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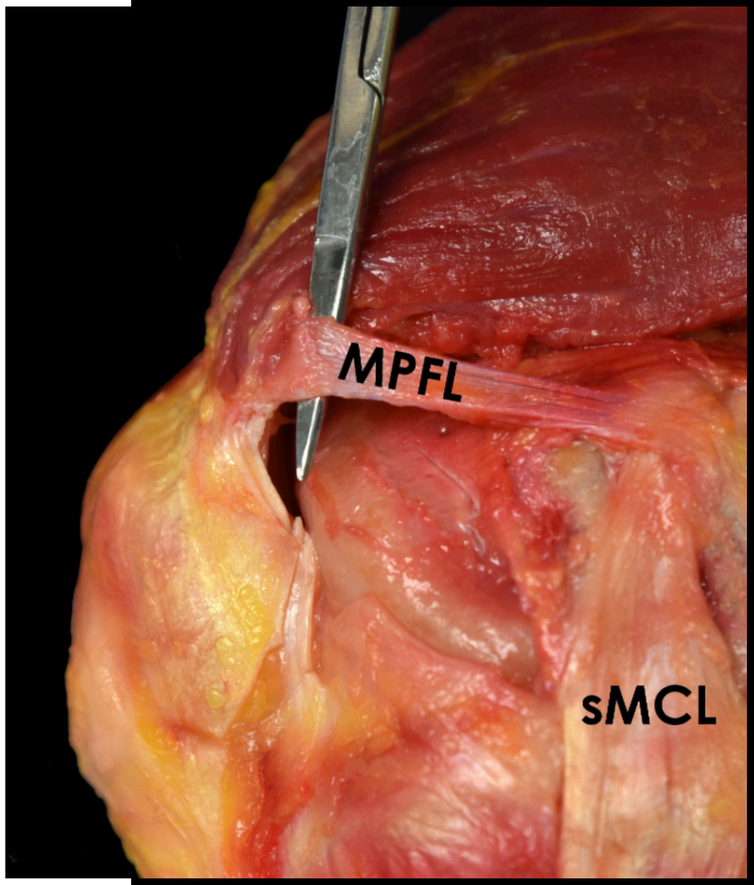
# Complications Following Primary Medial Patellofemoral Ligament Reconstruction for Recurrent Patellar Dislocations: A Systematic Review

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# DISCLOSURES

Disclosure

I (and/or my co-authors) have something to disclose.

Detailed disclosure information is available via:

