



# PROXIMAL TIBIOFIBULAR JOINT CYSTS

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# Disclosure



- Consultant: Arthrex, NewClip Technics
- Royalties: NewClip Technics, X Nov

# Introduction

- **Incidence**

Rare

<1% of patients undergoing MRI for knee pain

- **Demographics**

age : 20-76 years old

Female

- **Pathophysiology:**

Non-malignant, fluid-filled sacs

Degeneration or trauma leads to synovial fluid extrusion and cyst formation.

*Schwimmer et al. Radiology 1985*

# Classification

- **Location of cyst**

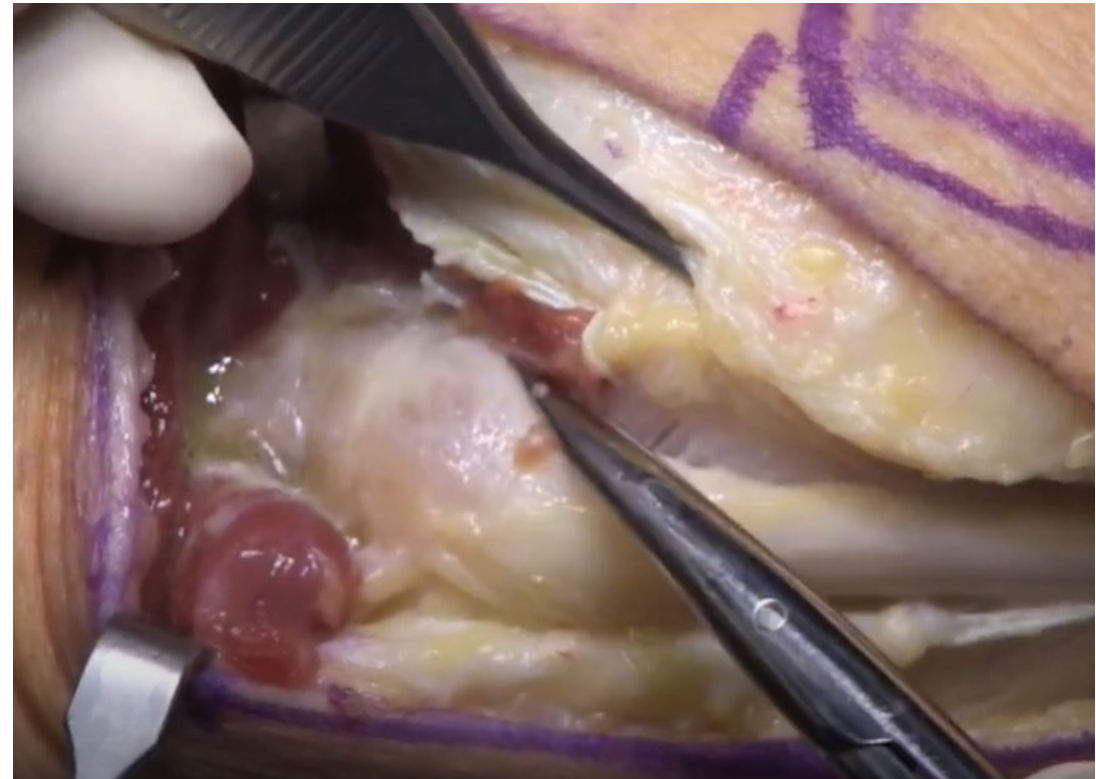
intraneural within epineurium or  
extraneural outside of epineurium

*Gibbons et al. J Arthropl 1999*

- **Developed from the articular capsule:**

No capsular attachments: “ganglion migrans”  
Attached to articular capsule by a fibrous  
attachment

