be quite distressing as the condition leads to progressive deterioration of the range of movement at the affected joint, which is most cases is the knee joint [2].

This is a case report of a patient who came to our department with painful restriction of knee movements. This is a detailed report of the diagnosis, management and the patient's response to the treatment.

In this case report, we would like to highlight the importance of early diagnosis and intervention which leads to not only an improvement of the range of motion of the affected joint but also results in a better prognosis.

42-year-old male, came to our department complaining of swelling and painfully restricted movements of left knee joint causing difficulty in walking, standing and sitting. He gave no history of trauma to the left knee and had no medical comorbidities. Systemic examination revealed no significant findings. On local examination of the left knee, there was an evident bony swelling over the anterior surface of the patella causing restriction of range of motion of the joint. The patient was able to flex the joint from 0 to 70 degrees however, further flexion was restricted due to pain. X ray of left knee (Anterior-Posterior and Lateral view) showed a bony swelling all around the patella extending to the tibial tuberosity. CT scan revealed it to be a 6.5 x 3.6 x 4.3 cm soft tissue swelling that had calcified in the Hoffa's pad of fat with inflammatory changes in the adjacent soft tissue. An MRI scan which was done to obtain a more detailed picture of the left knee, showed a synovial calcified swelling in the Hoffa's fat pad suggestive of synovial osteochondromatosis abutting the extensor retinaculum. A full blood work-up revealed no significant findings. Radiological findings suggested synovial osteochondromatosis which advocated the excision of the calcified swelling. A knee arthrotomy for the excision of the tumour along with repair of the extensor retinaculum under general anaesthesia was done after obtaining consent for the procedure and clearance for surgery from the medicine and the anaesthesia consultant. The surgery was

uneventful and was tolerated well by the patient. The excised tissue was sent for histopathology assessment post-operatively. Range of motion at knee joint post-operatively improved significantly, reverting to full flexion and extension at the joint. Histopathology report of the specimen confirmed synovial osteochondromatosis with no evidence of malignant changes. Following knee arthrotomy and excision of the tumour, range of motion at knee joint post-operatively improved significantly, reverting to full flexion and extension at the joint. The patient tolerated the procedure well.



Synovial osteochondromatosis in most cases affects the knee joint [1]. It typically presents with multiple loose bodies in the affected joint causing limitation of movements at the joint with the mean age of presentation being 41 years (range being 17-64 years) [4]. Radiological imaging proves to be useful to determine the location and rough size of the lesion. MRI scans provide more reliable details with regard to the lesion [5].

As the joint degenerates due to the growth, there is further painful restriction of the range of movement, significantly affecting the patient's quality of life. Therefore, an early diagnosis and surgical intervention to remove the growth drastically reduces the pain and

improves the clinical outcome in most cases [6].

References

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