

Orthopedic Injuries Not to Miss

Primary Care Conference

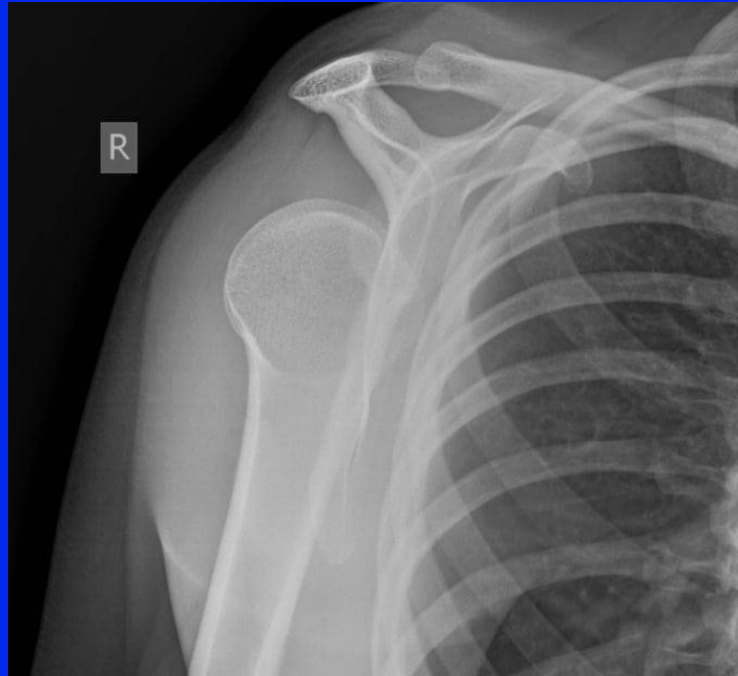
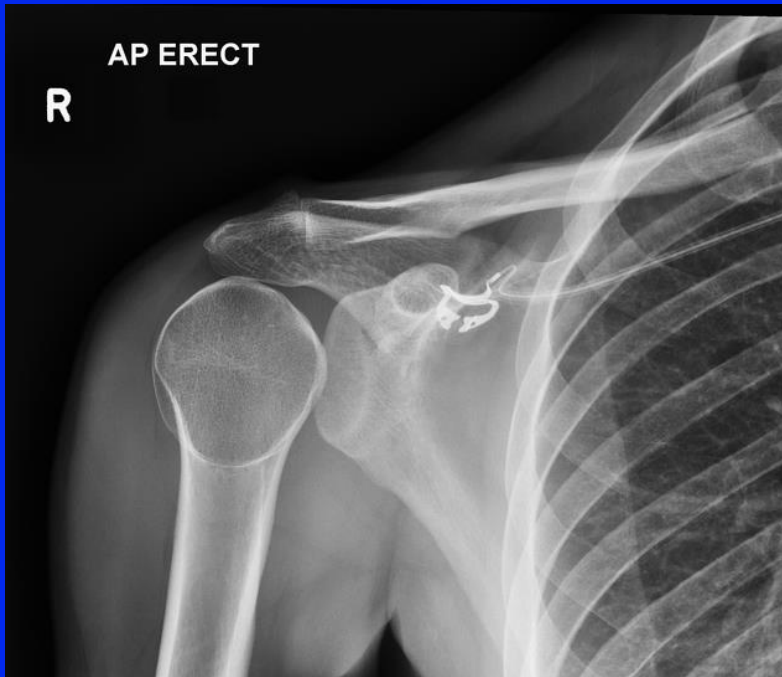
7/21-7/25/25

