

Posterolateral Corner Injury

- Discrete structures not always identifiable
- Some are anatomically inconstant across population
- Injury may manifest as only vague edema, irregular tissue in region
- Arcuate sign: Thin, curved cortical rim of bone avulsed from tip of fibular styloid
- Popliteus tendon and muscle injury
 - Usually involves muscle belly or myotendinous junction
- Biceps femoris/conjoined tendon injury
 - Best seen on coronal and axial T2WI FS MR
- Oblique coronal imaging suggested by some if PLC integrity in question

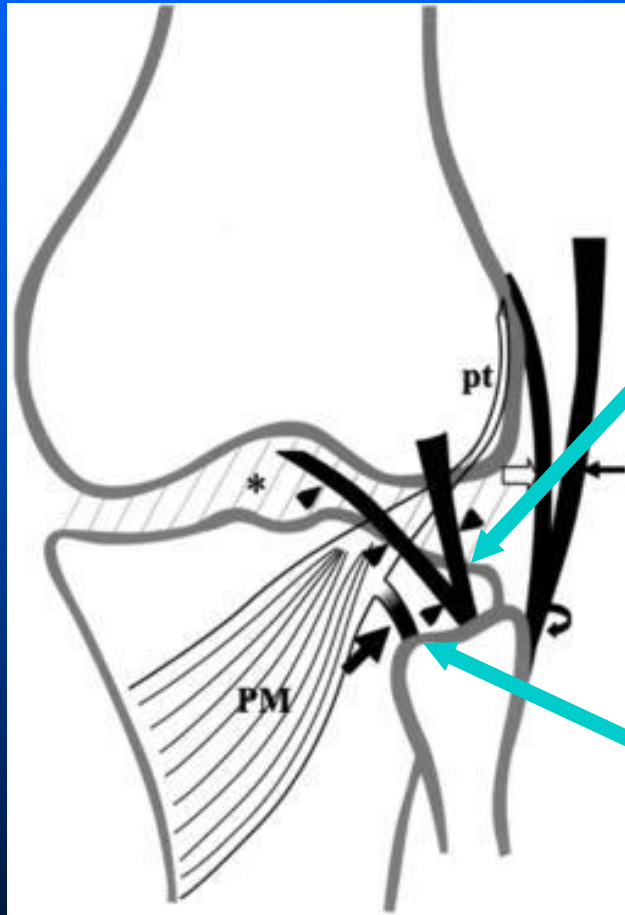
Posterolateral corner injury

- Tear of LCL complex, hemorrhage into the popliteus muscle,
- tear of the musculotendinous junction of the popliteus.
- Tear of either PCL or ACL, surgical emergency

Definitions

- Conjoined tendon:
 - FCL and BF join together to insert as one structure on posterolateral fibular head, adjacent to fibular styloid
- Arcuate complex: Additional structures of posterolateral corner (PLC) attaching to fibular styloid, including
 - Popliteofibular ligament
 - Arcuate ligament
 - Fabellofibular ligament

