

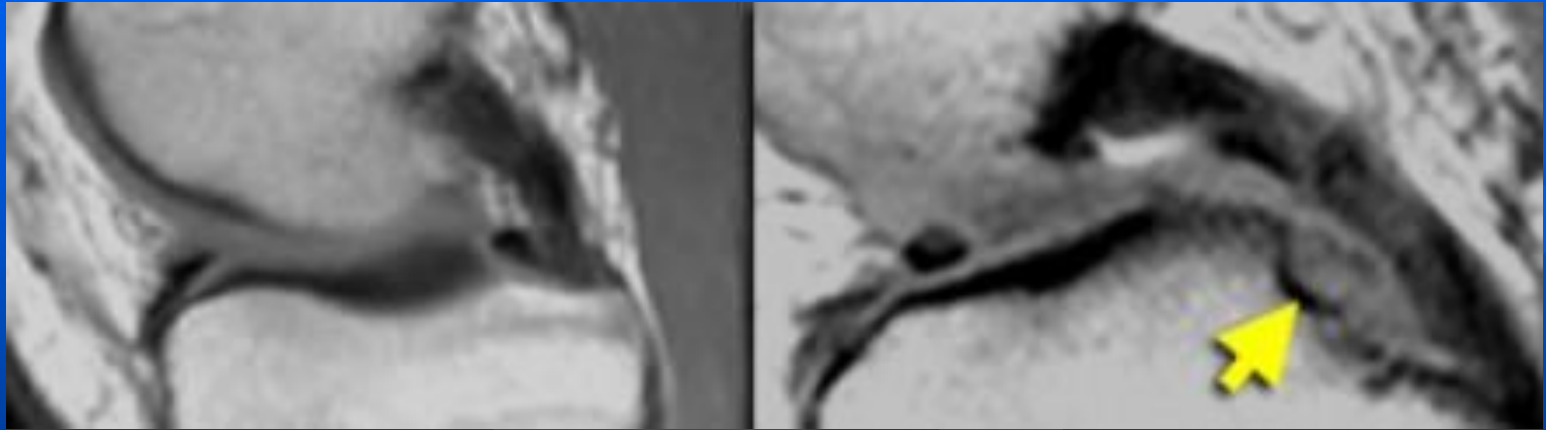
Medial Meniscus

- Both horns are triangular in shape and have very sharp points.
- The posterior horn is always larger than the anterior horn (figure).
- If this is not the case, then the shape is abnormal, which can be a sign of a meniscal tear or a partial meniscectomy

Medial Meniscus

- The posterior root is immediately anterior to the posterior cruciate ligament.
- If it is missing on the sagittal images, then there is a meniscal root tear.
- The anterior horn has an insertion on the tibia and a second portion that travels from medial to lateral to connect to the anterior horn of the lateral meniscus (intermeniscal or transverse ligament).