Kauai, HI

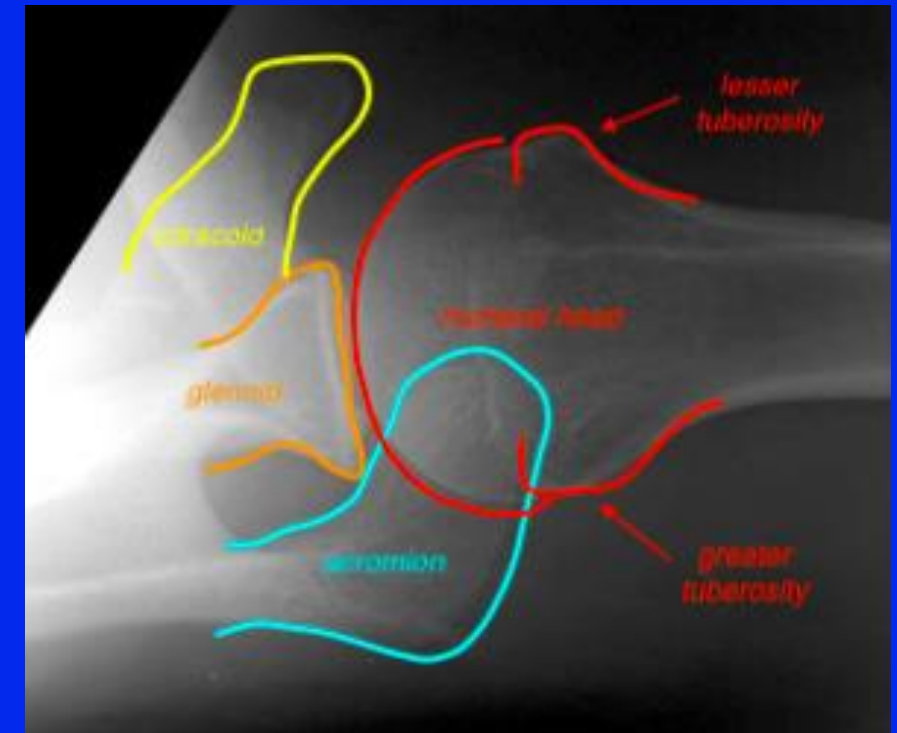
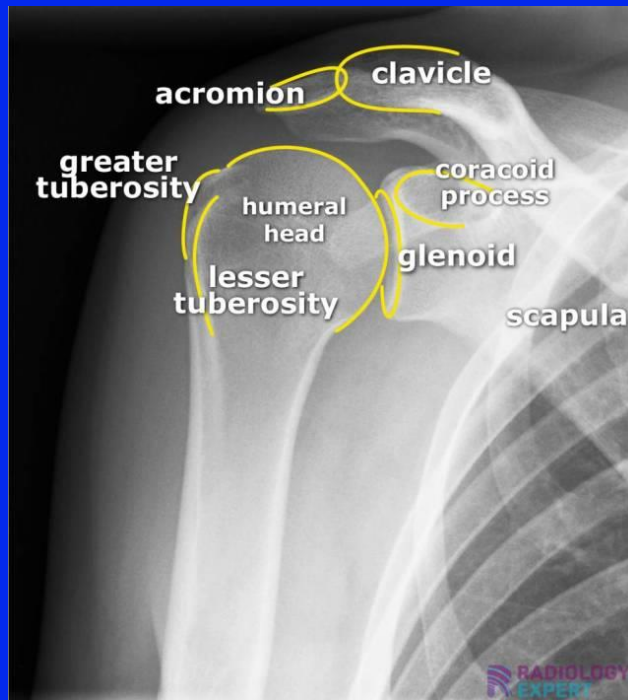
Greg Maletis

Kaiser Baldwin Park

60 yo male with a 3 day history of shoulder pain and limited motion. His wife says it seemed to start when she found him in a postictal state after a seizure