*Ilahi et al. Arthroscopy 2003*



# Clinical Presentation

- **Symptoms:**

- Non symptomatic+++

- Pain and swelling

- Mechanical symptoms: clicking

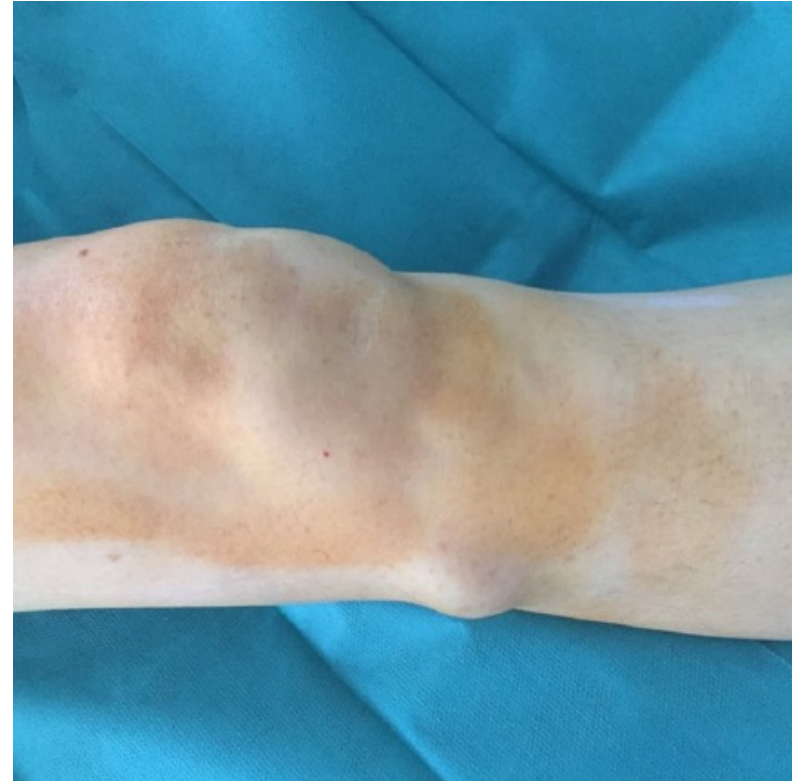
- Peroneal nerve compression: foot drop or paresthesia.

- **Examination:**

- Palpable mass over proximal fibula.

- Tenderness or fluctuation.

