

# Imaging of Common Injuries Encountered in Sports Medicine

**[www.fisiokinesiterapia.biz](http://www.fisiokinesiterapia.biz)**

# History & Physical

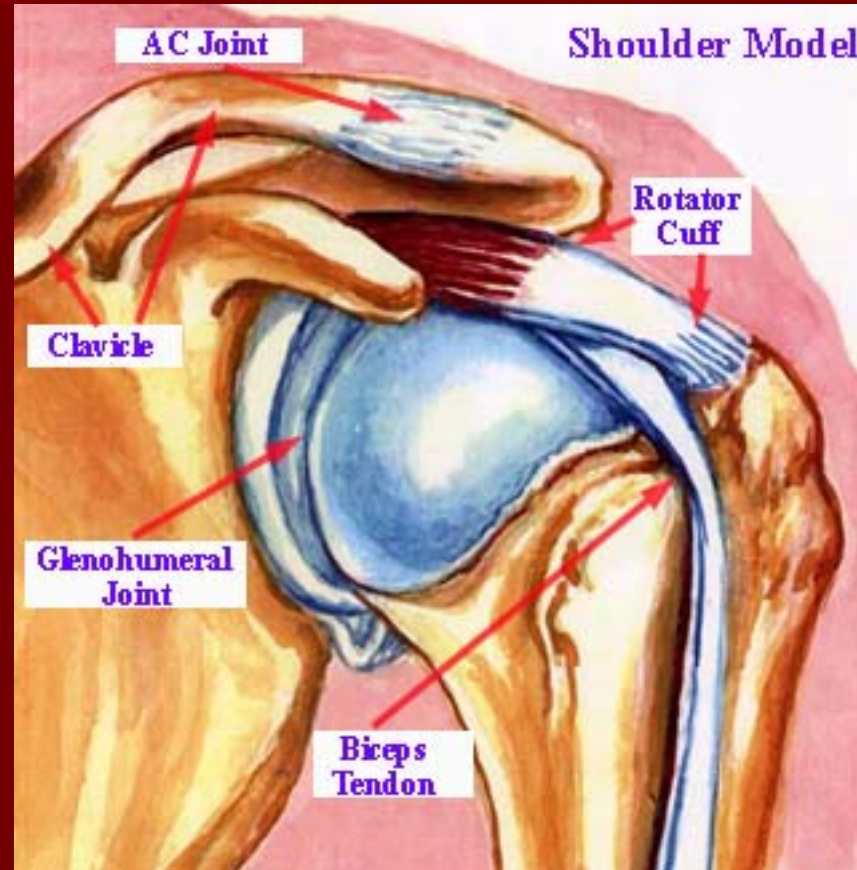
- Type of activity
- Mechanism of injury
- Pain?
- Swelling?
- Duration of symptoms

# History & Physical

- Inspection – ecchymosis, edema, joint effusions
- Movement – range of motion
- Palpation – tenderness, instability
- Tests – injury specific based on findings
- Imaging – also depends on suspected injury