The course syllabus, or

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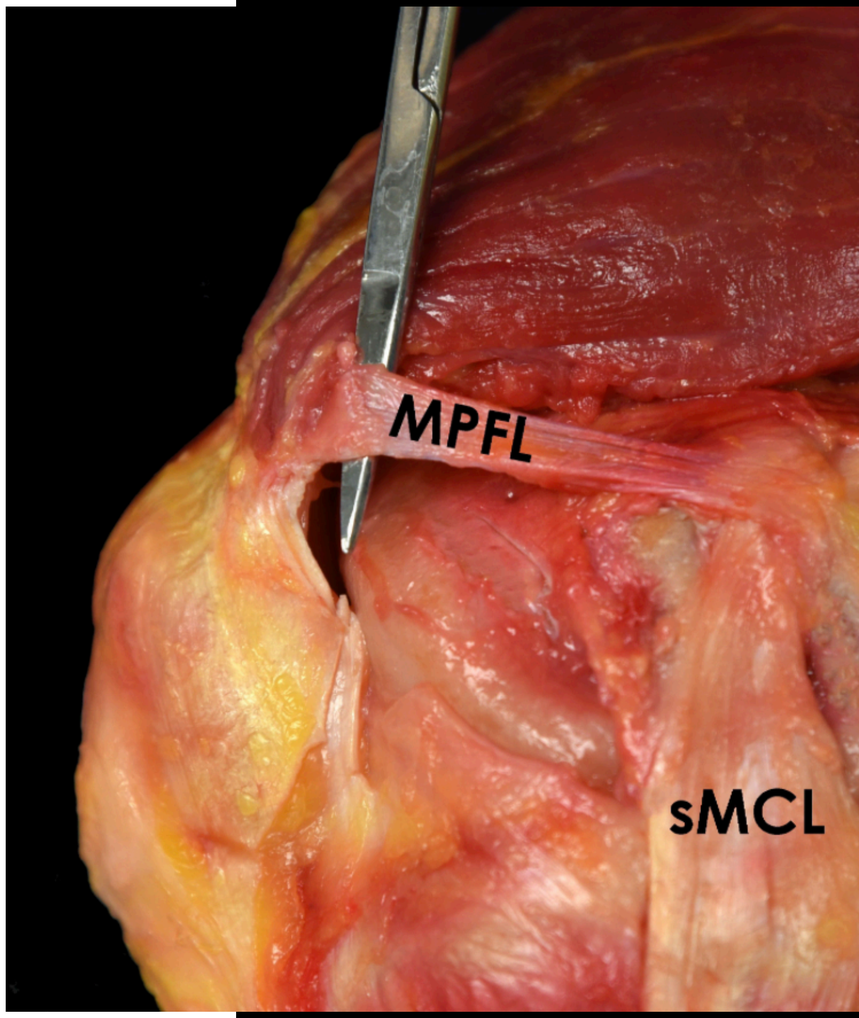
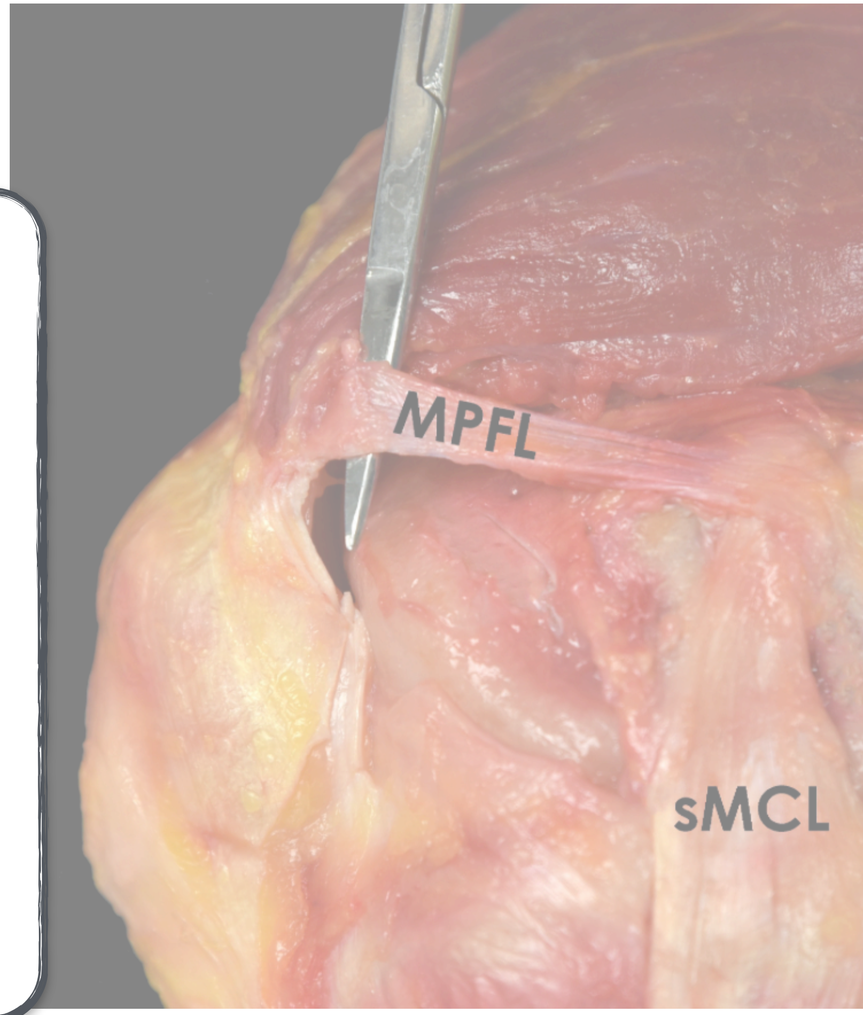