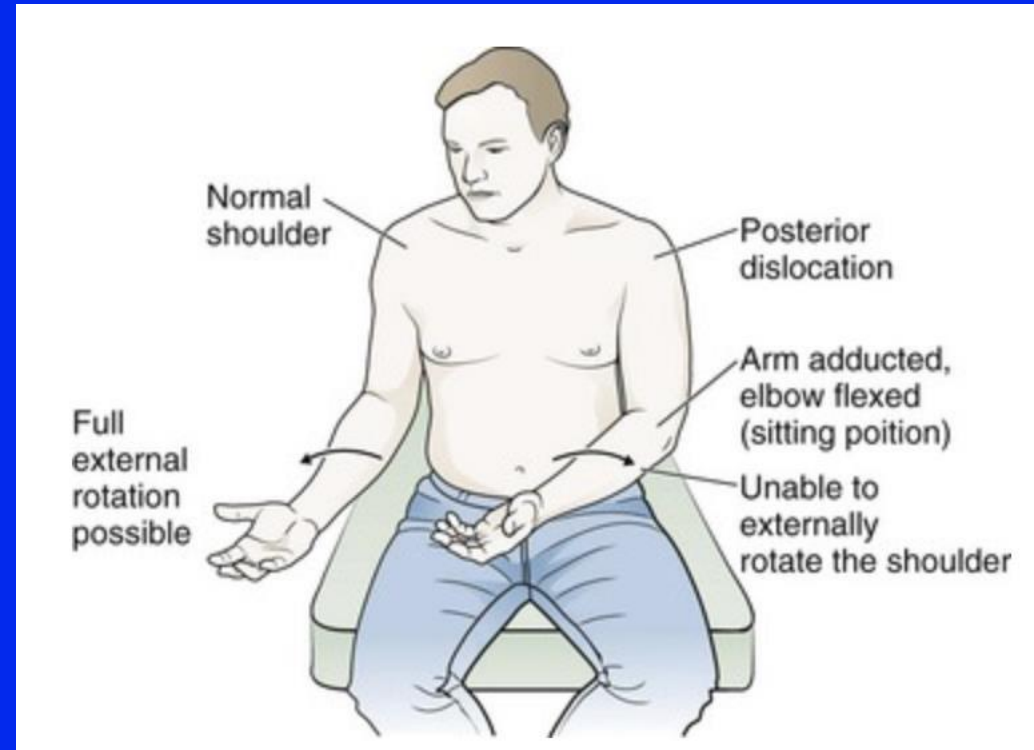
What does a normal shoulder xray look like



Make sure to get either a Y view or preferably an axillary view to verify the shoulder is reduced

Posterior Shoulder Dislocation

- Less common than anterior dislocation. 3-5%
- 50% missed in the ER
- Anterior still more common with a seizure but seizures are often the cause of a posterior dislocation



Unable to ER

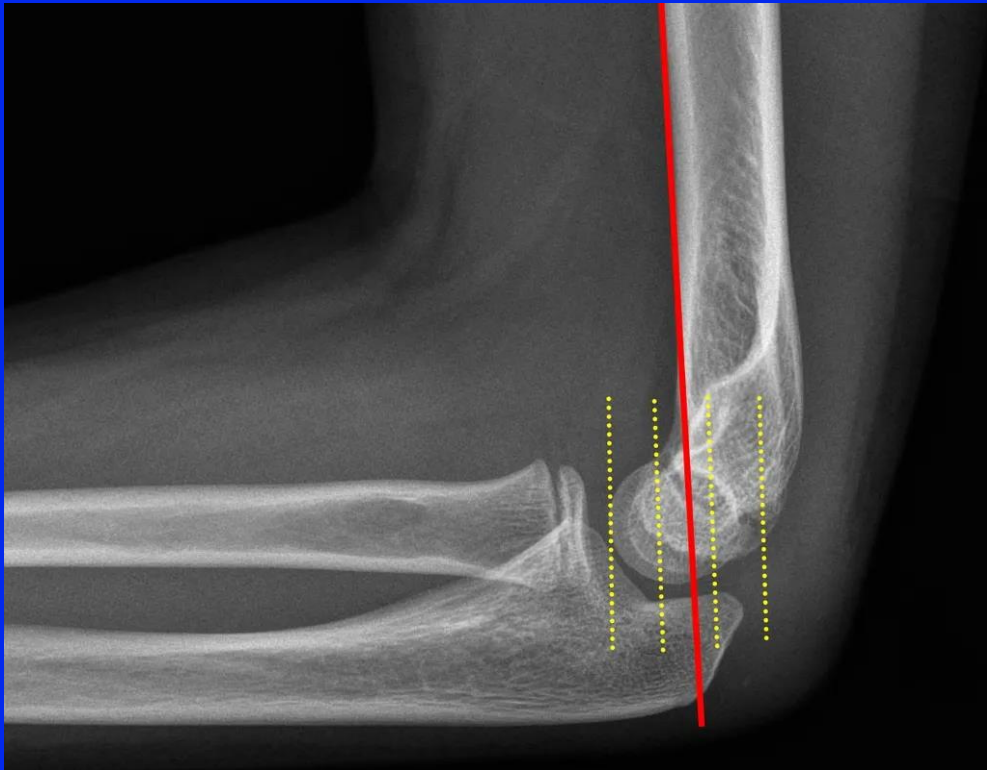
6 yo fell off the monkey bars and won't move arm