Root ligament tear



Left is normal

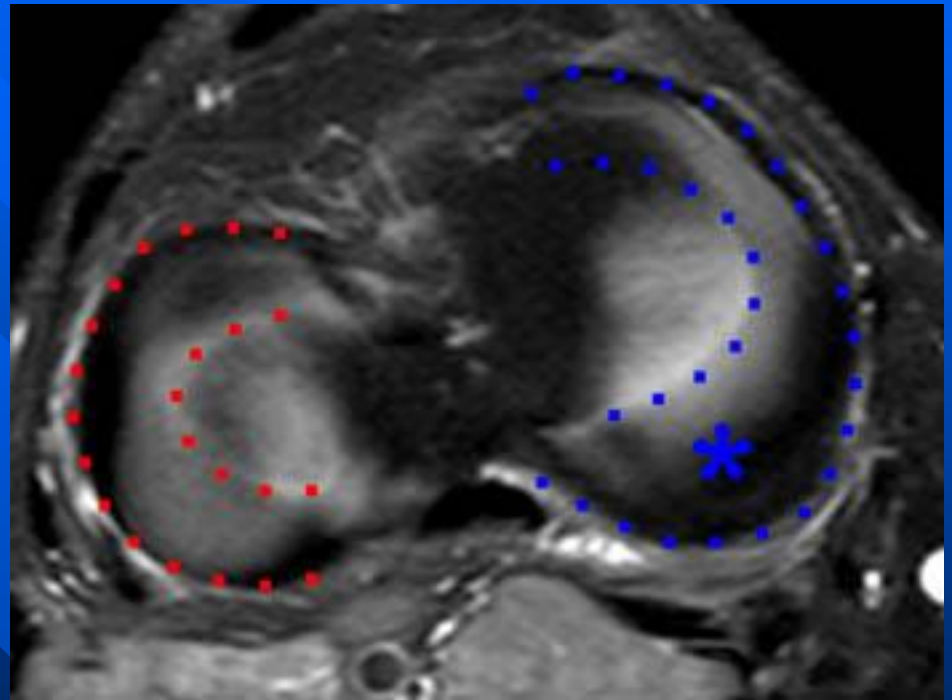
Lateral Meniscus

- On sagittal images the posterior horn is higher in position than the anterior horn. Both horns are about the same size.
- The lateral meniscus posteriorly comes up high over the tibial spine to insert near the posterior cruciate ligament.
- This upward position of the posterior horn may be the reason for the higher signal intensity of the posterior horn in all planes due to magic angle effect.

