



# The Knee (Part 1)

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June 7, 2024 Jacqueline Brady, MD Associate Professor, Oregon Health & Science University

# Disclosures

- Speaker, consultant: Miach
  
- \*All financial disclosures have been mitigated

# Don't forget referred pain!

- Spine
- Hip



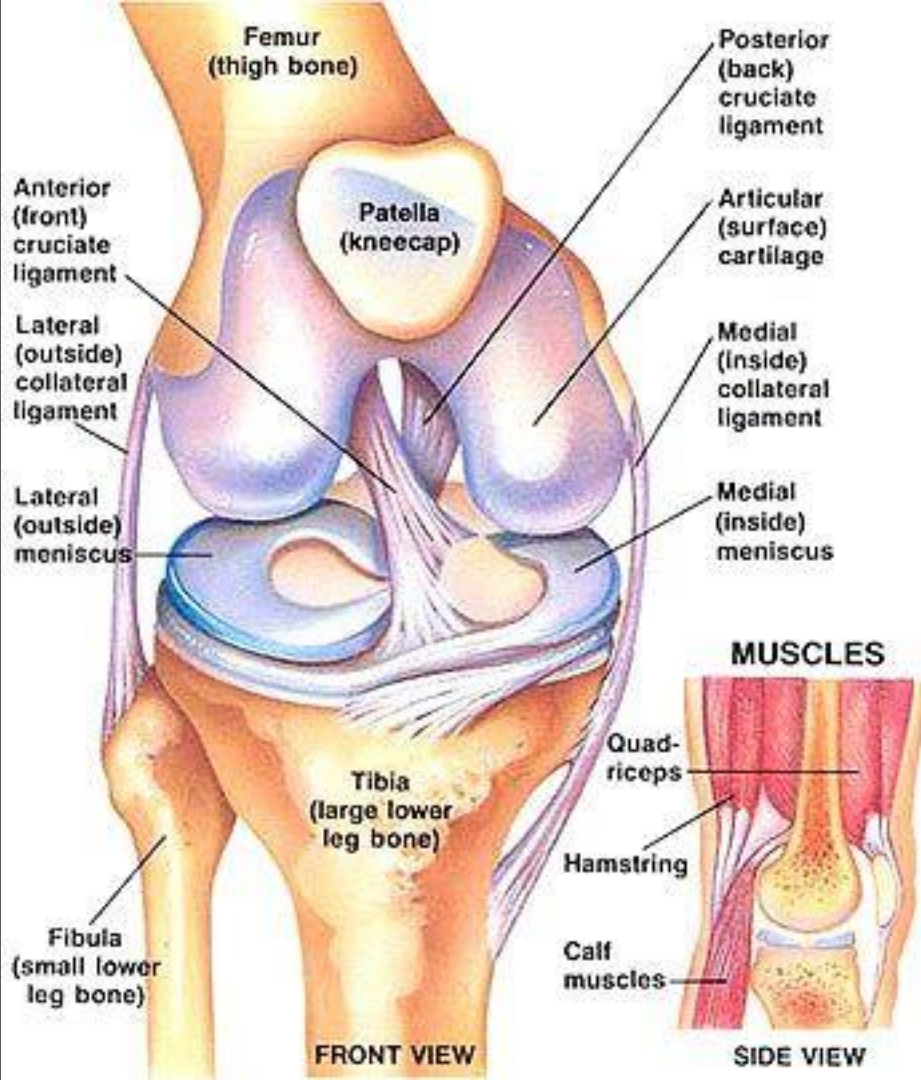
# A Word on Immobilization

- Whenever possible, avoid prolonged immobilization
  - Exception: fracture
- Braces = \$\$\$
- Middle ground: brief immobilization and rapid follow-up

# History = Key!

- Where?
- When?
- Injury?
- Instability?
- Swelling
- Trajectory?