Supracondylar Humerus Fracture



What to look for on the xray

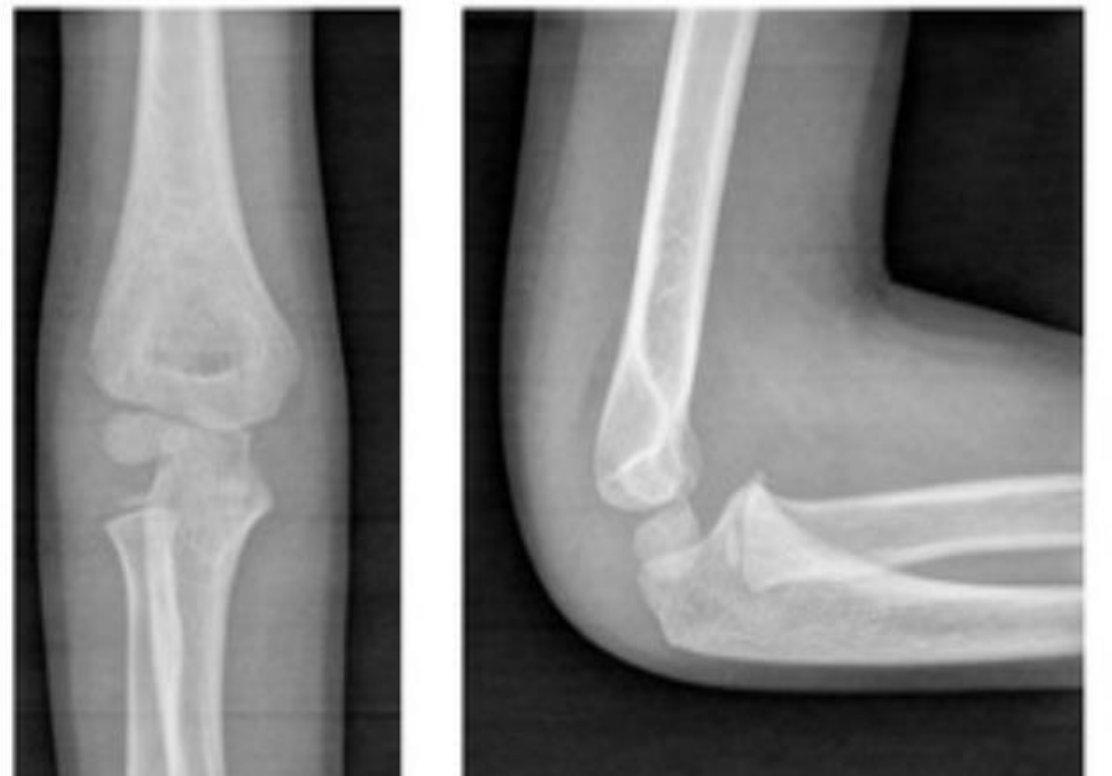


Anterior humeral line should intersect
Middle 1/3 of Capitellum