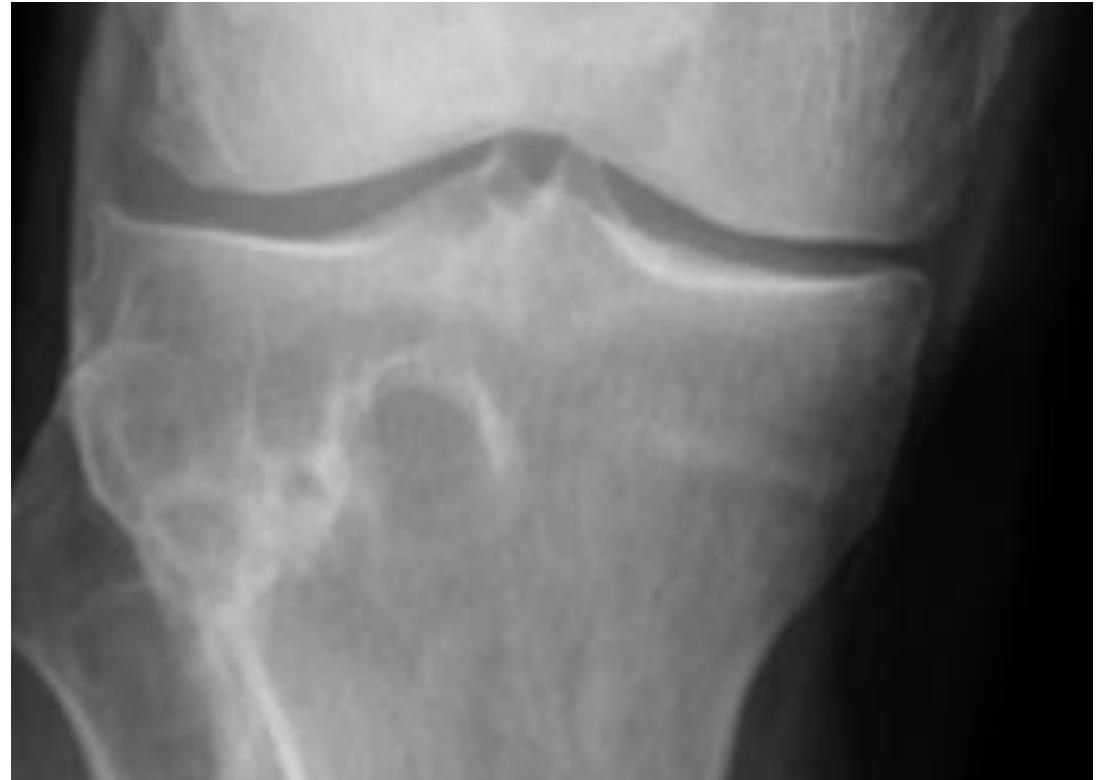
- Neurological examination +++



# Imaging

## 1. X-rays:

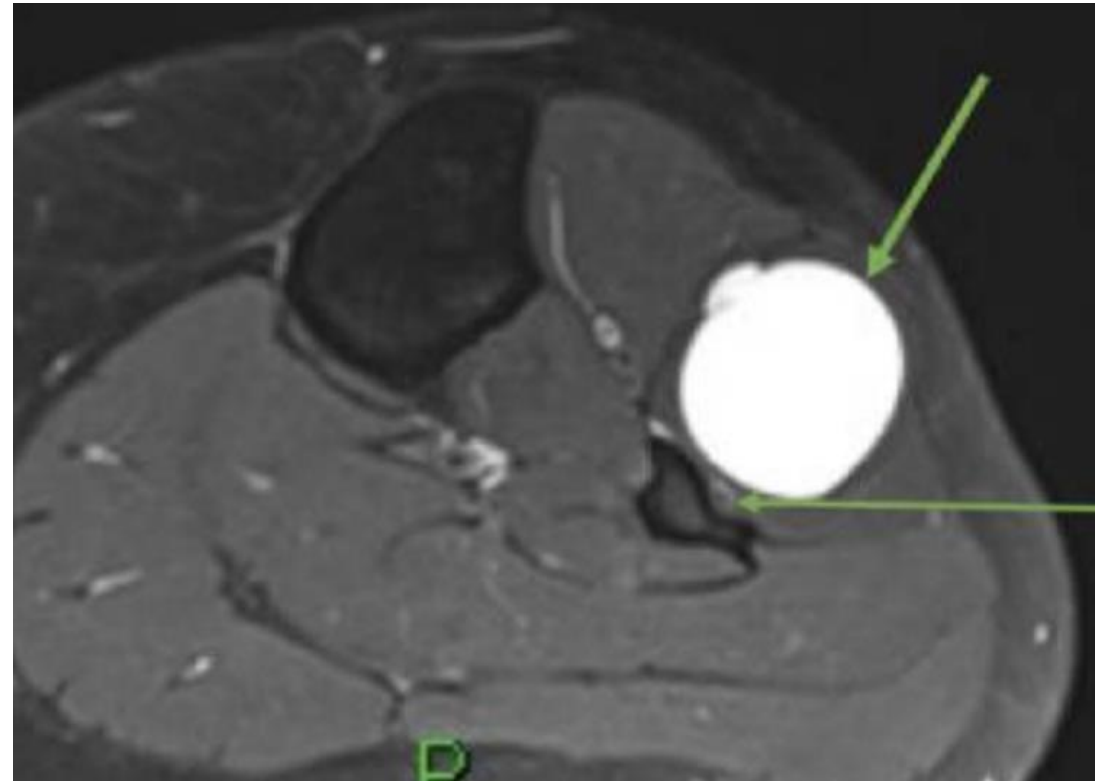
Degenerative changes or joint widening.  
Sclerotic lesions on lateral aspect of proximal tibia