Arcuate & Popliteofibular ligament

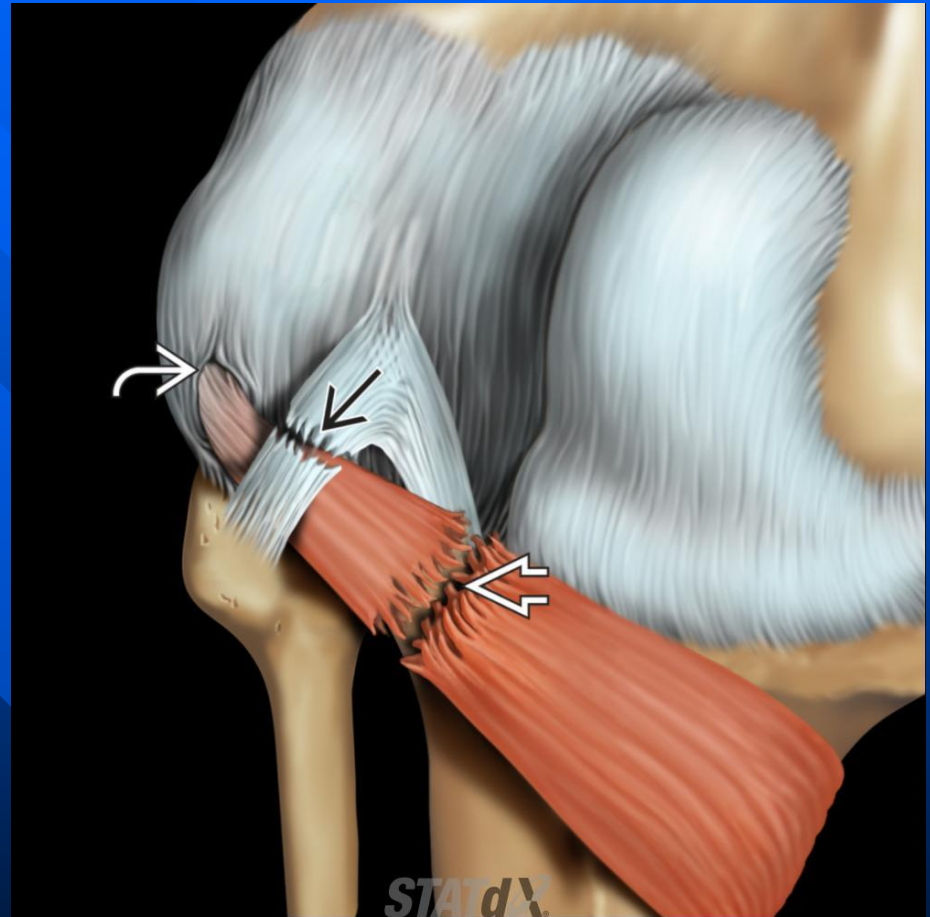


Arcuate ligament

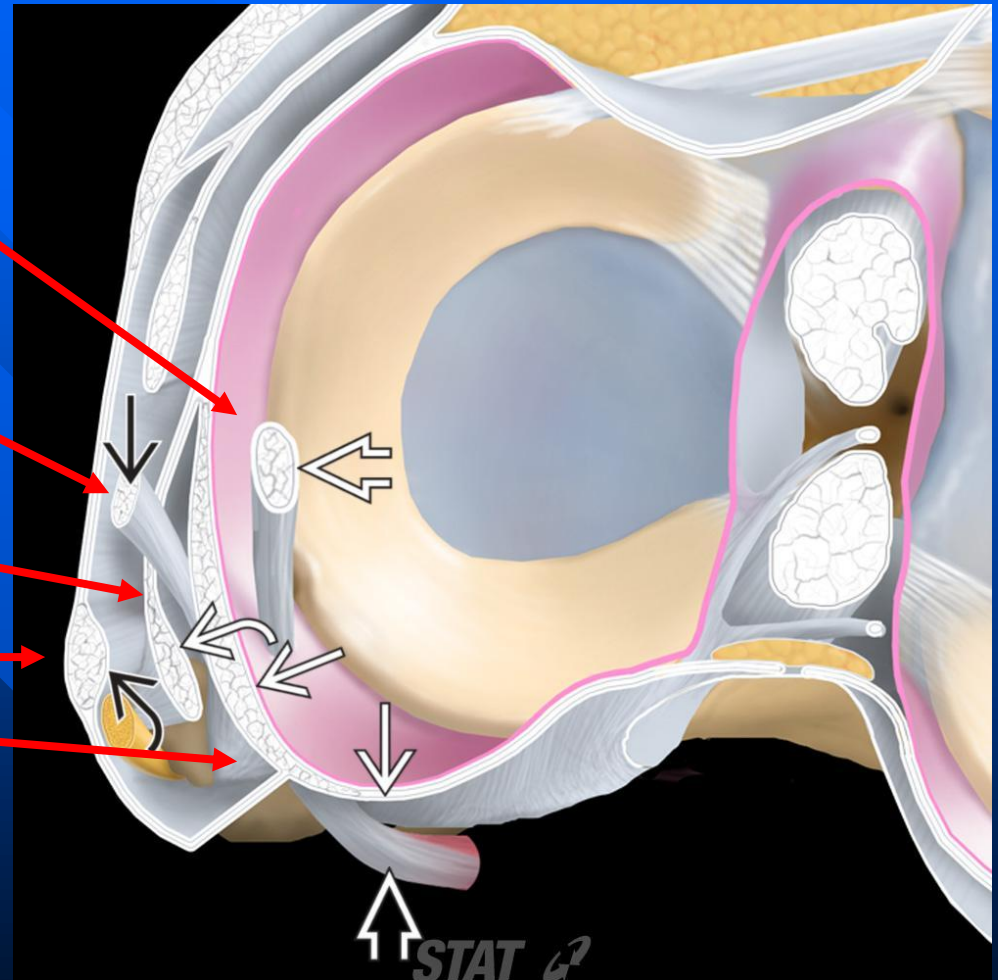
Popliteofibular
ligament

Posterolateral Corner Injury

- Tear of the popliteus muscle (white open arrow) and of the lateral limb of the arcuate ligament (black solid arrow).
- The popliteal hiatus (white curved arrow) is more proximal.



- Popliteus tendon (white open arrow) passing through the popliteal hiatus.
- Fibular collateral ligament (FCL) (black solid arrow) are also shown.
- Fabellofibular ligament (white curved arrow)
- Biceps femoris (BF) tendon (black curved arrow)
- The arcuate ligament (white solid arrow)





Axial PDWI FS MR in a patient with low-grade posterolateral corner injury shows the popliteus tendon (white open arrow), arcuate ligament lateral band (white solid arrow), fabellofibular ligament (white curved arrow), BF (black curved arrow), and FCL (black solid arrow).