# Shoulder

- Rotator cuff
- Labrum
- A-C joint
- Clavicle
- Dislocation



# Rotator Cuff



MRI normal shoulder

# Rotator Cuff



Rotator cuff tear

# Labrum



SLAP tear

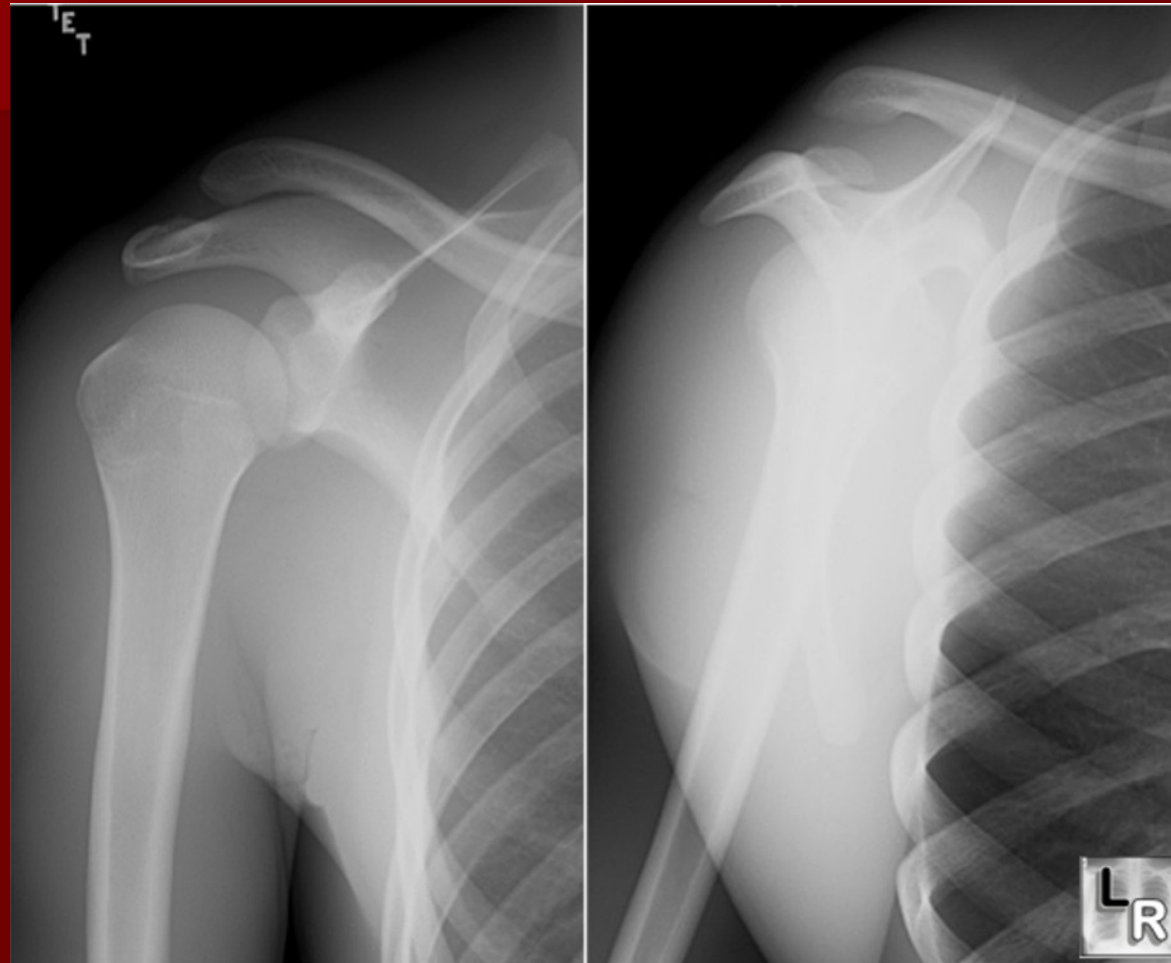
# Acromioclavicular Joint

## Rockwood Classification:

- **type I:**
  - sprain of joint with out a complete tear of either ligament
- **type II:**
  - tear of AC ligaments w/ coracoclavicular ligaments intact;
  - will not show marked elevation of lateral end of clavicle;
- **type III:**
  - in this injury both AC & CC ligaments are torn;
  - **> 5 mm** elevation of AC joint w/o weights is consistent w/ severe type II or a type III injury;
  - need to distinguish this from type III clavicular fracture
- **type IV:**
  - distal clavicle impaled posteriorly into trapezial fascia;
- **type V:**
  - distal end of clavicle displaced inferiorly



