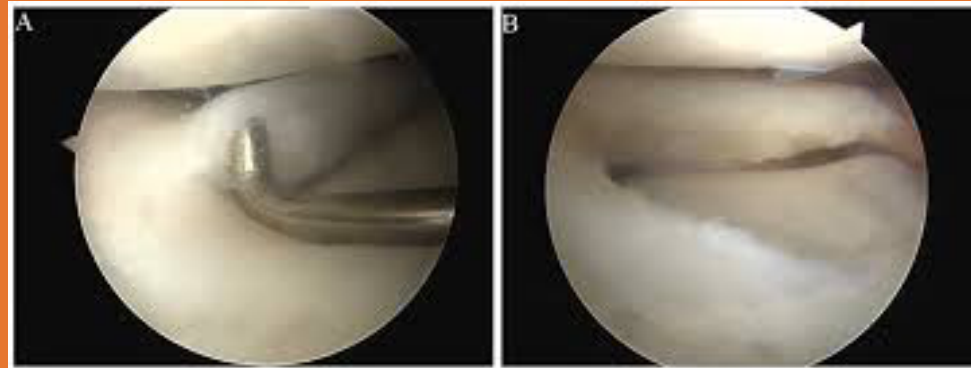


Discoid Lateral Meniscus in Pediatric and Adolescent Patients

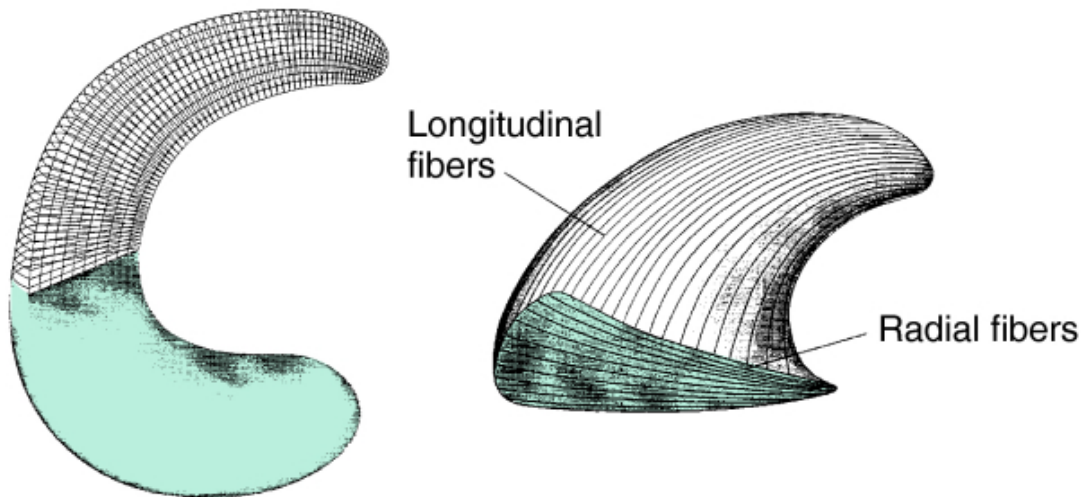


Michael Saper, DO, ATC, CSCS
Assistant Professor, Orthopaedics and Sports Medicine