# Imaging

## 2. MRI:

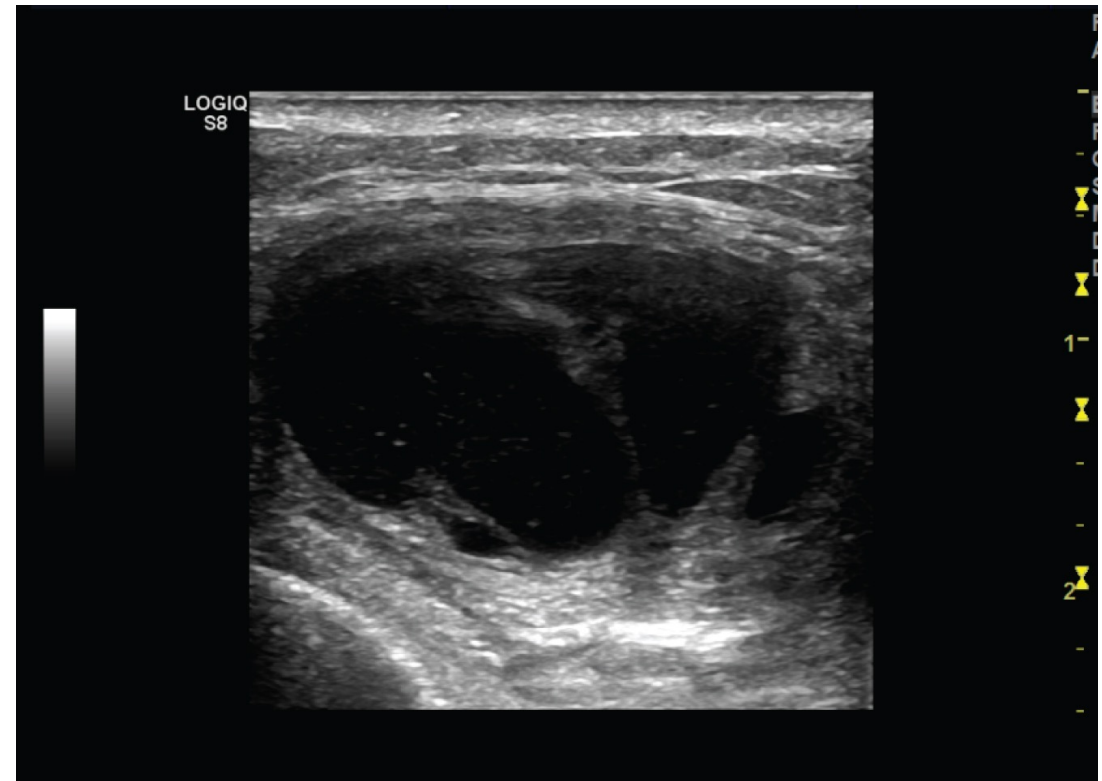
Gold standard for identifying cyst size, location, and soft tissue involvement.



# Imaging

## 3. Ultrasound:

Useful for guided aspiration or initial evaluation.





