

GOUTY TOPHI ARTHROPATHY MIMICKING TRAUMATIC MENISCUS INJURY: THE 'CRYSTAL CULPRIT' OF ATYPICAL LOCKED KNEE

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INTRODUCTION:

Locked knee is a relative emergency condition in orthopedic setting. Etiological diagnosis of this condition is difficult to achieve via clinical examination alone, sometimes requiring direct evaluation via arthroscopy to establish the cause. We present an unusual case of locked knee caused by crystal urate deposition.

CASE REPORT:

Mr. H presented to our clinic with recurrent episode of pain and locking sensation over left knee for two weeks, with previous history of fall. Upon clinical examinations, findings were suggestive of meniscus injury. Diagnostic arthroscopy was done and revealed to have gouty tophi which causing mechanical block in the knee joint. Subsequently arthroscopic debridement and synovectomy were done and medical treatment was commenced. Post-operatively, patient regained full range of movement of the knee.

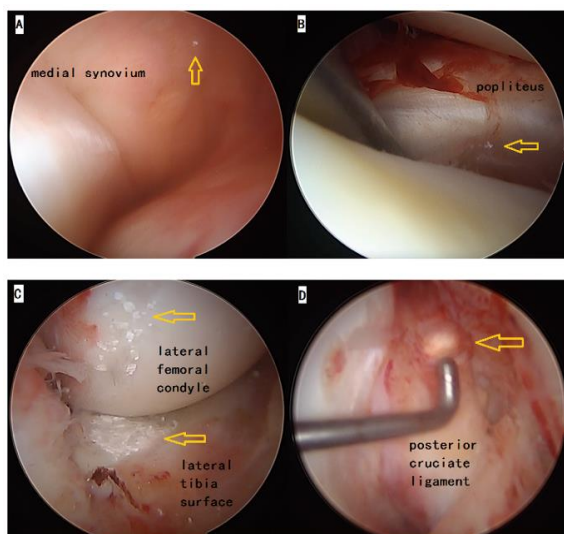


Figure 1 Arthroscopy finding of (A) inflamed synovium; (B) inflamed popliteus; (C) urate crystal deposition; (D) Tophi

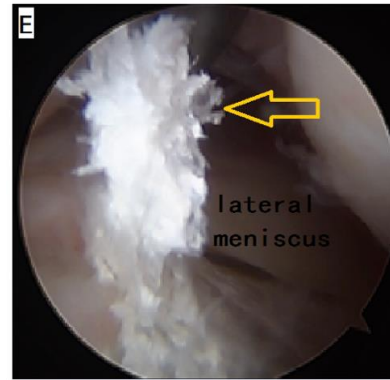


Figure 2

(E) Shows large crystal tophi loose body over lateral meniscus, the culprit behind the mechanical locked knee.

DISCUSSION:

Majority of locked knee caused by meniscus lesion, especially consists of bucket handle tears, followed by ruptured ligament lesion and others by loose articular bodies in the knee. Gouty arthropathy is an inflammatory arthritis. Mechanical locking of knee caused by gout is rare. Nevertheless, chronic untreated gouty arthritis can still potentially give rise to form tophi which are big enough to cause mechanical block in the knee, as shown in this case. MRI can be conclusive but time consuming in certain hospital setting, thus arthroscopic diagnosis and debridement are the usual mainstay of treatment without further delay.

CONCLUSION:

Gouty tophi with crystal urate deposition are a great mimicker for locked knee cases. It is important to establish the cause of locked knee via arthroscopy as it serves both diagnostic and therapeutic purposes. Early arthroscopy debridement of the knee, along with medical treatment are able to produce good functional outcome for inflammatory knee condition.

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