# THE SNAPPING KNEE: A RARE CASE OF KNEE TENOSYNOVIAL GIANT CELL TUMOR MIMICKING PLICA SYNDROME

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### Introduction

Tenosynovial giant cell tumor (GCT) which arises from synovium of a joint or tendon sheath are generally a benign group of soft tissue tumor which often occurs in the fingers and rarely seen in large joints such as knee and ankle. Typical symptoms are mainly associated with painful swelling mass which worsens during activities and spontaneously appears without precipitating factors. While Plica Syndrome are more often associated with snapping sensation pain and upon repetitive activities. To our knowledge, there is very limited case of Knee Tenosynovial GCT reported in Malaysia

# Case report

22-year-old female patient presented to us with complaints of pain over lateral aspect of right knee especially upon flexion for 1 year. Otherwise, there were no instability, and no locking sensation. Local examination shows no obvious swelling or deformity. Upon flexion, noted 'snapping' sensation over lateral knee. Range of motion was full and special tests were unremarkable. No abnormal findings were found on X-ray. USG Right knee were suggestive of chronic plica syndrome.

Therefore, we proceeded with diagnostic arthroscopy. To our surprise, intraoperatively there was a pedunculated mass over superolateral aspect of lateral gutter measuring 2.7x1.2cm attaching to lateral capsule with feeding vessel which was then excised. Tenosynovial GCT was diagnosed at histopathological examination.



Figure 1: Pedunculated mass intraoperatively



Figure 2: Synovial tissue mass excised

1 month post operatively, patient was well and asymptomatic

#### Discussion

Tenosynovial GCT localized in knee joint is very rare. It may occur at any age but mostly at ages between 30 to 50 with female predominance. Presentation is usually swelling painless knee with progression and no history of trauma. MRI standard to diagnose the gold periarticular knee masses. Local excision via arthroscopy or arthrotomy is sufficient but presents with better functional outcome in arthroscopic surgery.

## References

- 1. A Abdullah et al., J Chin Med Assoc. 2010 Jan; 73(1):47-51
- JK Wong et al. , New Horizons in Clinical Case Reports. 2017 Nov; Vol 2:31