# AC Joint



Type III separation

# AC Joint



# Clavicle



Fracture of middle 1/3 of clavicle

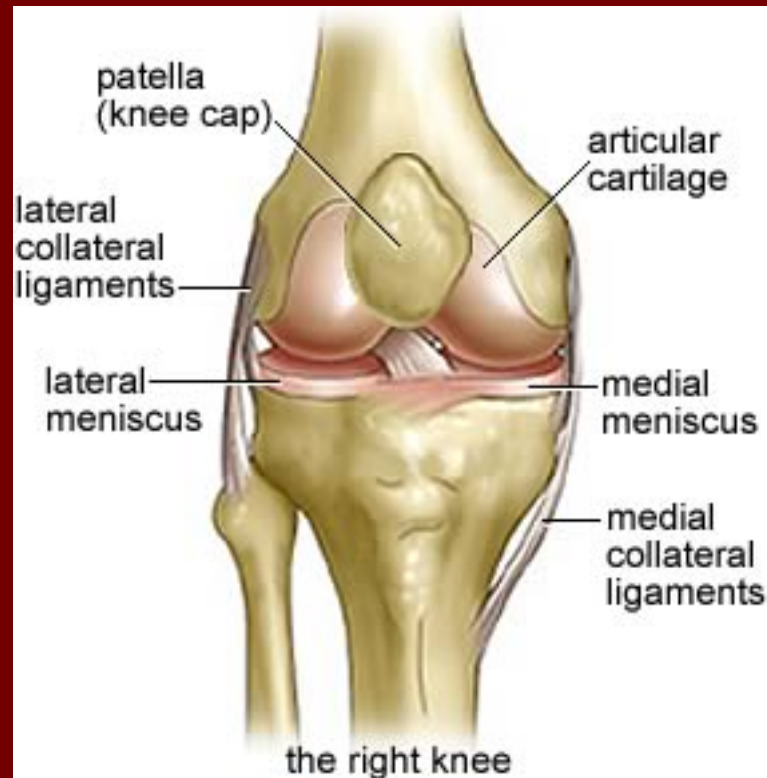
# Shoulder Dislocation



Anterior dislocation

# Knee

- ACL
- PCL
- MCL
