

## **Arthroscopic Removal Of Loose Bodies In Knee Joint Of Patient With Anterior Cruciate Ligament And Bilateral Meniscus Injury**

**Danappal S, Vincent J, Mustapa N, Kadir KMS**

*Orthopaedic Department, Hospital Tengku Ampuan Rahimah, Jalan Langat, 41200 Klang, Selangor, Malaysia*

### **INTRODUCTION:**

Loose bodies in the knee joint are small fragments of cartilage or bone that move freely around the knee in joint fluid, or synovium<sup>1</sup>. The knee is the most common joint to find a loose body. These can hinder the joint moment by getting caught in flexion and extension movements. The loose bodies can vary in sizes from a few millimetres to centimetres. The fragments can lead to damage to the articular cartilage, causing osteoarthritis<sup>1</sup>. The best treatment is to remove the loose bodies surgically<sup>2</sup>.

### **METHODS:**

A 48 years old male presented to us with persistent right knee pain, instability and reduced range of motion after sustaining an industrial injury to his right knee two years ago. A steel object knocked his lateral aspect of knee. Right knee X-ray showed multiple loose bodies with moderate osteoarthritis. MRI Right Knee showed complete tear of right anterior cruciate ligament with lateral and medial meniscus injury.

### **RESULTS:**

Right knee arthroscopic debridement and removal of loose bodies done electively. The arthroscopic findings showed grade 4 chondral defects on medial femoral condyle and grade 2 chondral defects on patella surface. There was complete ACL tear with medial and lateral meniscus degenerative tear. Post operatively was uneventful. Patient's pain has reduced to half and regained full range of motion. Latest X-ray showed no recurrence of loose bodies. Histopathology examination of loose bodies showed lobules of cartilage with mild infiltration by acute inflammatory cells.

### **DISCUSSIONS:**

Loose bodies are free floating fragments of bone, cartilage or collagen in the knee or any other joint. Knee is the most common area affected. Loose bodies are classified into three types: fibrinous, cartilaginous, and osteo-cartilaginous. The symptoms caused are knee pain, intermitted joint locking, limitation of motion and occasional swelling. Larger loose bodies are typically calcified and thus easily visible on an x-ray. Smaller Loose bodies or contain little or no bone may not be visible with an x-ray and are typically diagnosed using CT scan. MRI may be useful in determining associated soft tissue injuries. The best option of surgery is Arthroscopic removal of loose bodies; however, it depends on the sizes<sup>3</sup>. Rehabilitation is very important pre n post operatively which should focus on pain management and restore function. In this patient, pain is reduced after arthroscopic removal of loose bodies despite patient having moderate to severe osteoarthritis.

### **CONCLUSION:**

Arthroscopic removal of loose bodies in knee has proven to give pain relief and better range of motion.

### **REFERENCES:**

1. Pandey, P.K., Pawar, I., Gupta, J. and Verma, R.R. (2015) Giant Loose Body of Knee Joint Presenting as Accessory Patella. *Open Journal of Orthopedics*, 5, 235-239.
2. Daddamani RM, Kotian P. (2012) Synovial Chondromatosis of knee-A rare case report. *IJRRMS Vol-2 No.4 Oct - Dec 2012*
3. D. J. Dandy, P. F. O'Carrol. The Removal of Loose Bodies from the Knee Under Arthroscopic Control . *The Journal Of Bone And Joint Surgery*, 473, VOL. 64-B, No. 4, 1982