# Ligament Injuries

# ACL Tear

- Often non-contact
- Cut/pivot, felt a “pop”
- Rapid swelling



# ACL Tear

- Lachman, pivot shift



# ACL Tear

- Xray: Segond fracture



# ACL Tear

- MRI
  - Bony contusions
  - Disrupted continuity



# ACL

Intact



Torn



# ACL Tear

- Surgical intervention
  - Young
  - Jumping/cutting sports
  - Recurrent instability

# The ACL Deficient Knee

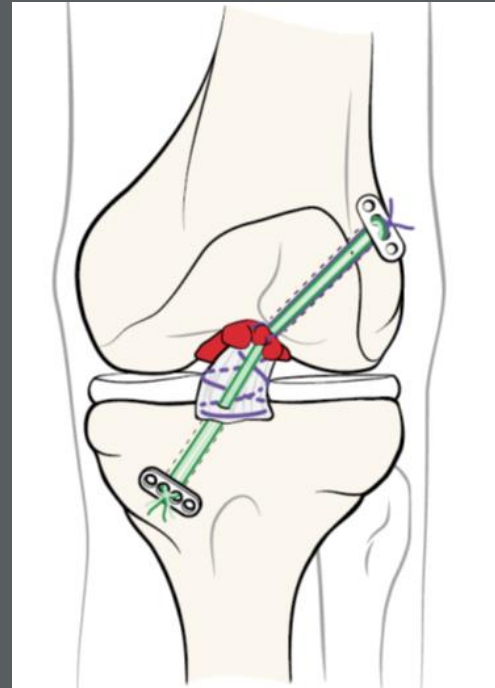
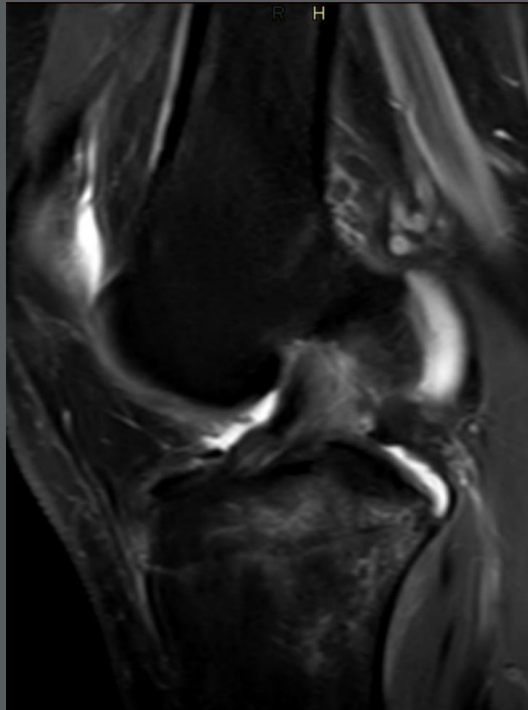
- ~1/3 of patients will do well
- Next line of defense: meniscus



# Treatment Options

- Repair\*
- Reconstruction
  - Autograft = lower failure rates
  - Allograft = faster return to work in older athletes

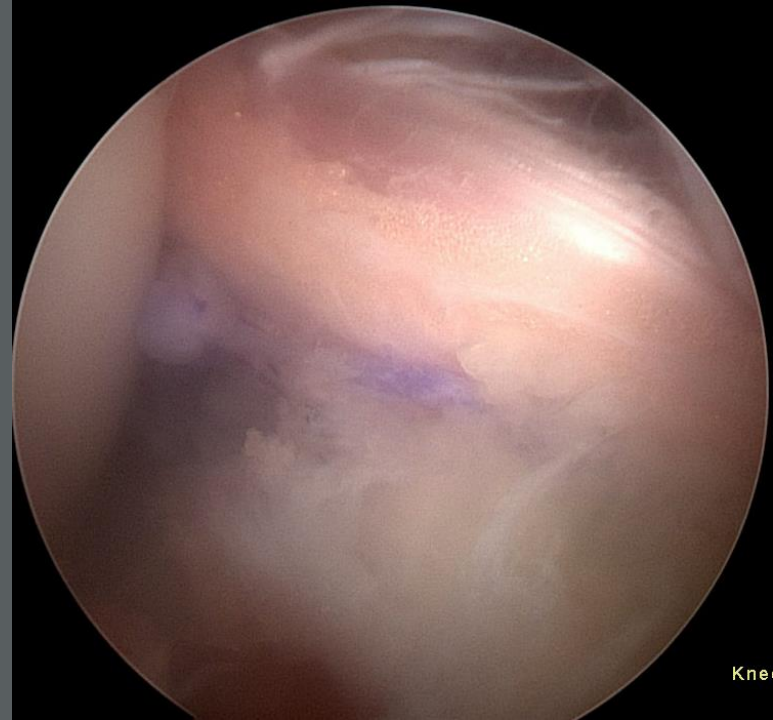
# ACL repair





# ACL Reconstruction

- Patellar tendon
  - Anterior knee pain
- Hamstring
  - Higher failure rate
- Quadriceps tendon
  - Quad weakness