- LCL
- Meniscus

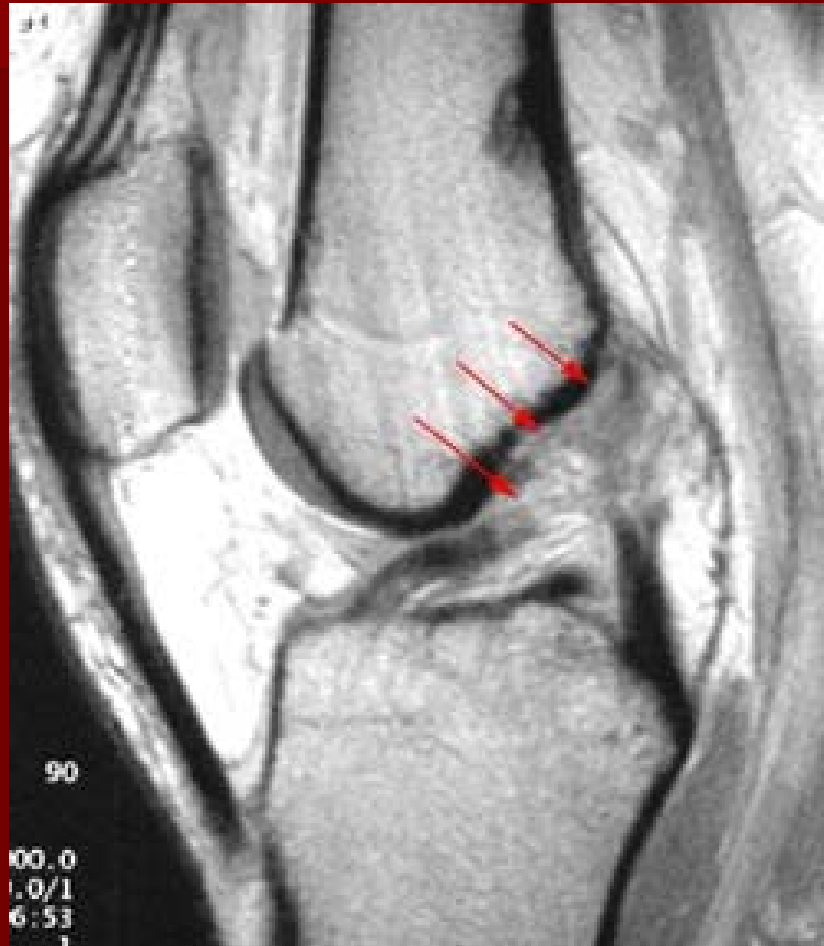


# Anterior Cruciate Ligament



MRI normal ACL

# Anterior Cruciate Ligament



MRI ACL tear

# Anterior Cruciate Ligament



MRI ACL tear