Sail sign and posterior fat pad sign
suggest fracture

Lateral Epicondyle Fracture



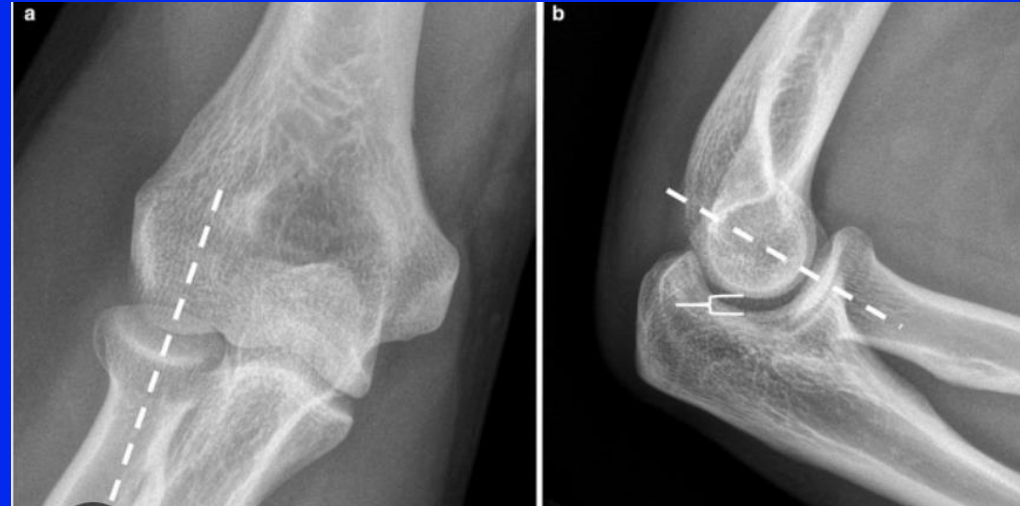
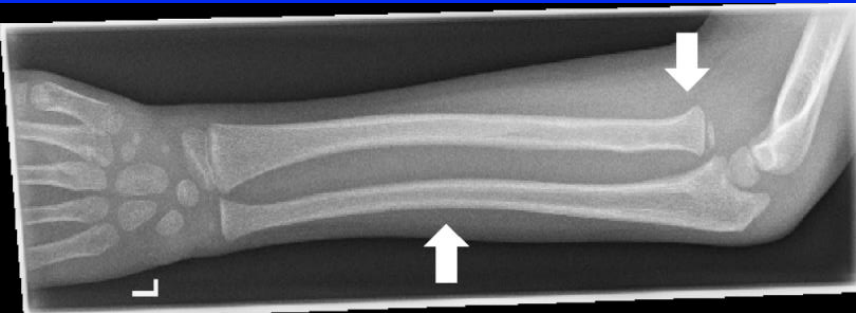
AP and Lateral may look normal



