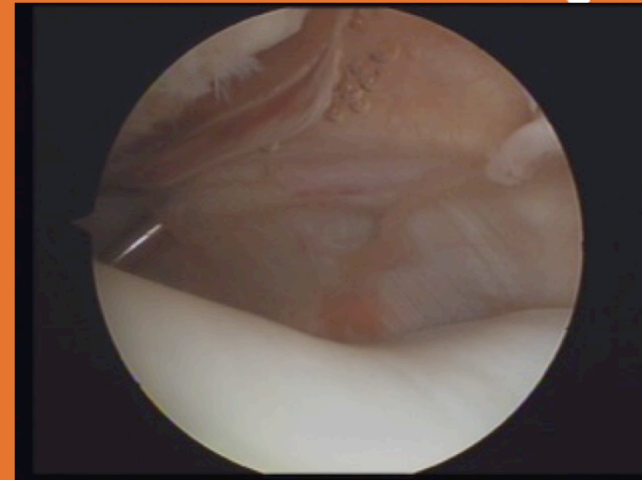


MPFL Reconstruction in the Pediatric and Adolescent Patient



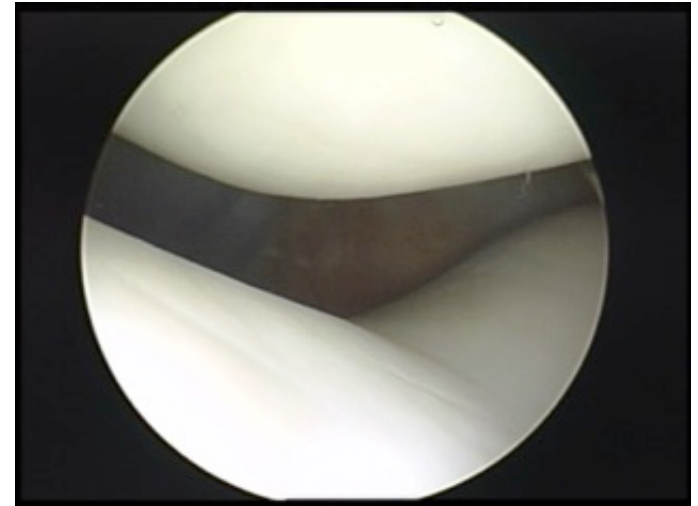
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Anatomy

- **Patella** = “knee cap”
- **Trochlea** = “groove”
- Cartilage cushion on surface of bones
 - Often injured with dislocation
- **MPFL (medial patellofemoral ligament)** = ligament that keeps knee cap in place
 - Torn/stretched with dislocation



Without surgery....

- Torn/stretched ligament **won't heal**
- Knee cap will continue to pop out
- More damage to cartilage
- *Increased* **arthritis**
- *Poor* long term **function**
- *Decreased* return to sport



Main Goals for Surgery

Restore Stability

Decrease arthritis
Improve function

Return to Sport



MPFL Reconstruction

Outpatient surgery (go home same day)

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

Arthroscopic evaluation

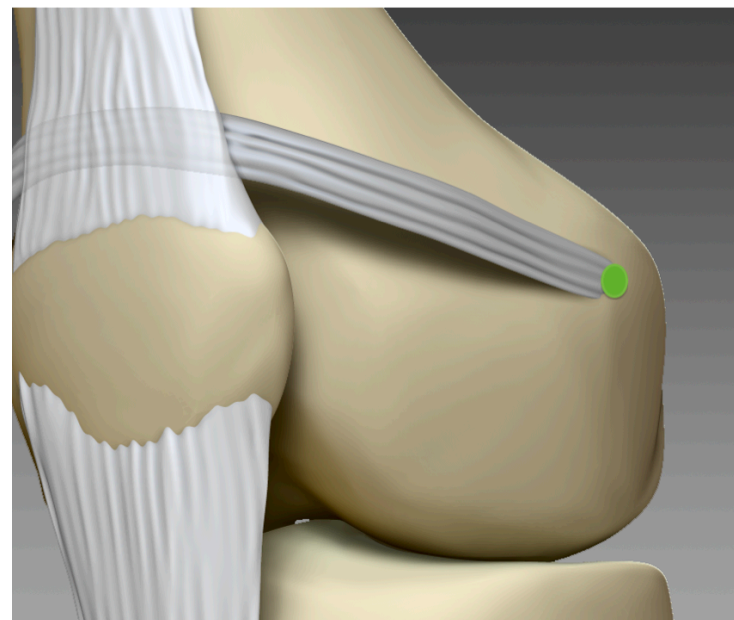
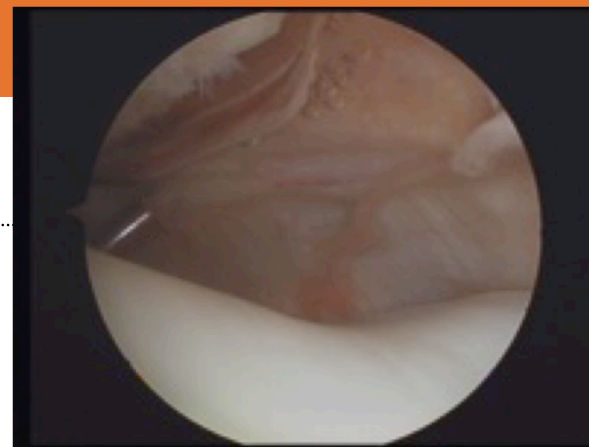
- Remove or repair injured tissue

Patella Realignment

- *“Lateral release with repair”* to get knee cap in center of groove

Stabilize Patella

- *“MPFL reconstruction”*
 - Cadaver hamstring (allograft) tendon is used to replace the torn MPFL



Complications and Considerations

Anesthesia

Bleeding

Nerve injury

Infection (1%)

- Rare joint infection can require hospitalization, IV antibiotics, multiple surgeries, removal of the graft.

Stiffness

Re-operation (<5%)

Failure to return to sport

Rehabilitation and Return to Sports

Full weight-bearing right after surgery

Physical therapy starts 3-4 days after surgery

Knee brace until adequate quad strength regained

- Up to 6 weeks

Encourage **range-of-motion** exercises

Healing typically at 3 months

Running at 4 months

Rehab Progress Assessment at 6 months

High-loading / return to sport activities at 6-12 months

- Strict criteria for return to sport *clearance*

Conclusions

**Goals = remove diseased tissue, stabilize knee cap,
preserve the joint**

Surgery results in improved outcomes

Treatment of underlying risk factors is key

Slow, progressive rehabilitation

Return to sports (6-12 months)

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