# Anterior Cruciate Ligament



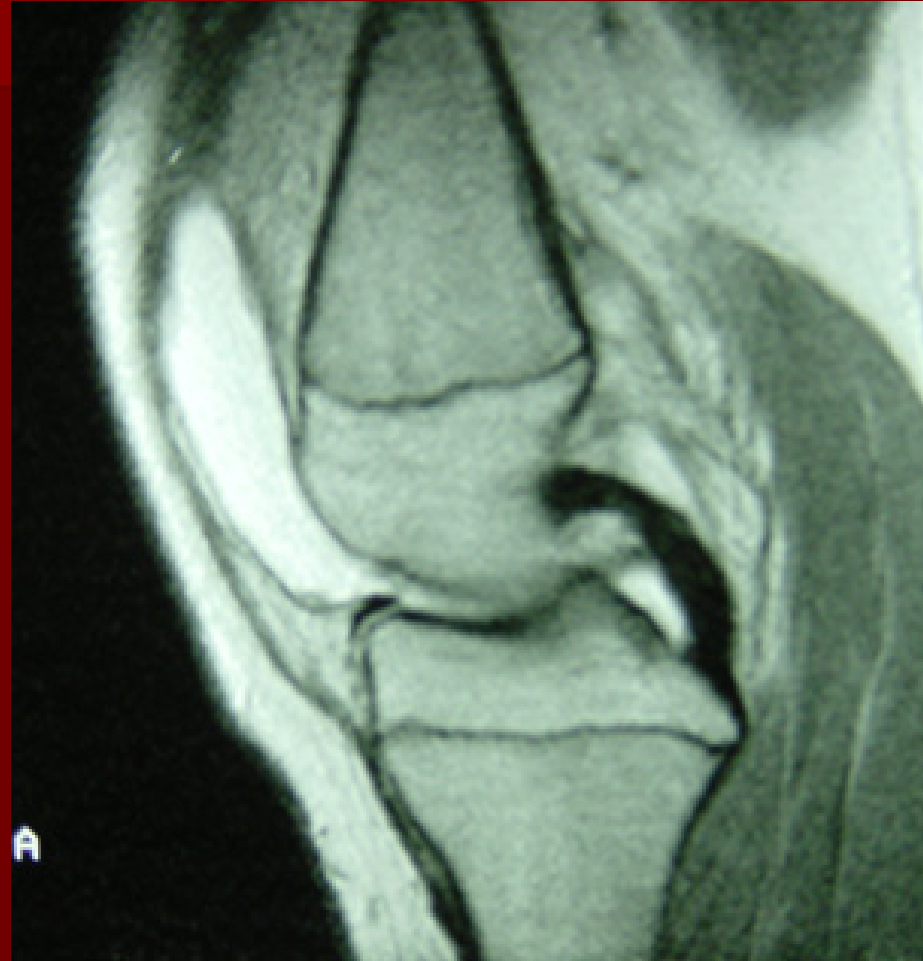
“Bruise” in bone with ACL tear

# Second Fracture



Associated with ACL tear

# Posterior Cruciate Ligament



MRI normal PCL