Internal oblique view tells the story

Other Fracture Variants

- Monteggia



Xray the joints above and below a fracture

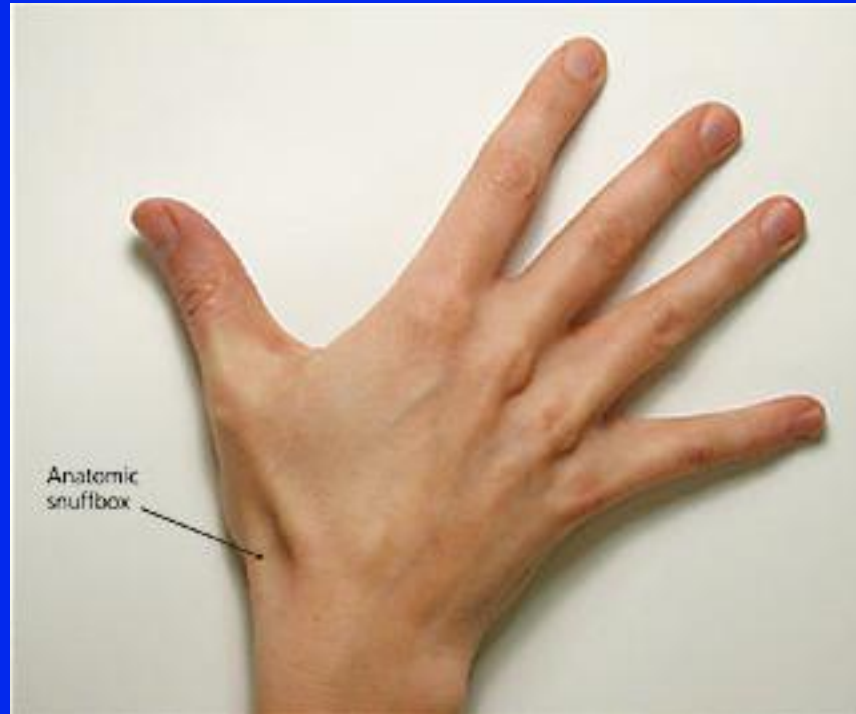
Radial Head should always point towards the Capitulum

In children plastic deformation is like a fracture

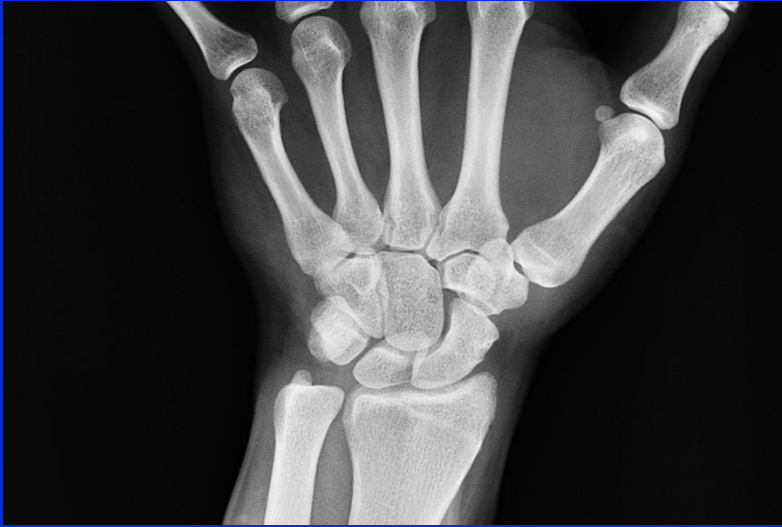
18 yo falls of a skateboard and lands on outstretched hand



What else to consider



Scaphoid Fracture



Missed scaphoid fractures can
can go on to develop arthritis



Scaphoid nonunion advanced collapse
SNAC Wrist

CT scan can help
in cases where a
fracture
is not obvious

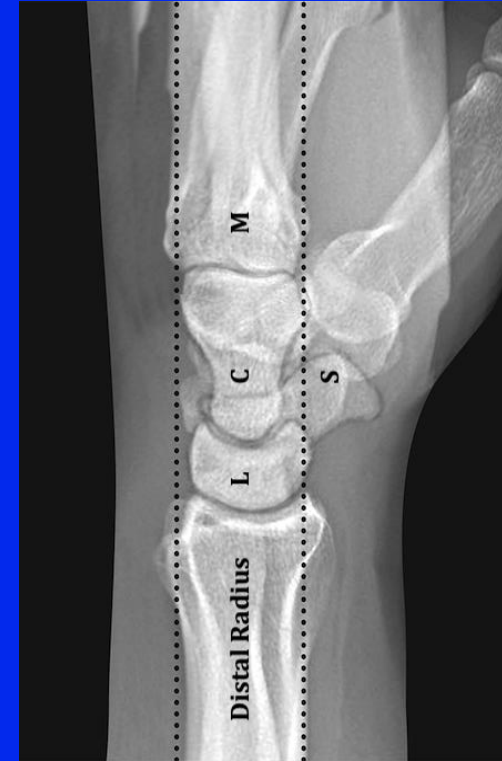


What else to consider



Perilunate Dislocation

- Significant hand swelling
- 25% missed in ER
- Look for alignment of Radius, Lunate, Capitate and Metacarpal



13 yo female soccer player falls while while trying to dribble around an opponent.