# PURPOSE

# TO...

Systematically review the complications following primary MPFL reconstruction for recurrent patellar instability

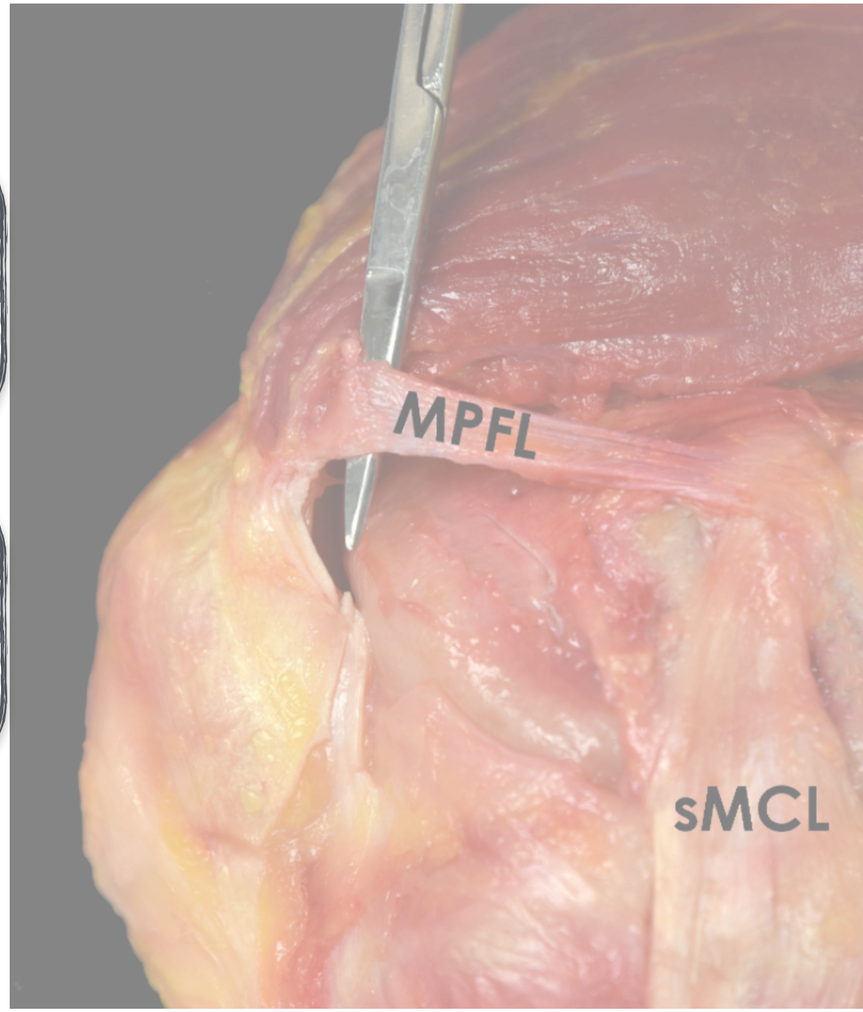


# LITERATURE SEARCH

PubMed & Scopus were searched from database inception through August 2022

2,389 articles initially identified → 97 full-text articles evaluated for eligibilty

