# RAPID RESEARCH



**April 2022** 

# Inside This Week: Not All Meniscus Tears Need Surgery

- Medial Meniscus Arthroscopic vs. Placebo Surgery
- 5 Years Later: Partial Meniscectomy vs. Placebo
- Early Surgery vs. PT for Meniscus
  Tears

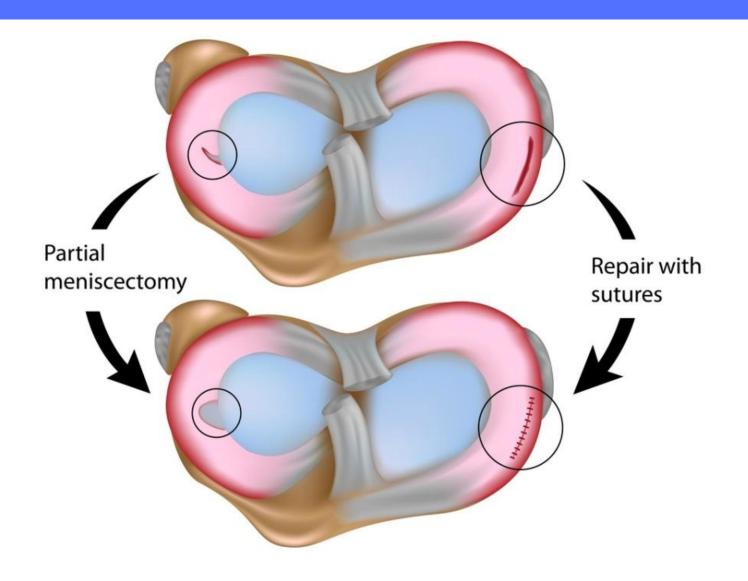


# MEDIAL MENISCUS ARTHROSCOPIC VS. PLACEBO

SURGERY

<u>Click for Full Text</u> (<u>Sihvonen et al 2017</u>)

This study assessed if arthroscopic partial meniscectomy (APM) is superior to placebo surgery in the treatment of patients with degenerative tear of the medial meniscus.



## KEY FINDINGS

146 adults, with degenerative medial meniscus tear, randomized to APM or placebo surgery.

### At 2 Year Follow-up:

No significant between-group differences in [WOMET score] APM group (27.3) vs. Placebo (31.6) [Lysholm knee score] APM (23.1) vs. Placebo (26.3) [Knee pain after exercise] APM (3.5) vs. Placebo (3.9)

### No differences between groups for any secondary outcomes:

Participants' satisfaction
Impression of change
Return to normal activities
Incidence of serious adverse events
Presence of meniscal symptoms in clinical exam)

### MAIN TAKEAWAYS

APM provided no statistically significant benefit over placebo surgery in patients with a degenerative medial meniscal tear and no knee osteoarthritis.

Degenerative meniscus tear represents an (early) sign of knee osteoarthritis, rather than a clinical entity on its own.

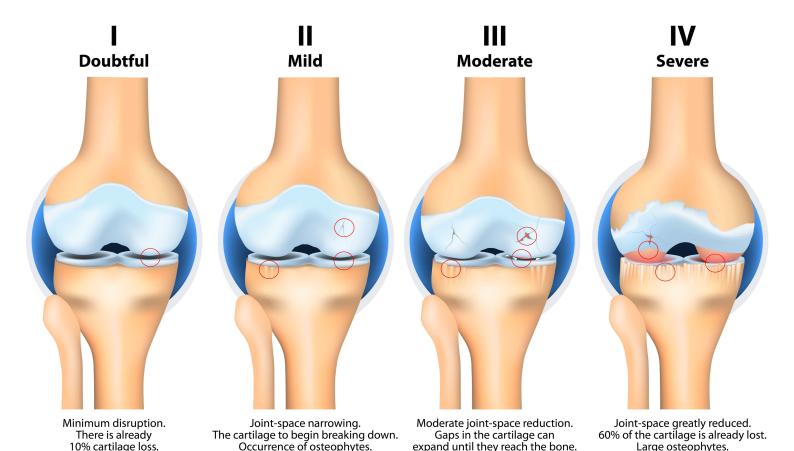
Caution should be exercised in referring patients with knee pain and suspicion of a degenerative meniscal tear to MRI examination or APM, even after a failed attempt of conservative treatment.