Exam (may be difficult early on)

Limping

Limited ROM

Able to Straight leg raise

Ligament exam can be difficult (guarding)

EFFUSION



Four things that cause early (< 3 hours) Knee Swelling

ACL Tear

Patella Dislocation

Fracture

Tendon rupture

13 yo female soccer player falls while while trying to
dribble around an opponent.

ACL Tear until proven
otherwise

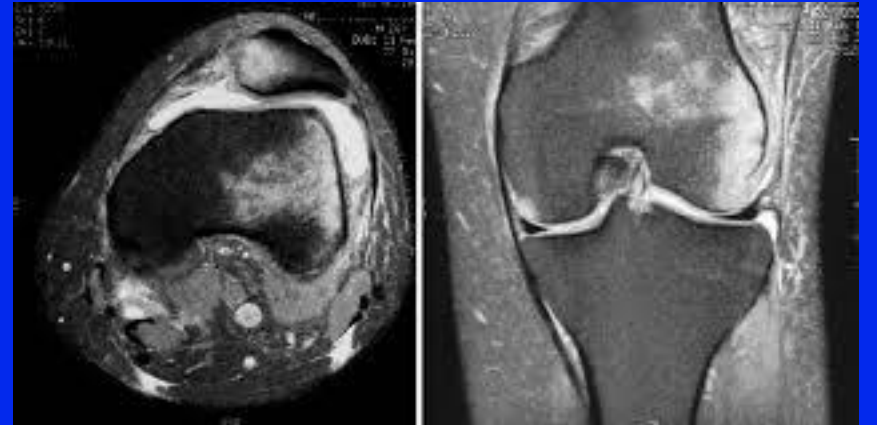


If missed further injury is likely



Bucket handle meniscal tear

Patella Dislocation



MRI shows “kissing lesion”