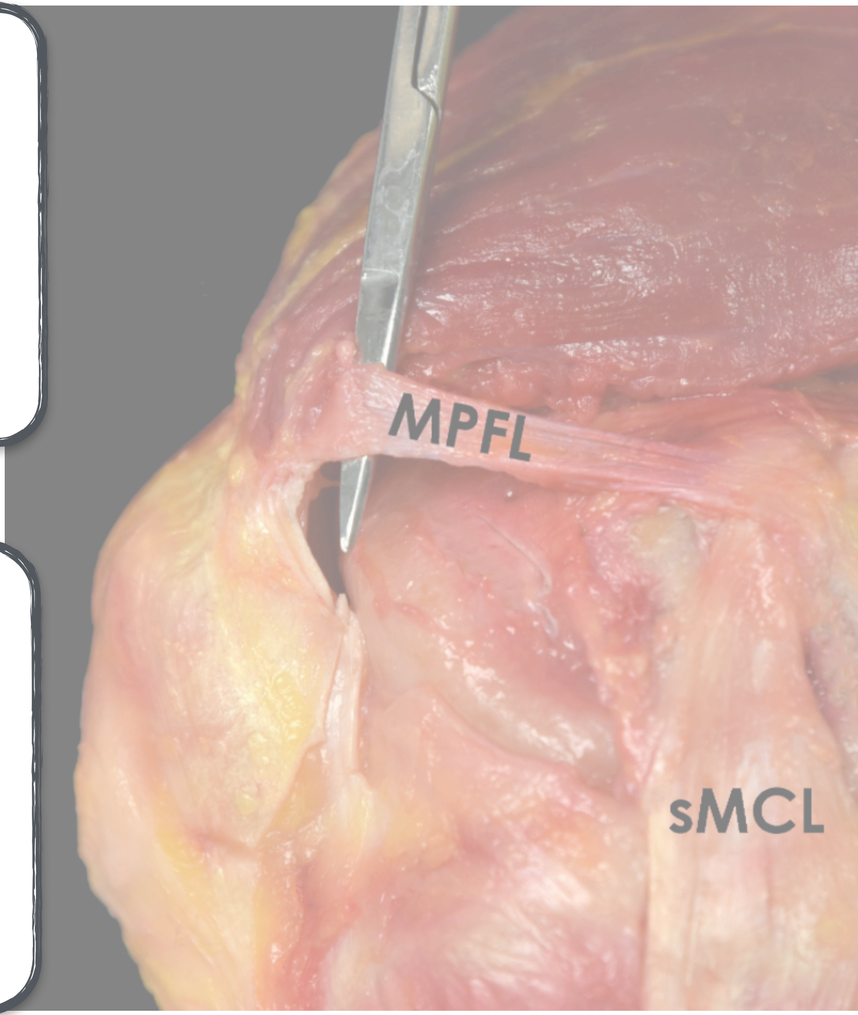
**28 Articles Included**



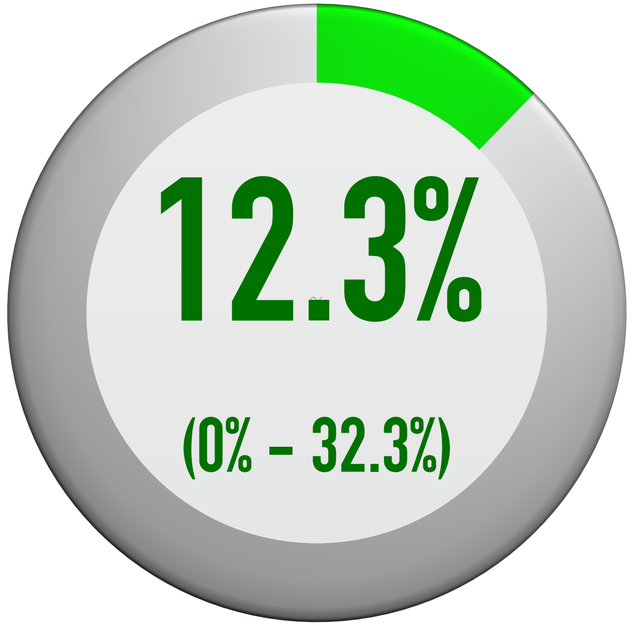
# RESULTS

1478 patients (1521 knees)