### 5 YEARS LATER: PARTIAL MENISCECTOMY VS. PLACEBO

<u>Click for Full Text</u> (Sihvonen et al. 2020

This study assessed the long-term effects of arthroscopic partial meniscectomy (APM) on the development of knee osteoarthritis, and on knee symptoms and function, at 5 years follow-up.

### STAGE OF KNEE OSTEOARTHRITIS



### KEY FINDINGS

146 adults, with degenerative medial meniscus tear, randomized to APM or placebo surgery.

### **After 5 years:**

Consistent, slightly greater risk for progression of radiographic knee osteoarthritis in the APM group vs. placebo surgery.

No relevant between-group differences in:

**WOMET** 

Lysholm knee score

Knee pain after exercise

Absolute risk difference in the presence of mechanical symptoms was 18%

All other secondary outcomes comparisons were similar

### MAIN TAKEAWAYS

Arthroscopic partial meniscectomy (APM) provided no more benefit for knee symptoms or function than placebo surgery.

Arthroscopic partial meniscectomy was associated with a slightly increased risk of developing radiographic knee osteoarthritis at 5 years after surgery.

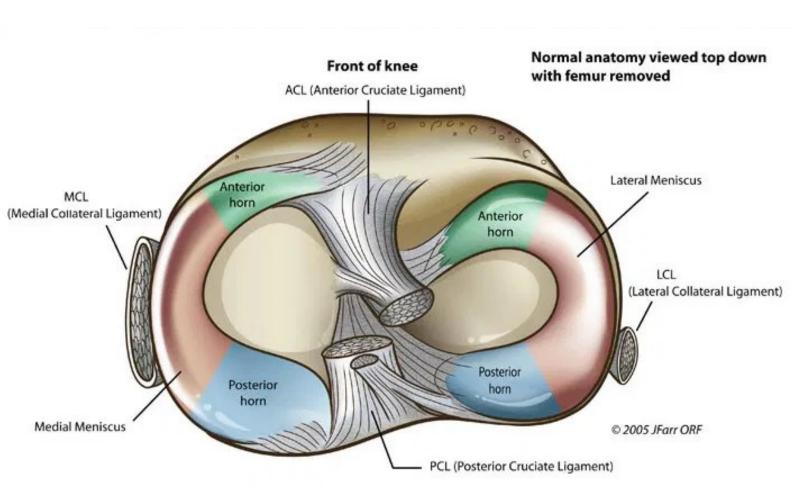
APM remains one of the most common orthopaedic surgeries, however it's long-term outcomes are questionable.

Patients can have an increased risk of developing knee osteoarthritis after APM.

# EARLY SURGERY VS. PHYSICAL THERAPY FOR **MENISCUS TEARS**

**Click for Full Text** (Van De Graff et al. 2018)

This study assessed PT in comparison to APM for improving patient-reported knee function in patients with meniscal tears.



# **KEY FINDINGS**

- 321 participants, APM (n = 159), PT (n = 162).
- 47 PT participants (29%) had APM during the 24-month follow-up.
- 8 participants randomized to APM (5%) did not have surgery.

### 24-month follow-up:

- Knee function improved on IKDC score in both groups:
  - APM (44.8 to 71.5) & PT (46.5 to 67.7)
- Between-group difference was small 3.6 points.
- Adverse events occurred in both groups:
  - APM (18 participants) & PT (12)
- Repeat surgery (3 in the APM group and 1 in the PT group)
- Additional outpatient visits for knee pain (6 in the APM group and 2 in the PT group) were the most frequent adverse events.

### MAIN TAKEAWAYS

Among patients with non-obstructive meniscal tears, PT and APM were similar for improving patient-reported knee function over a 24-month follow-up period.

Based on these results, PT may be considered as an alternative to surgery for patients with non-obstructive meniscal tears.

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We would greatly appreciate any feedback you have, as it helps us continually improve!

**Leave Review** 