# Posterior Cruciate Ligament



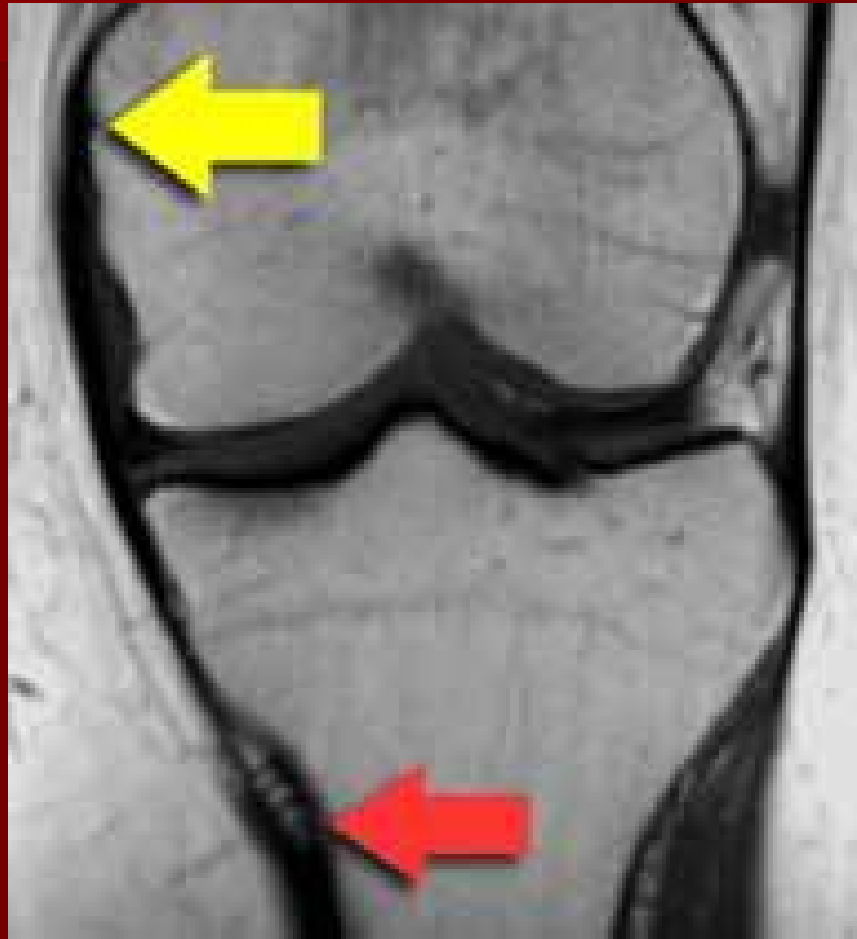
MRI PCL tear

# Posterior Sag Sign



Sign of PCL rupture

# Medial Collateral Ligament



MRI normal MCL

# Medial Collateral Ligament



MRI MCL tear