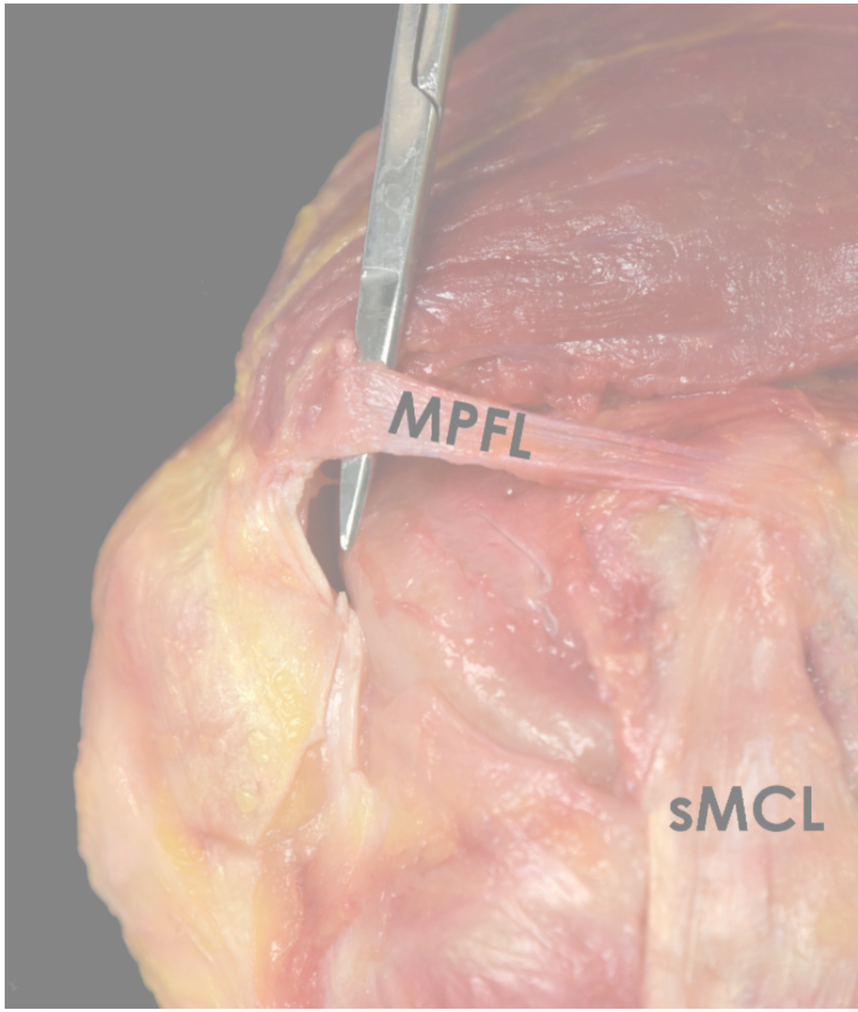
Mean Age: 23.3 years
(range: 19 – 34.3 years )