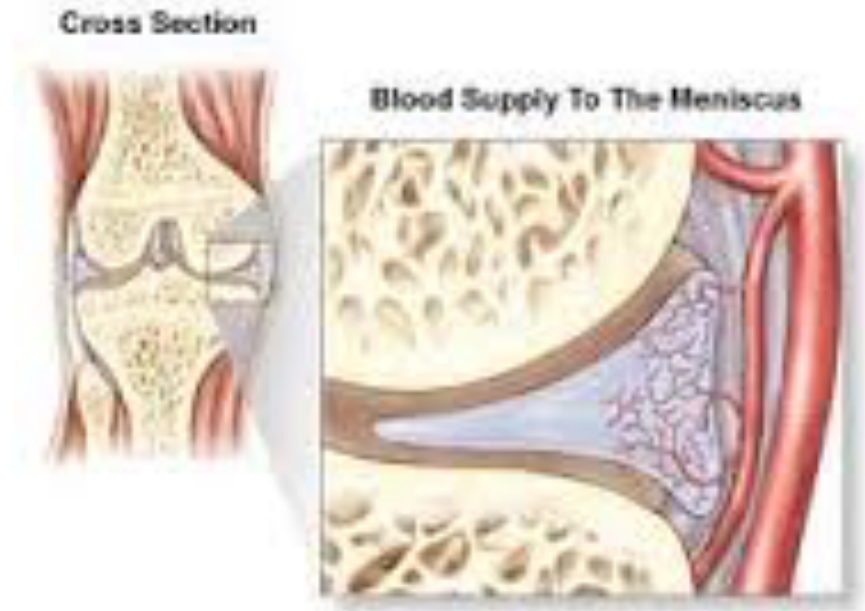
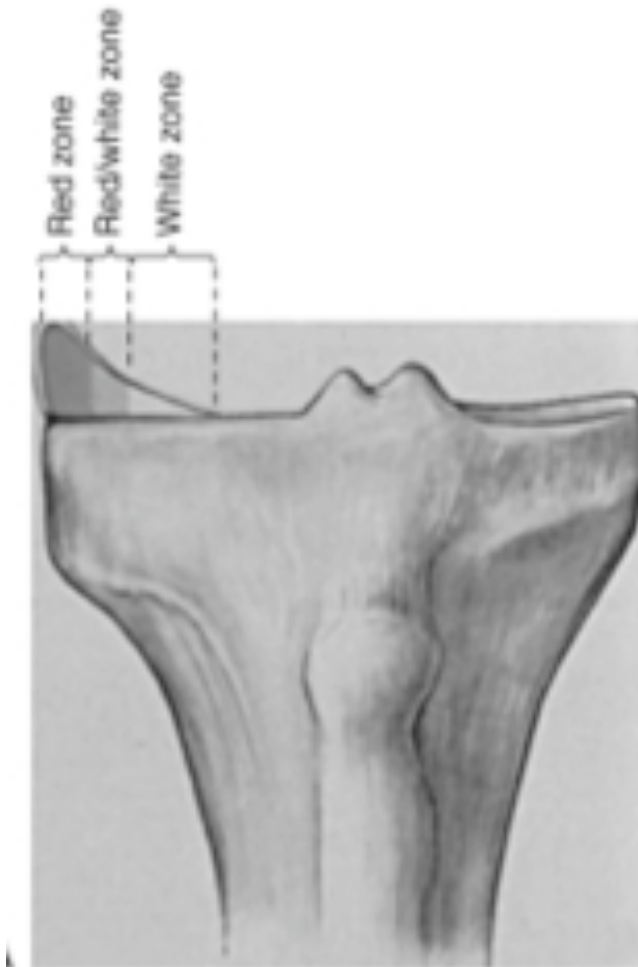
Updated March 3, 2020

Lateral Meniscus

- Function
 - Stability
 - Shock Absorption
 - Protect cartilage
- **Composed of purposefully arranged fibers**



Lateral Meniscus – Outer 1/3 has best blood supply



Discoid Lateral Meniscus

Congenital abnormality of the meniscus



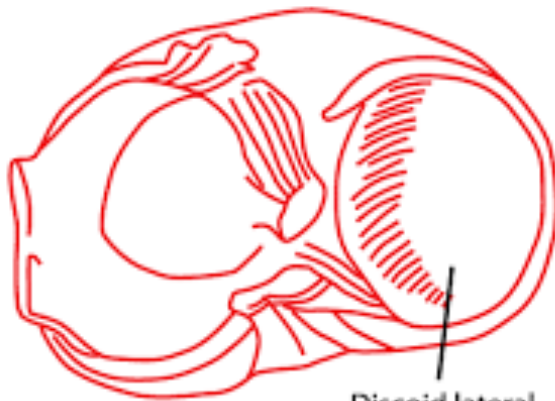
Normal



Incomplete



Complete



Discoid lateral meniscus



Normal meniscus



Prone to tearing:

- Thicker
- Poor tissue quality
- Less blood supply
- Unstable

Without surgery....