# Therapeutic Options

## 1. Conservative Management:

Aspiration with or without corticosteroid injection.  
Under ultrasound guidance



# Therapeutic Options

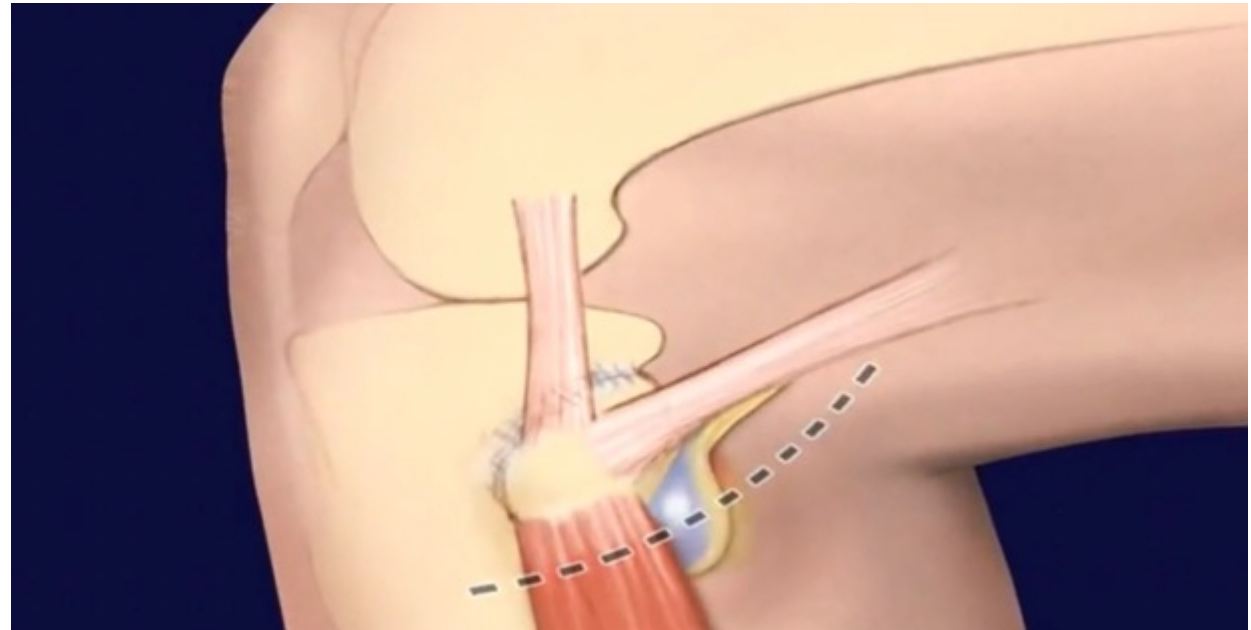
## 2. Surgical Management:

Lateral approach

CF nerve dissection

Nerve Decompression: Required for cases with peroneal nerve involvement.