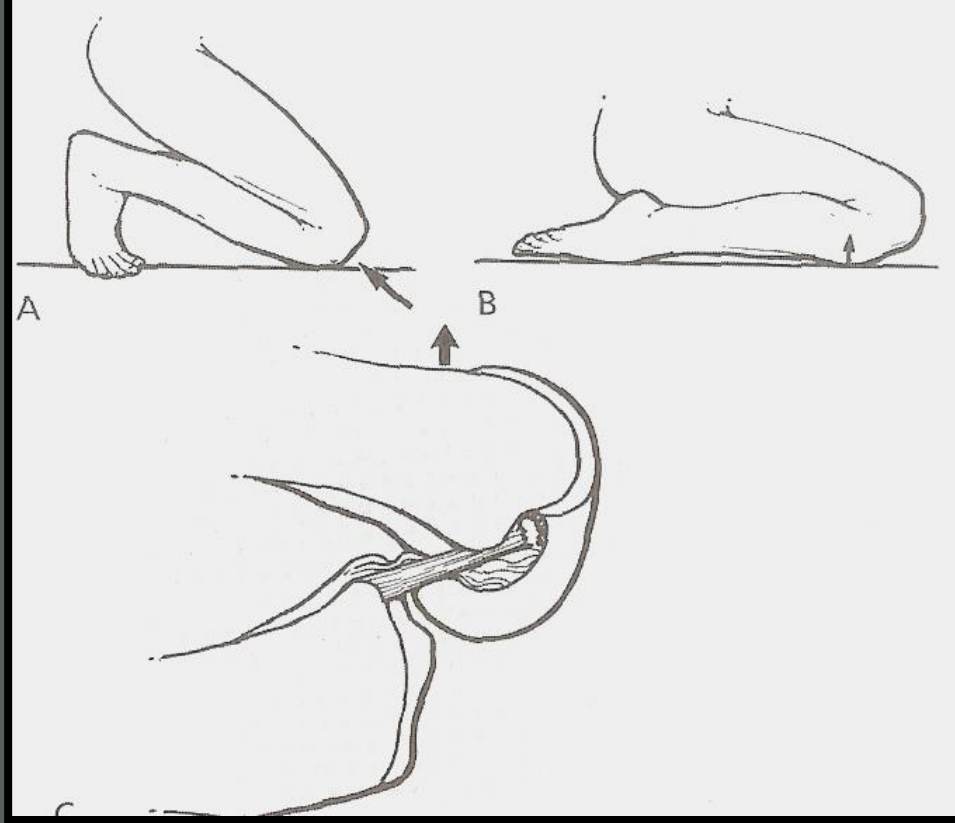


# ACL Reconstruction

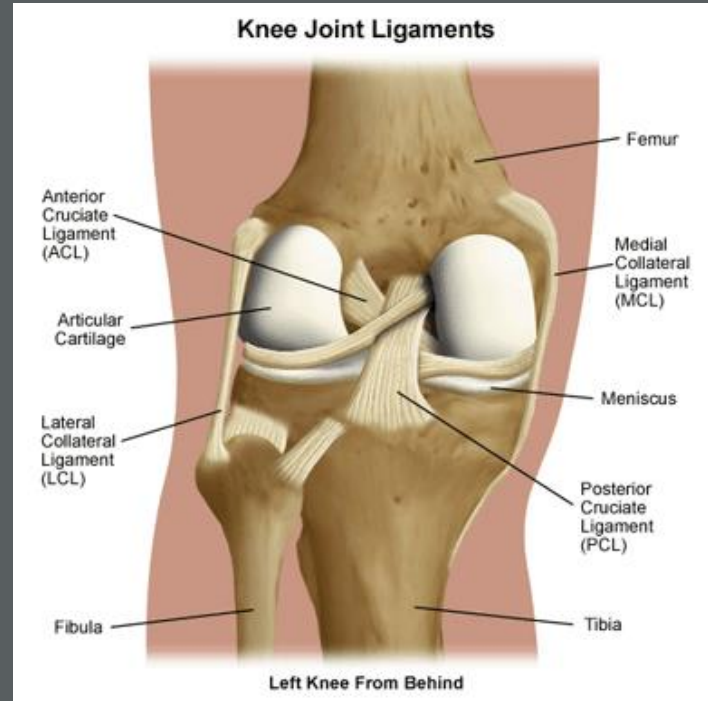
- Return to sport 9-12 months
- PT formal RTS testing = lower failure rates!
- Sad truth: higher risk of posttraumatic arthritis regardless of surgery