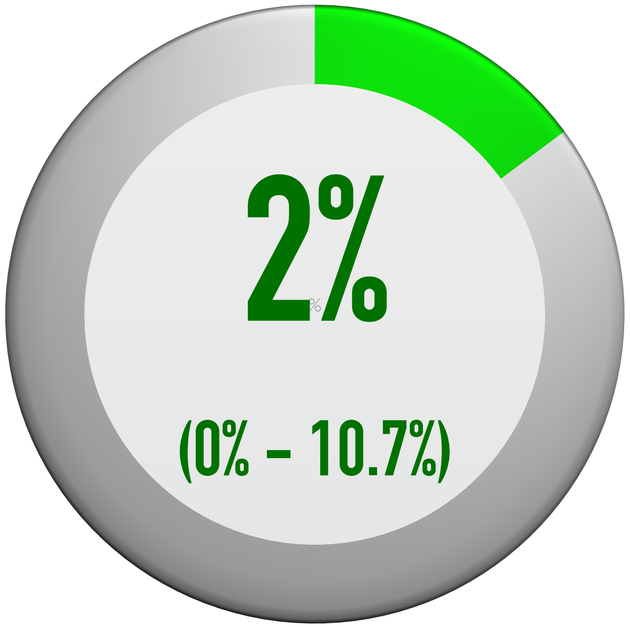
# OVERALL INCIDENCE OF COMPLICATIONS

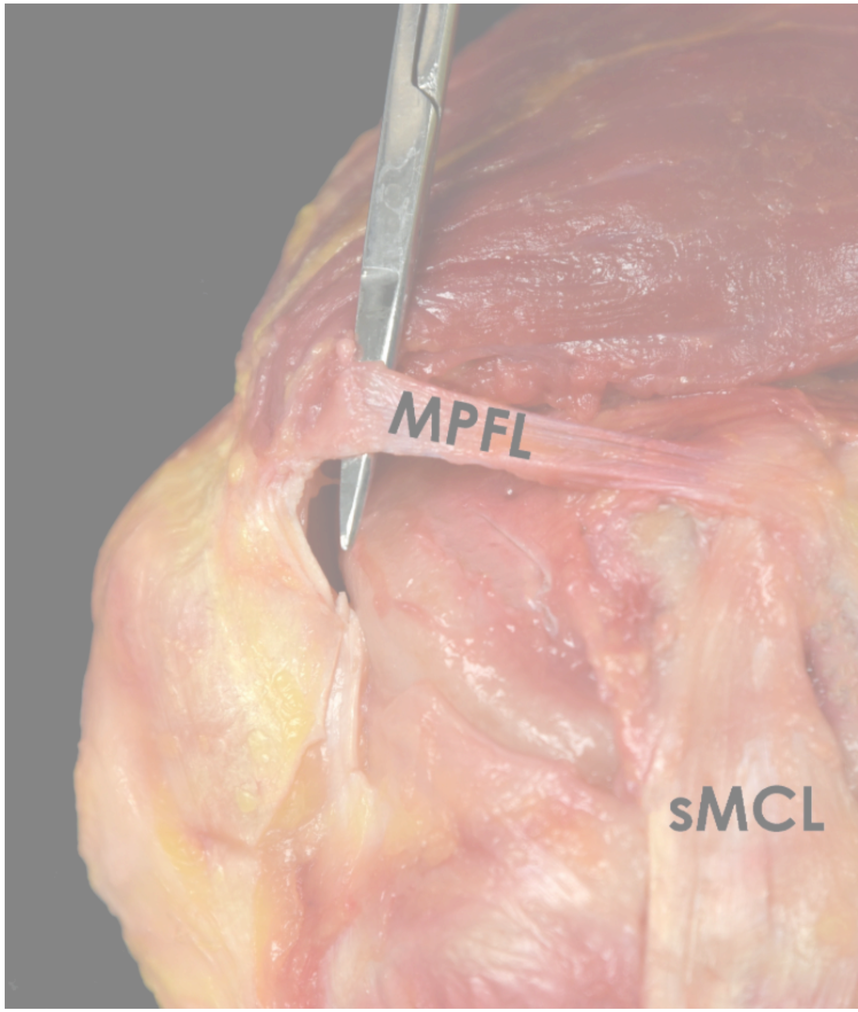



**Primarily anterior knee pain!**

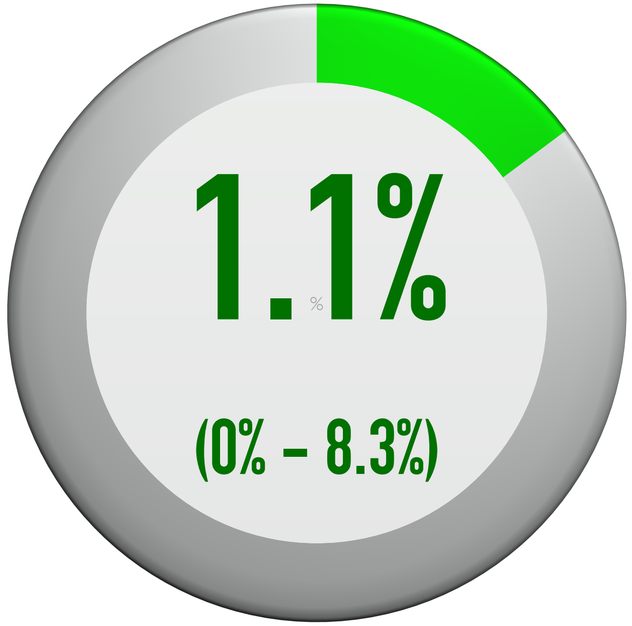


# FAILURE RATE

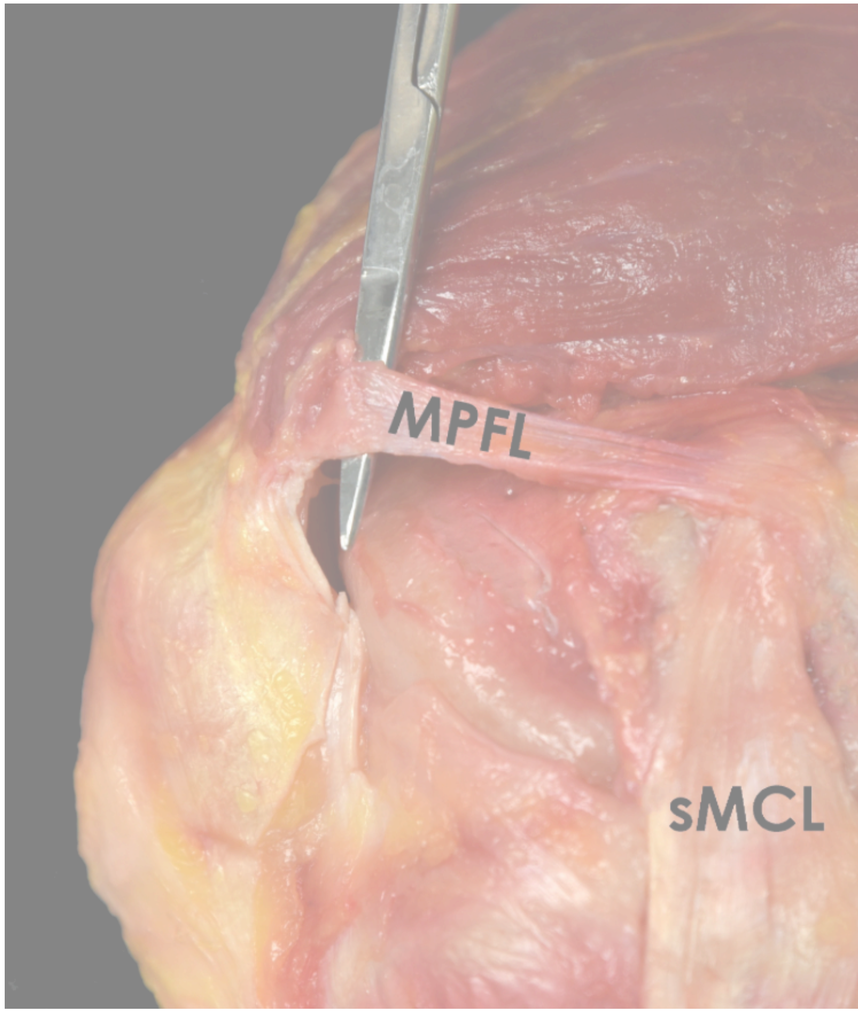


# INCIDENCE OF PATELLAR FRACTURE

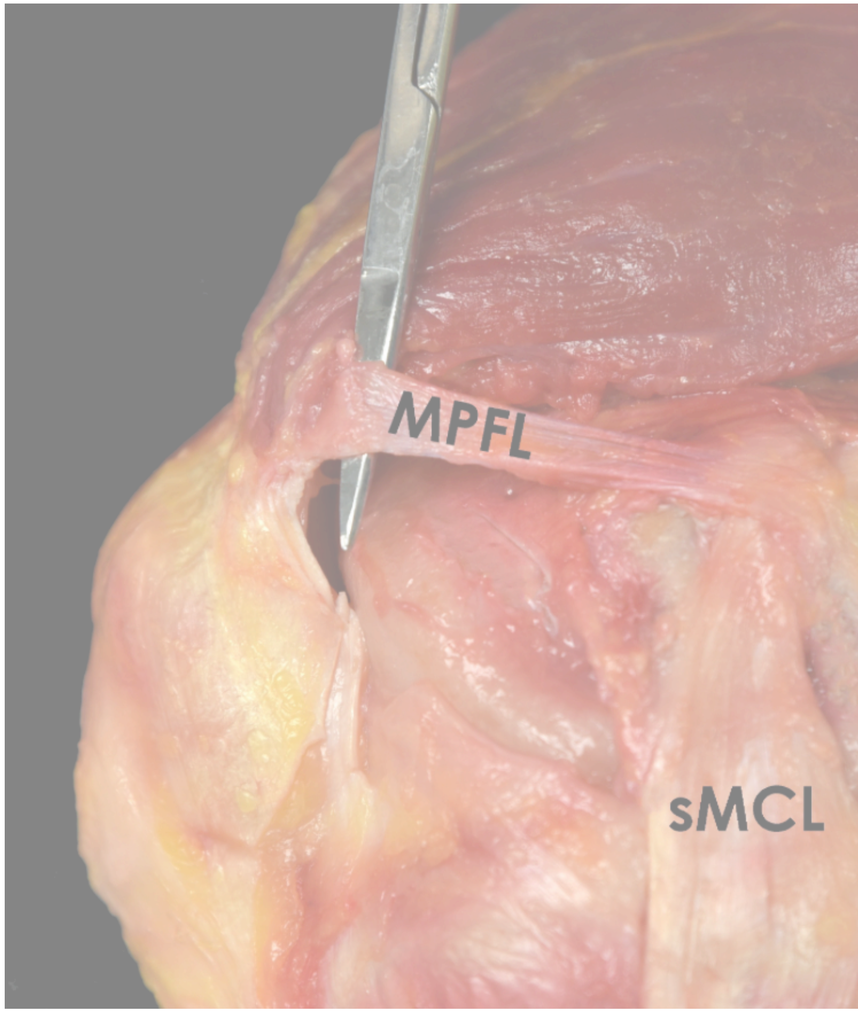



- **Primarily in full-length transverse tunnel or two-tunnel techniques!**
- **All in tunnels 4.5 - 6.0 mm in diameter**



# OUTCOMES REOPERATIONS

| First Author (Year) | Reoperations |
|---|---|
| Sappey-Marinier et al.[40] (2019) | Revision due to instability (n=10; 4.7%) |