# Lateral Collateral Ligament



MRI normal LCL

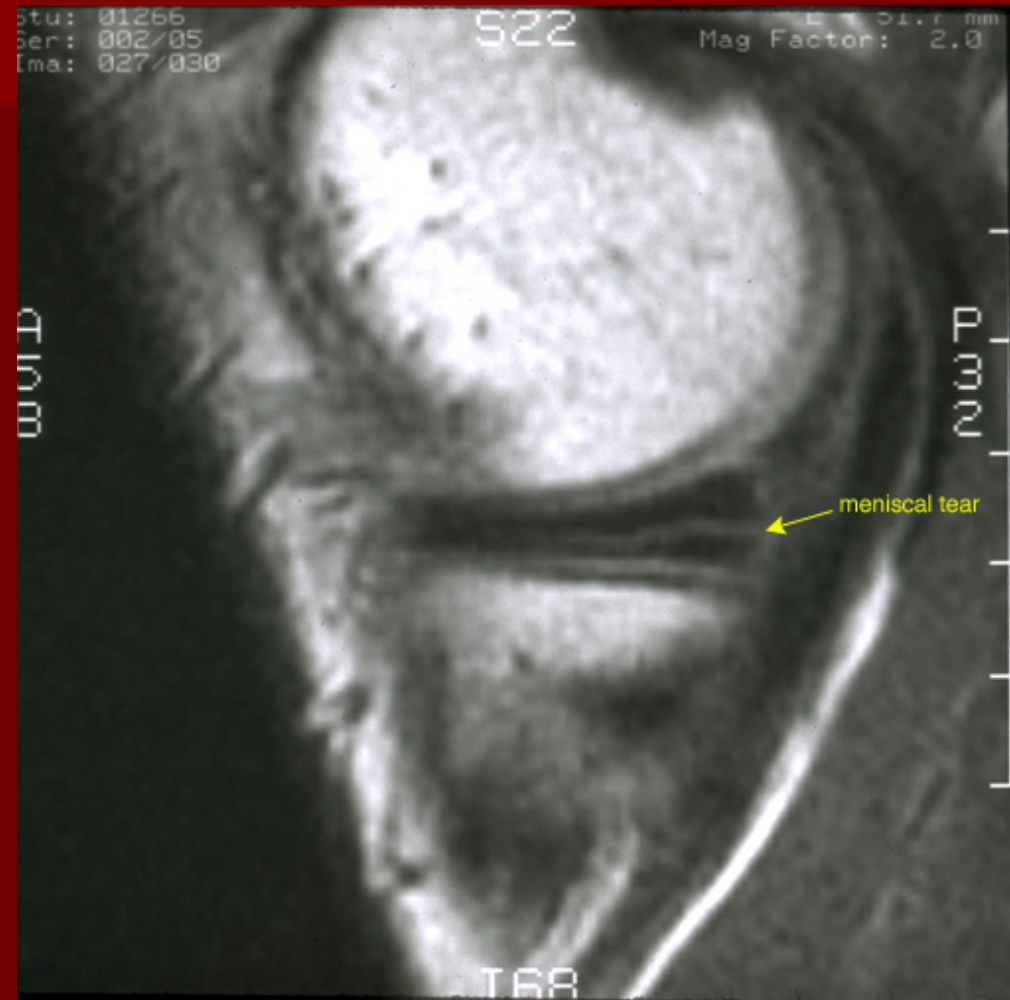


# Meniscus



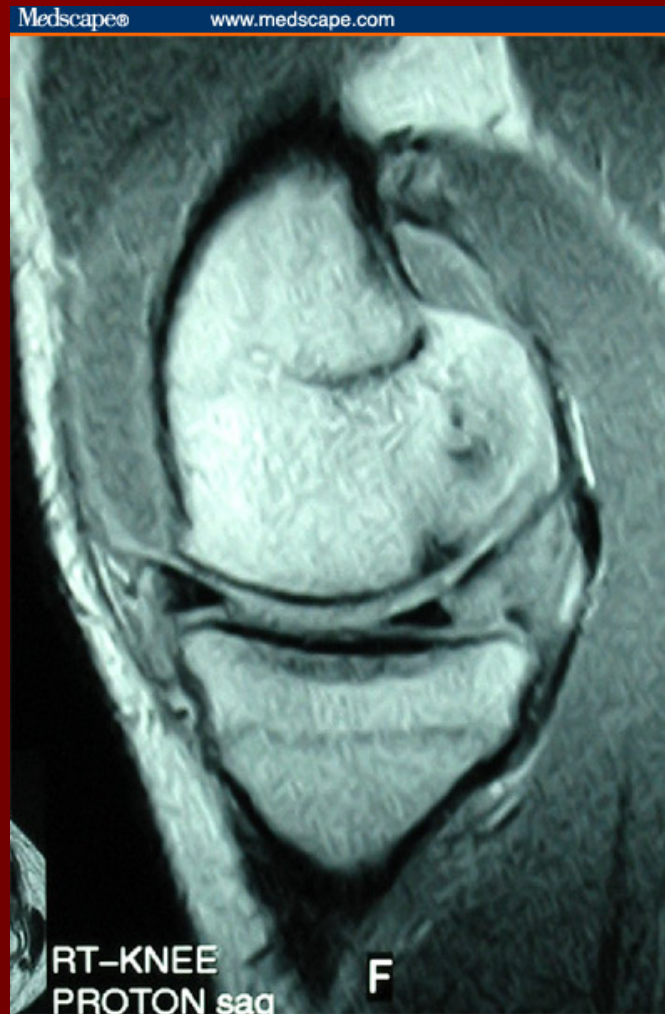
MRI normal meniscus

# Meniscus



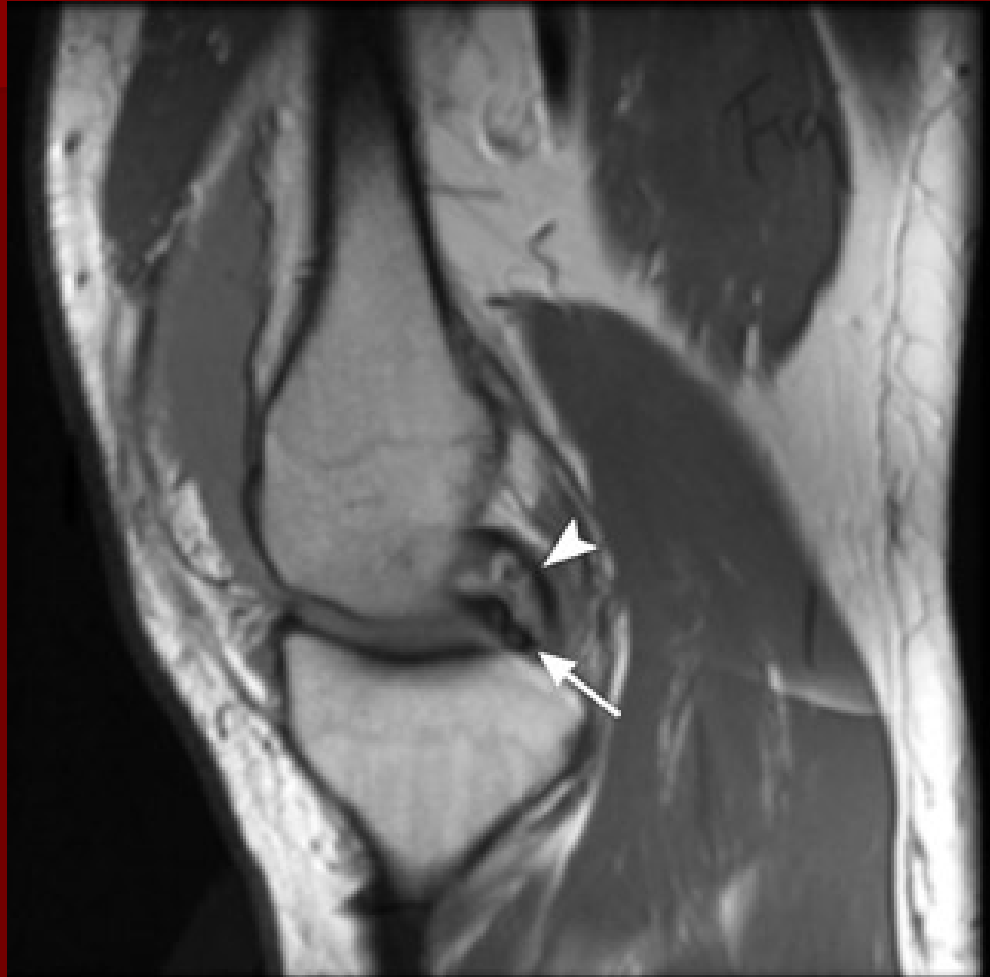