# PCL Tear

- Fall on a flexed knee
- Dashboard injury
- High energy!
- Rarely isolated



# PCL Anatomy

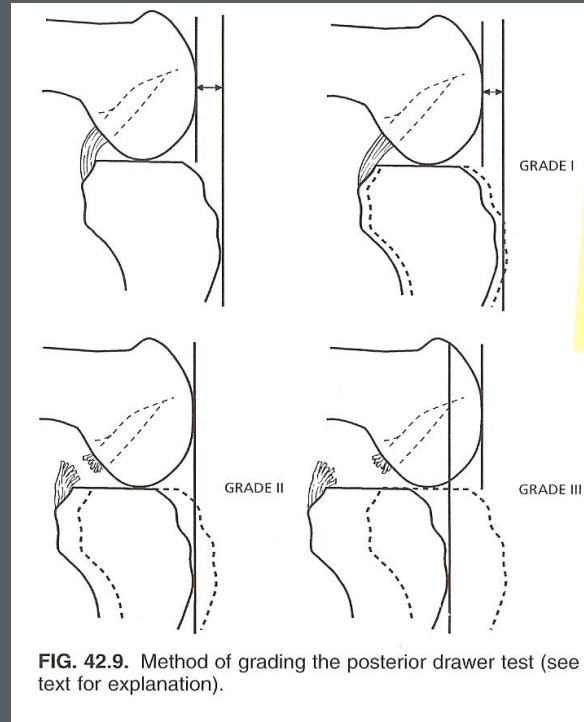


# PCL Tear

- Posterior drawer
- Quad active test
- Sag sign

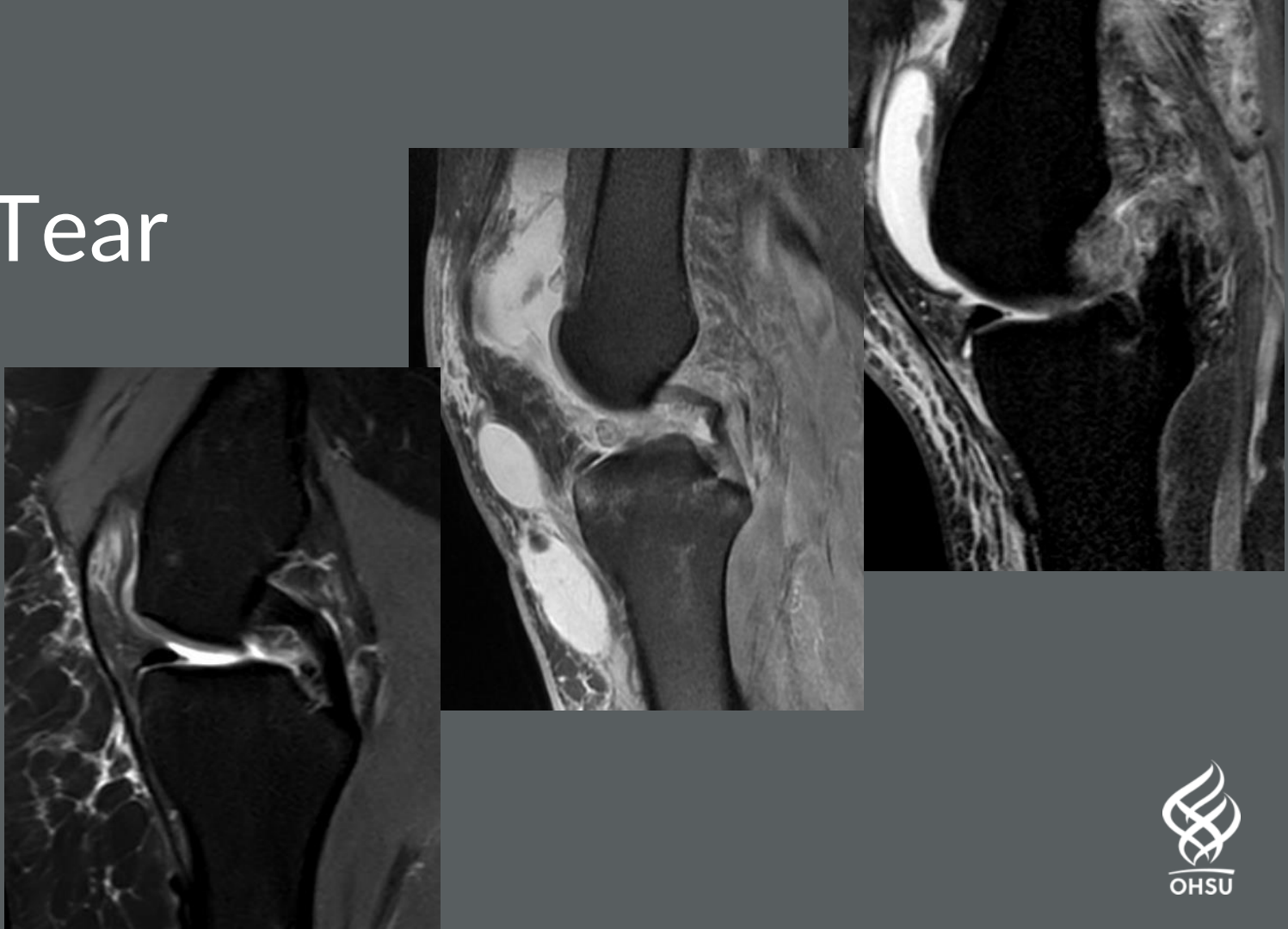


# Posterior Drawer



# PCL Tear

- MRI



# PCL Tear

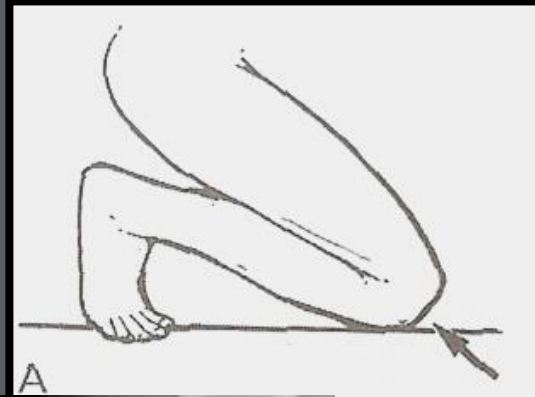
- Isolated = non-op
  - Quad strength!!!
- If multilig/persistent instability, reconstruct





