

Arthroscopic Removal of Synovial Chondromatosis

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INTRODUCTION:

Synovial chondromatosis (SC), a rare joint disease forming cartilage nodules, mainly affects adult males (30-50 years old) in large joints. Conventionally, an open procedure is done. Nowadays, all-arthroscopic removal surgery with synovectomy is preferred to minimize recovery time and complications. Here, we present a case of all arthroscopic removal of SC.

REPORT:

A 33-year-old male patient presented with a 2 years history of atraumatic painful swelling of the right knee. On examination, there was atrophy of the quadriceps and hamstring muscles. Crepitus was felt, but range of motion was full. Knee X-rays showed osteoarthritis changes with multiple loose bodies. MRI reported numerous small loose bodies within the synovial cavity which suggest synovial chondromatosis. Surgery was done via arthroscopic approach, intraoperative findings noted presence of multiple rice bodies and osteoarthritic changes.

DISCUSSION:

SC can be classified into 3 phases. Phase I : Metaplasia of synovium with active synovitis and absence of loose bodies. Phase 2– Active synovitis with the formation of loose bodies, which are still cartilaginous. Phase 3– Loose bodies tend to calcify and synovitis subsides.

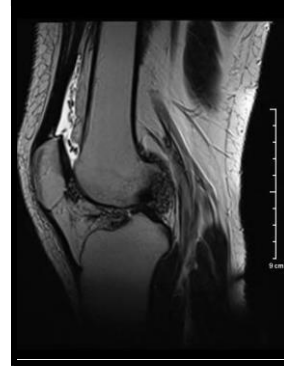


Figure 1: MRI SC



Figure 2: Rice body

Plain radiography or ultrasound may help with diagnosis but the gold standard would be MRI because of its superior soft tissue contrast. Early diagnosis and proper treatment are crucial, because delaying can lead to permanent joint damage and osteoarthritis.

All-arthroscopic approach is recommended for faster recovery and less complication (eg: pain and bleeding). Reports have suggested concomitant synovectomy gives better results compared to removal of loose body alone as it reduces the potential recurrence rate significantly (Ogilvie-Harris DJ, 1994).

CONCLUSION:

All arthroscopic removal techniques with synovectomy provide a better outcome. Early arthroscopic removal of SC is recommended to gain a good outcome and allow early rehabilitation. We suggest synovectomy to reduce the rate of recurrence.

REFERENCES:

Kukreja S. A Case Report of Synovial Chondromatosis of the Knee Joint arising from the Marginal Synovium. J Orthop Case Rep. 2013