- Meniscus **won't heal**
- Meniscus might become irreparable
- Persistent **instability**
- **Poor** long term **function**
- **Increased arthritis**
- **Decreased return to sport**



Main Goals for Surgery

Preserve Meniscus

Restore Stability
Decrease arthritis
Improve function

Return to Sport



Knee arthroscopy

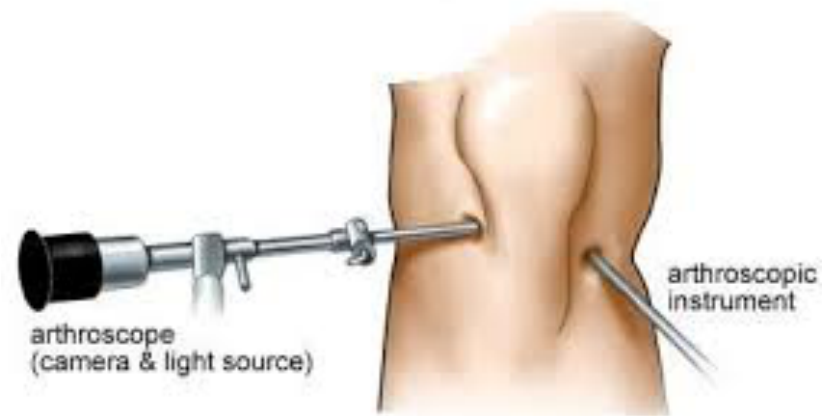
Outpatient surgery (go home same day)

General anesthesia (asleep the whole surgery and won't feel anything)

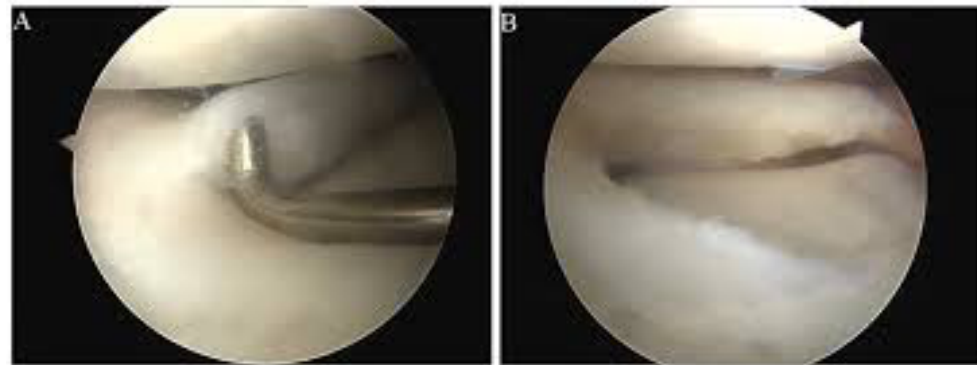
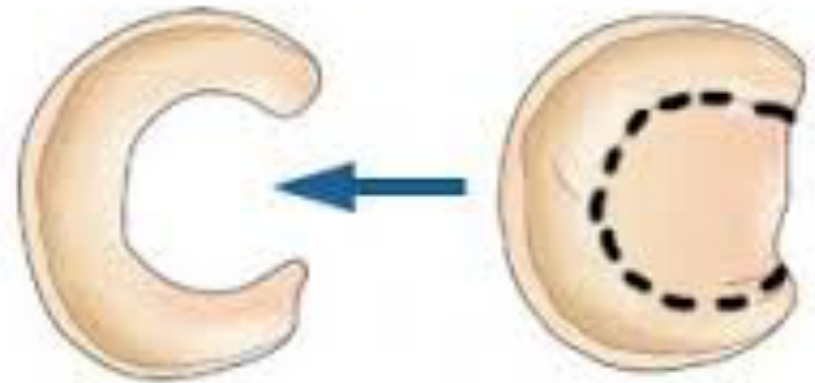
Arthroscopic surgery with small incisions