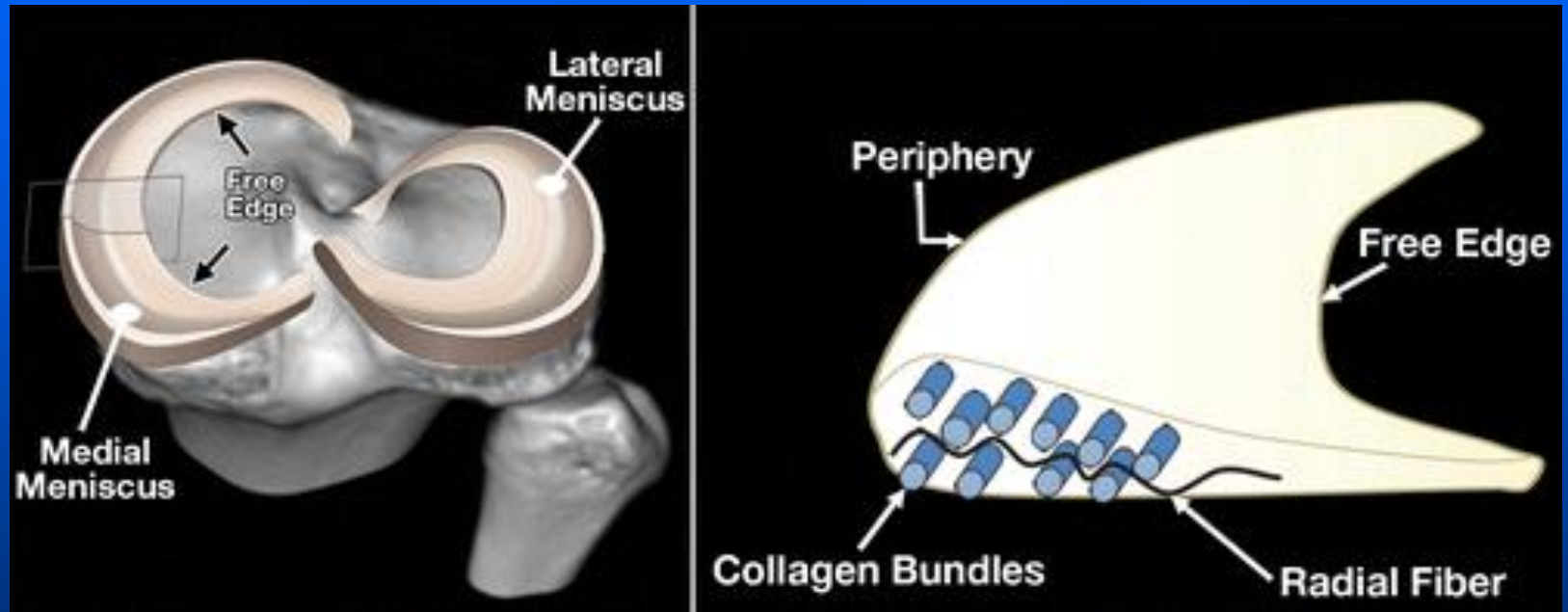


Meniscus

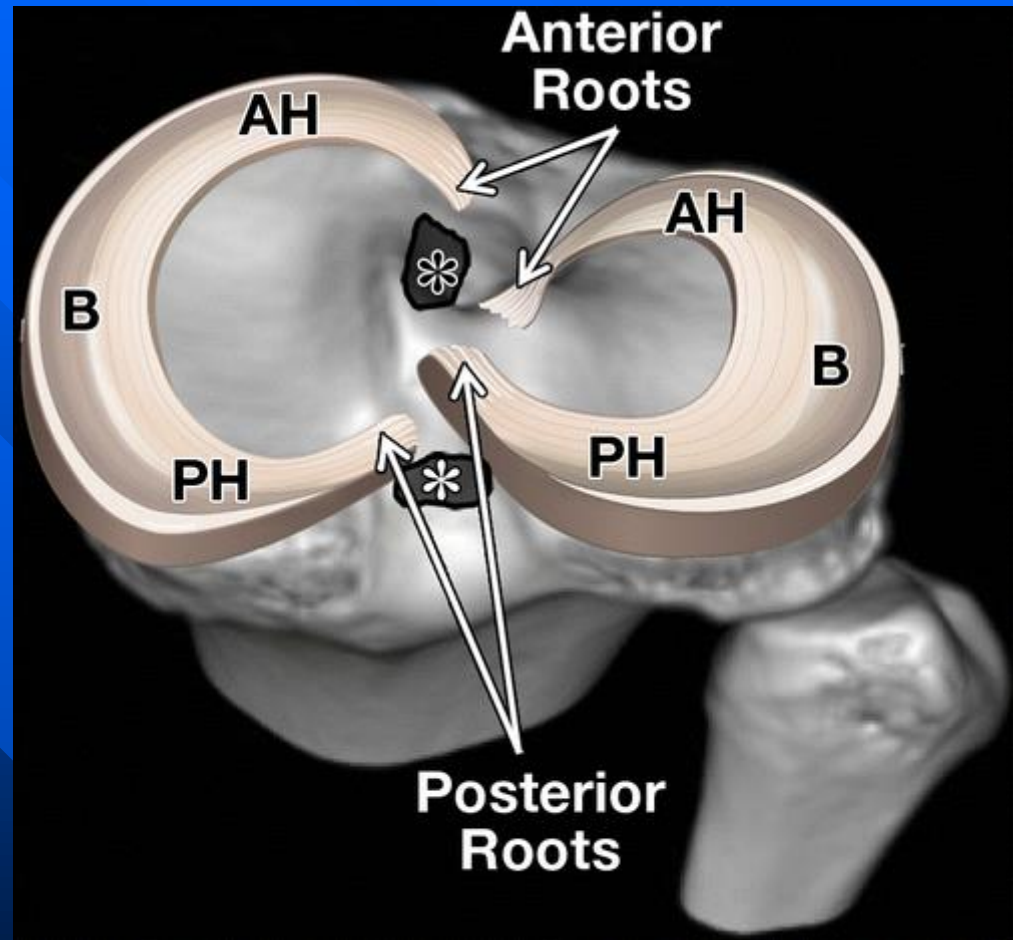
- Not the symmetrical shape of the lateral meniscus (red outline)
- Note the asymmetry of the medial meniscus (blue outline), where the posterior horn (asterisk) is significantly larger than the anterior horn.