| Gao et al.[34] (2020) | Revision due to instability (n=2; 2.5%) |
| Fujii et al.[33] (2021) | Lateral release to address post-operative arthrofibrosis (n=3; 11.1%) |
| Ronga et al.[39] (2009) | Revision due to instability (n=1; 3.6%); Diagnostic arthroscopy and MUA for ROM deficit (n=2; 7.1%) |
| Mikashima et al.[36] (2006) | Removal of a piece of fragmented patella secondary to fracture (n=1; 4.2%) |
| Zhao et al.[41] (2021) | Revision due to instability (n=7; 3%) |
| Csintalan et al.[31] (2014) | Removal of painful hardware (n=1; 1.8%) |
| Mathews et al.[44] (2010) | Debridement and irrigation of infection (n=1; 4%); Neuroma excision (n=1; 4%) |
| Panni et al.[27] (2011) | ORIF of patellar fracture (n=1; 2.2%) |
| Wagner et al.[28] (2013) | Revision due to poor wound healing (n=2; 4%) |
| Astur et al.[17] (2015) | ORIF of patellar fracture (n=1; 1.7%); Retinacular release (n=2; 3.4%) |



# CONCLUSIONS

Complications ranged from 0% to 32.3% of knees and failure ranged from 0 – 10.7% of knees. Patellar fractures were reported in 0 – 8.3% of knees, and primarily occurred with a full-length transverse tunnel or two-tunnel techniques. All fractures occurred with patellar tunnels ranging from 4.5 mm to 6.0 mm in diameter.

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