# Patella fracture

- Dorsiflexed ankle
- Often operative
  - Check extensor mechanism



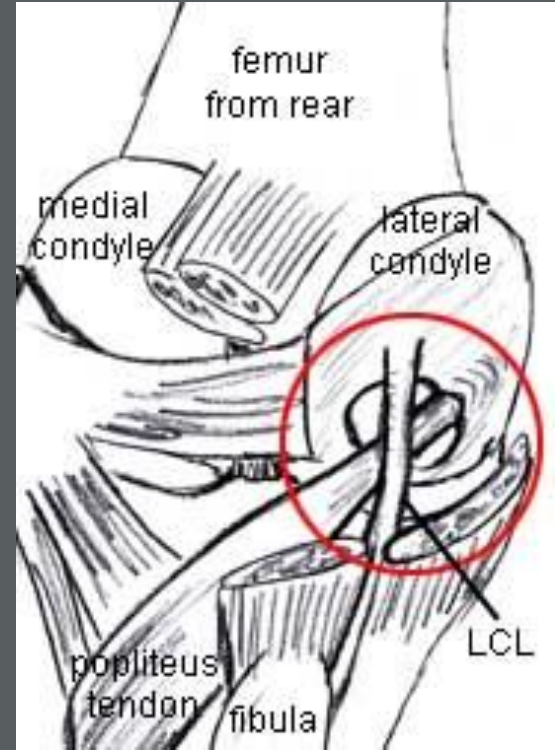
# MCL Tear

- \*\*\*Pain without instability ≠ MCL\*\*\*



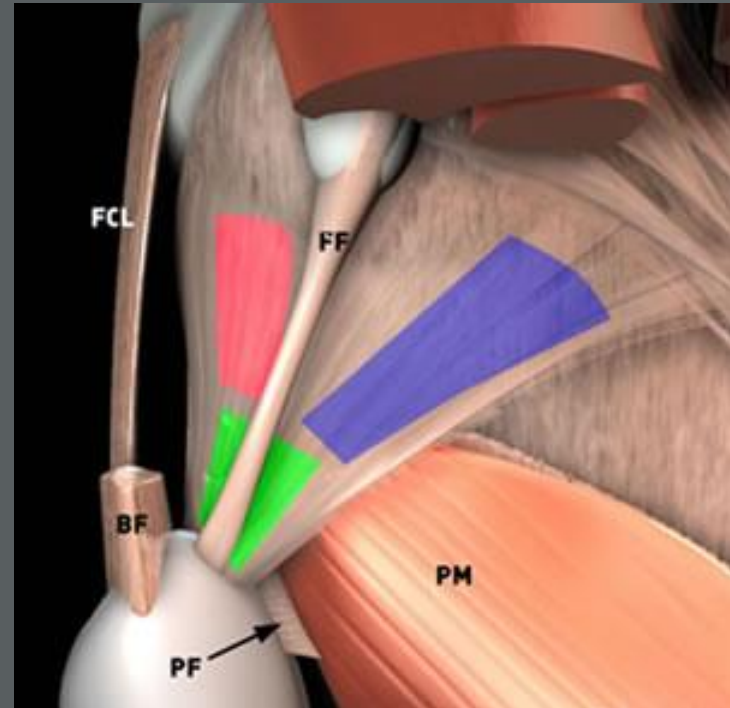
# LCL/Posterolateral Corner Injury

- Rare in isolation
- Most often surgical



# Posterolateral Corner Anatomy

- FCL = LCL
- Biceps femoris (cut)
- Arcuate ligament (colors)