Normal



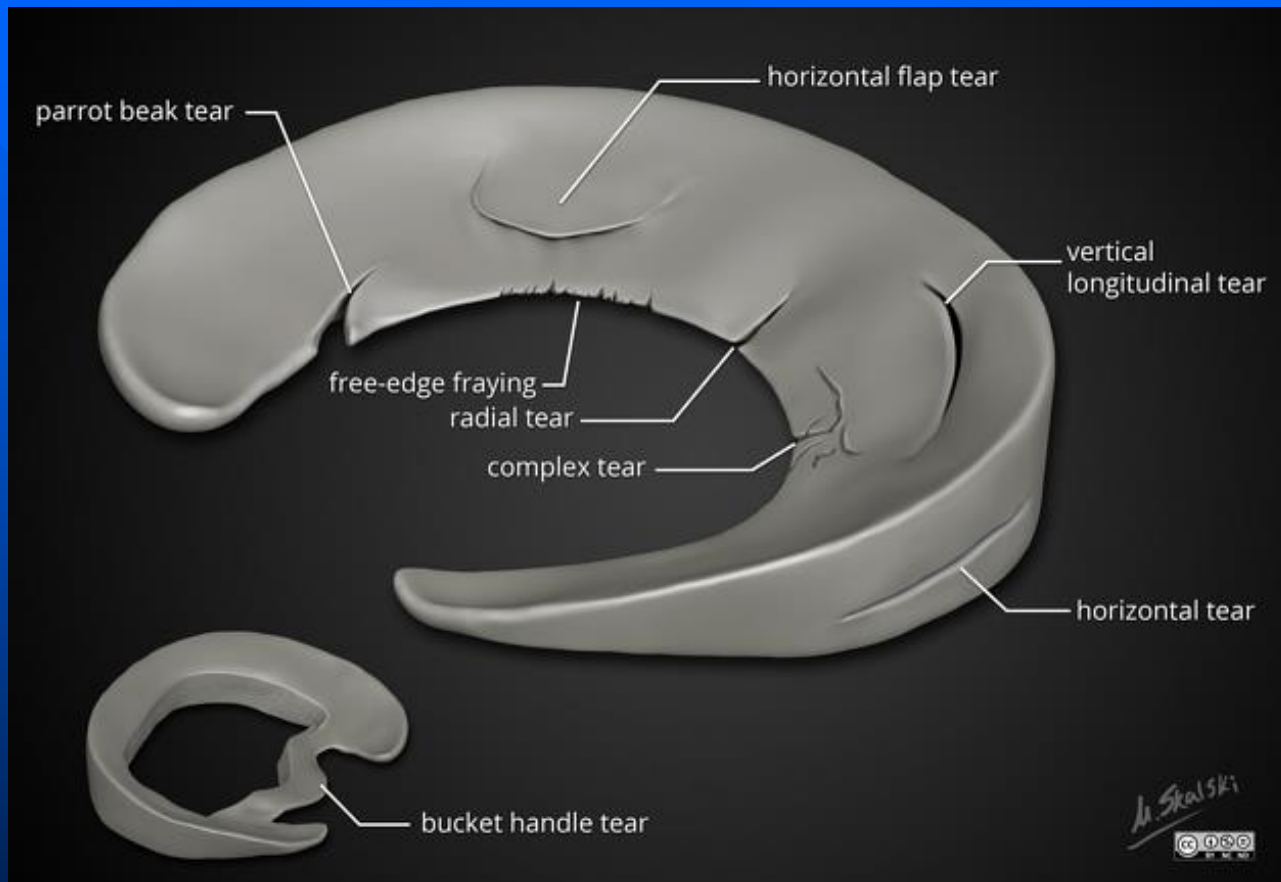
- Meniscus subdivided into thirds (the anterior horn [AH], body [B], and posterior horn [PH]) and attached to the tibia via the anterior and posterior root ligaments.
- Note the proximity of the roots to the tibial attachment sites for the anterior cruciate ligament (ACL) (black *) and posterior cruciate ligament (PCL) (white *). (c)



Nomenclature of Meniscal Tears

- 3 basic shapes of meniscal tears:
 - Longitudinal
 - Horizontal
 - Radial
- Complex tears are a combination of these basic shapes

Meniscus



Types of tears



Longitudinal

Horizontal

Radial

Types of tears



Bucket handle

Horizontal Flap tear

Parrot beak

"speckled anterior horn"



Normal variant, anterior horn lateral meniscus. The so-called "speckled anterior horn" is a normal variant created by the insertion of the ACL