Small bone
avulsion



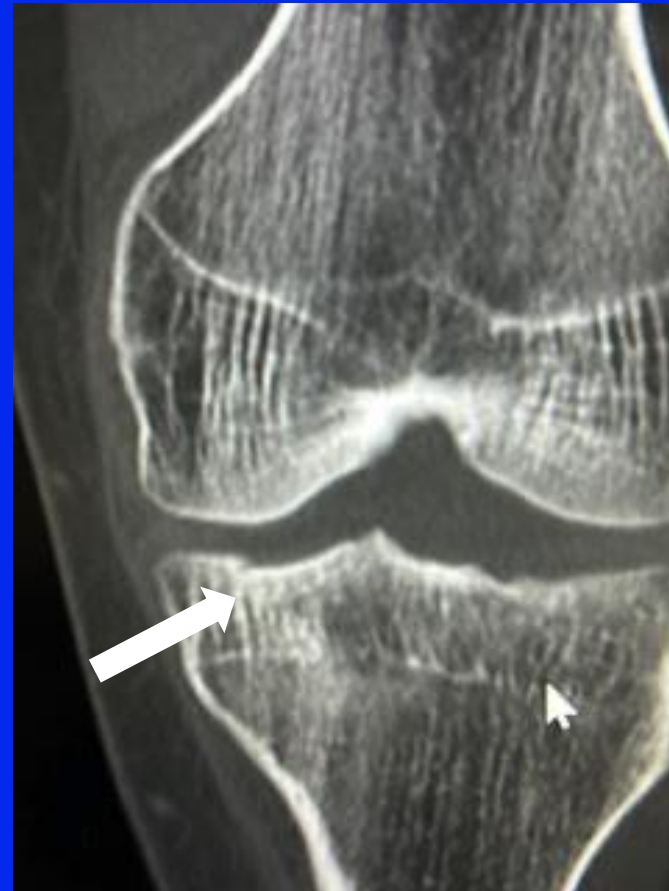
Tibial Plateau Fracture

24 yo male assaulted at a bar. Unable to weight bear
Large effusion



Tibial Plateau Fracture

If the story and exam don't fit, then keep looking



Quad or Patella Tendon Rupture

Inability to straight leg raise
Bilateral xrays at the 30 degrees flexion

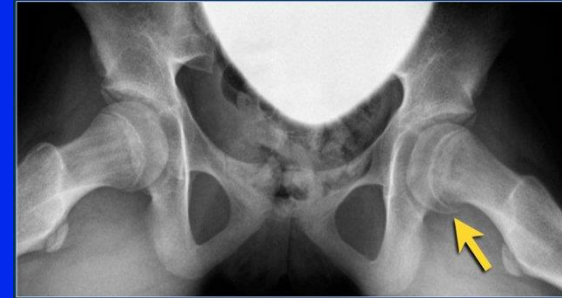
Patellar Tendon Rupture



Quad Tendon Rupture



14 yo male brought in by mother who states he has knee pain and is limping.



Slipped Capital Femoral Epiphysis (SCFE)

- SCFE Demographics

- Males > Females
- African American, Pacific Islanders, and Latinos
- Ave age – Females 11-12, Males 12-13
- Obesity is the greatest risk factor



30 yo basketball player lands on another player's foot while coming down from a rebound



What else should you consider



Maisonneuve Fracture

30 yo male is thrown from a horse and is unable to walk

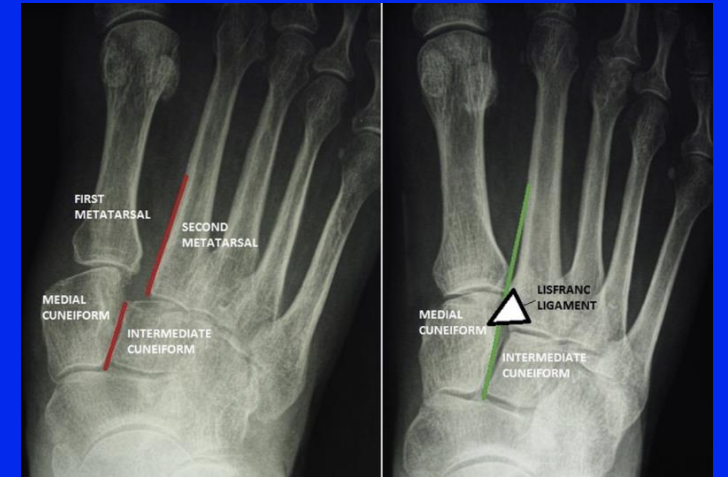


Don't forget the foot

Lisfranc fracture



Disruption of medial cuneiform
and 2nd metatarsal joint



40 y.o. tennis player feels a pop in the posterior leg

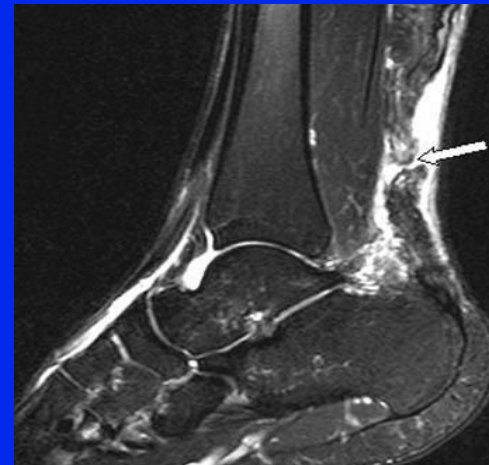
Location of pain



Achilles Tendon Rupture

- Most common in men 30-40
- Risk factors Fluoroquinolones and steroids
- 25% missed in ER

Thompson test



Thank You