- Popliteofibular ligament
- Fabellofibular ligament

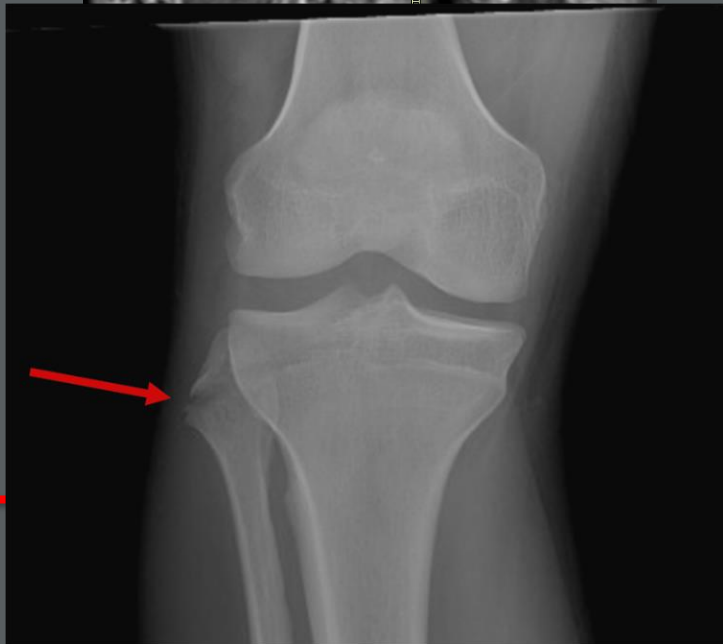


# LCL/Posterolateral Corner Injury

- Rotational instability
  - Dial test
    - 30° vs 90°



# LCL/Posterolateral Corner Injury

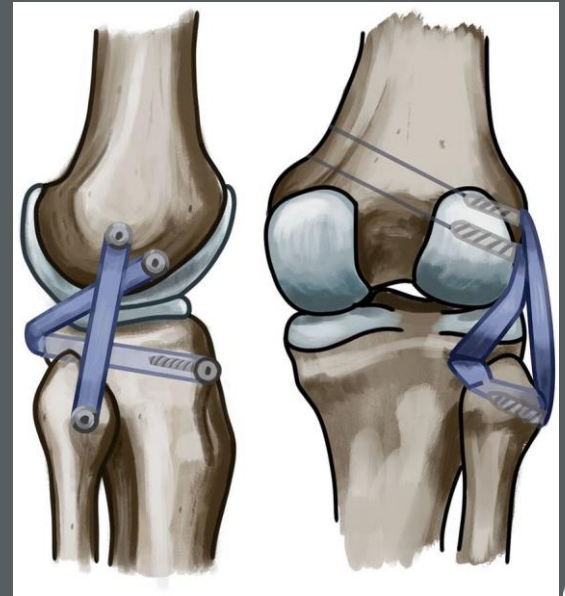


# LCL/Posterolateral Corner Injury

- Most often operative
  - Reconstruction



Arciero



LaPrade



Thank You