Complications: perineural fibrosis or nerve injury

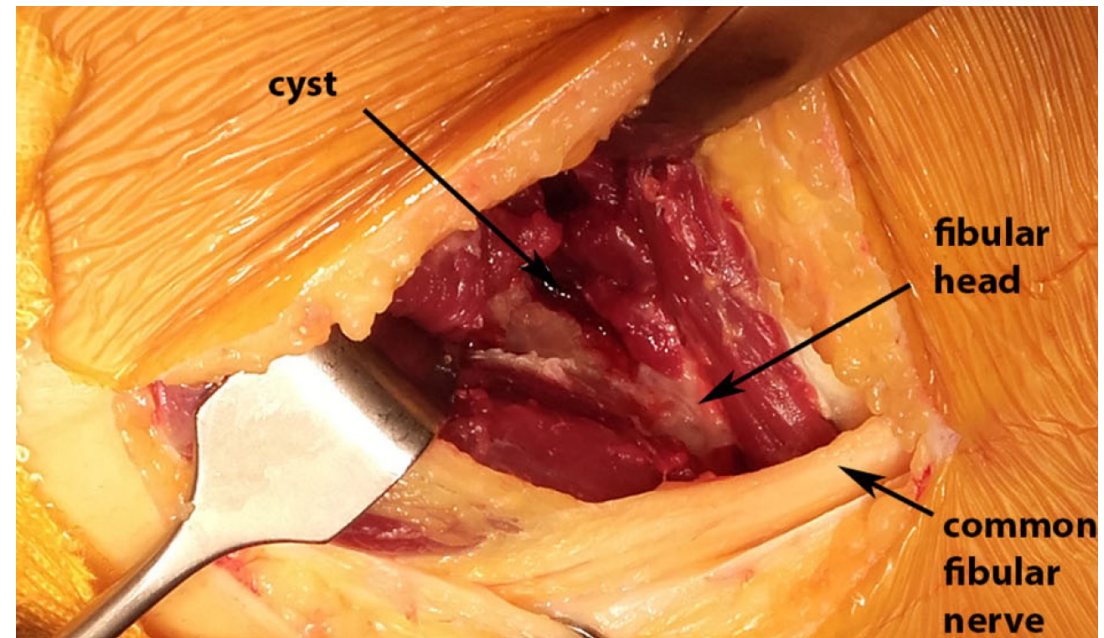


# Therapeutic Options

## 2. Surgical Management:

- **Cyst Excision:**

+/- associated ligation of the articular branch

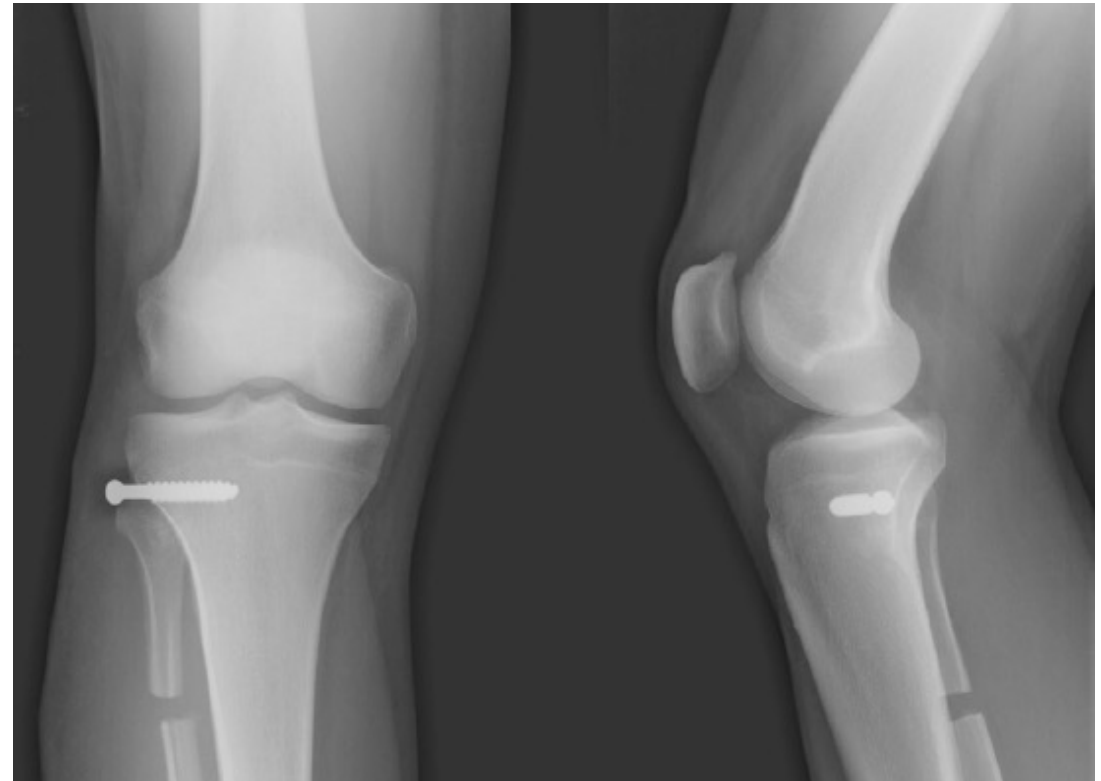


*Lateur et al. Int Orthop 2017*

# Therapeutic Options

## 2. Surgical Management:

- **Joint resection / Arthrodesis:**  
Indicated for recurrent cysts.



*Lateur et al. Int Orthop 2017*

# Outcomes

Intervention	Symptoms resolution	Recurrence (%)
Aspiration/injection	100%	81.8% primary 100% revision
Cyst excision	100%	27.4% Branch ligation 22% vs 36% without
Joint resection	100%	8.3%
Arthrodesis	100%	0%

*Huntington et al. The Knee 2022*

# Conclusion

## **PTFJ Cysts:**

- Rare
- Surgery indications:
  - Aspiration / injection failure
  - Nerve compression
- Cysts excision: primary surgery
- Recurrence: Joint resection or arthrodesis



*Papanastassiou et al. Clin Orthop Relat Res 2019*





Thank you