Meniscus reshaped to look normal

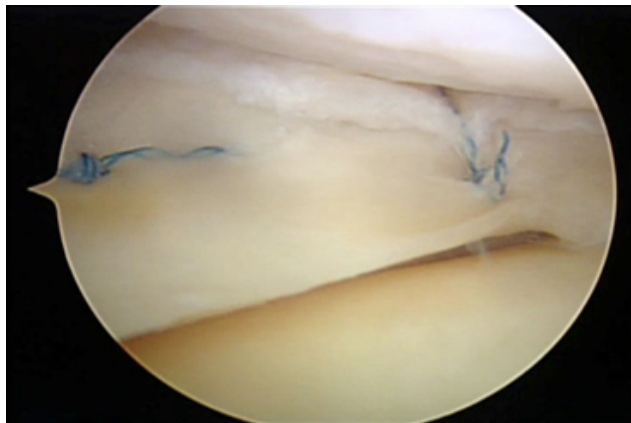
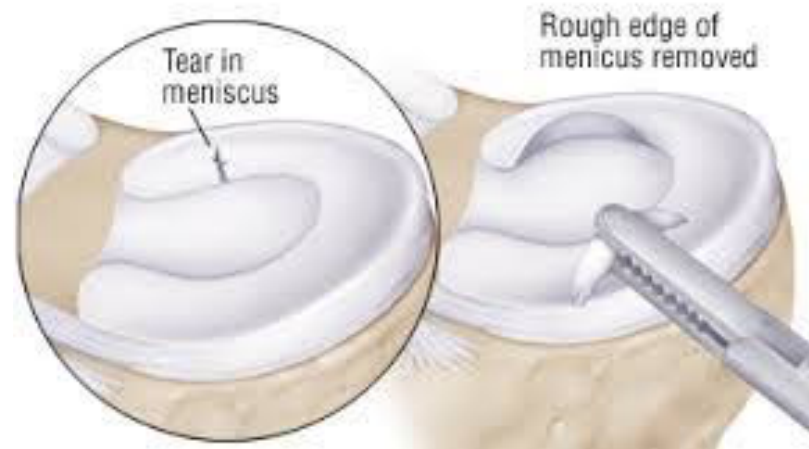
Tears are repaired with suture or torn meniscus is removed



Saucerization (Reshaping)



Meniscus Repair vs. Partial Meniscectomy (Trim)



Complications and Considerations

Anesthesia

Bleeding

Nerve injury

Infection (<1%)

Stiffness (<3%)

Reoperation (up to 1/3 of patients)

20% surgery on other knee for symptomatic discoid

Arthritic changes on X-ray (~40% @ 10 years)

Worse outcomes with subtotal meniscectomy

Rehabilitation

Repair

**Weight-bearing depends on
tear size/location and repair**
Knee brace up to 6 weeks
Healing takes ~3 months
Return to sport 6+ months

Partial Meniscectomy

Weight-bearing as tolerated
Crutches 3-7 days
Return to sport 6-8 weeks*
longer with lateral tears

Physical therapy starts 3-4 days after surgery

Conclusions

Discoid meniscus = abnormal tissue prone to tearing

Goals = preserve meniscus (if possible)

Repair depends on type/location of tear and quality of tissue

Decision made at time of surgery

Very different rehabilitation

Up to 1/3 of patients require reoperation