MRI meniscus tear

# Meniscus



MRI meniscus tear

# Bucket Handle Tear



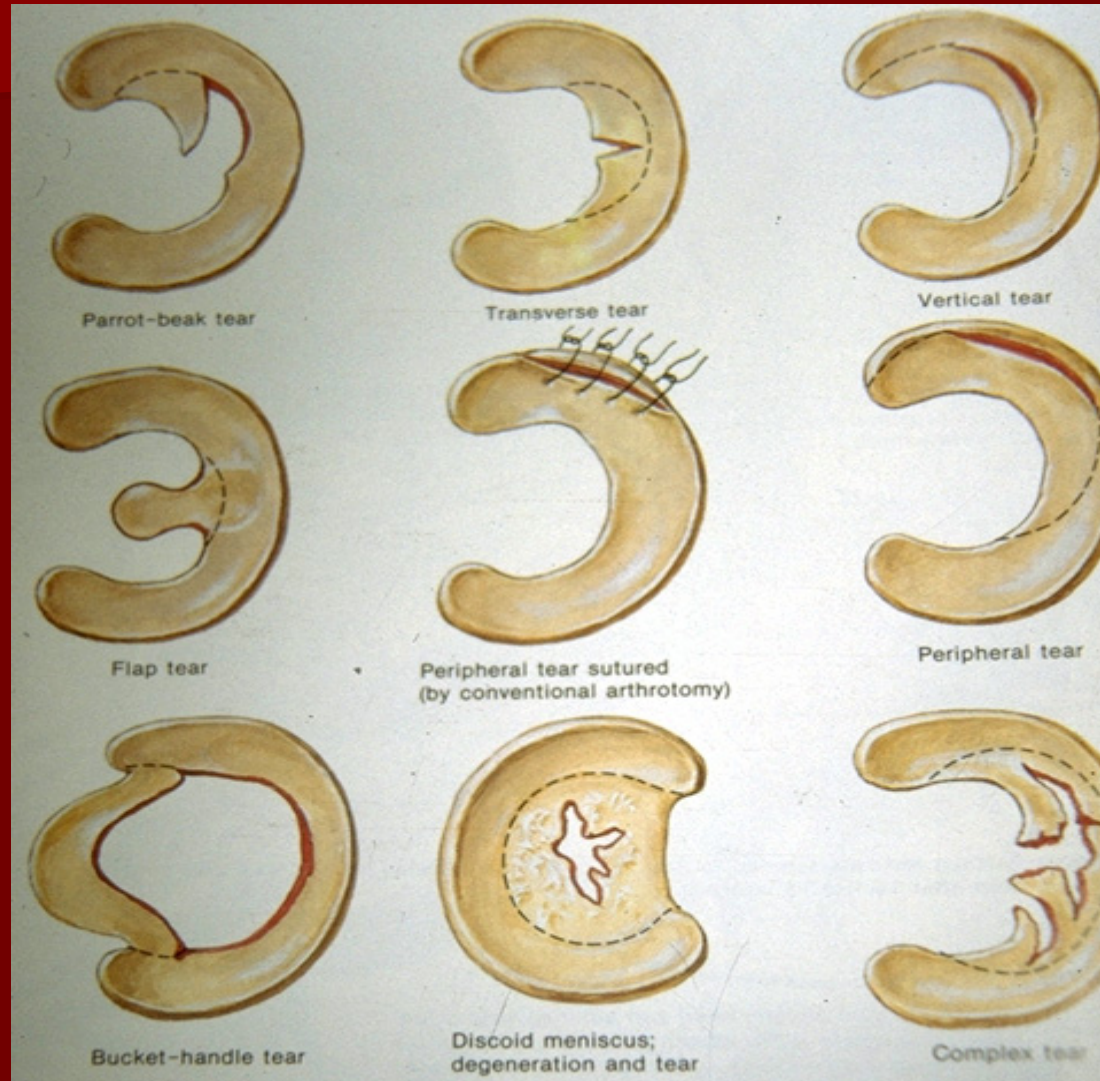
Double PCL sign

# Bucket Handle Tear



Frontal view of bucket handle tear

# Meniscus Tears

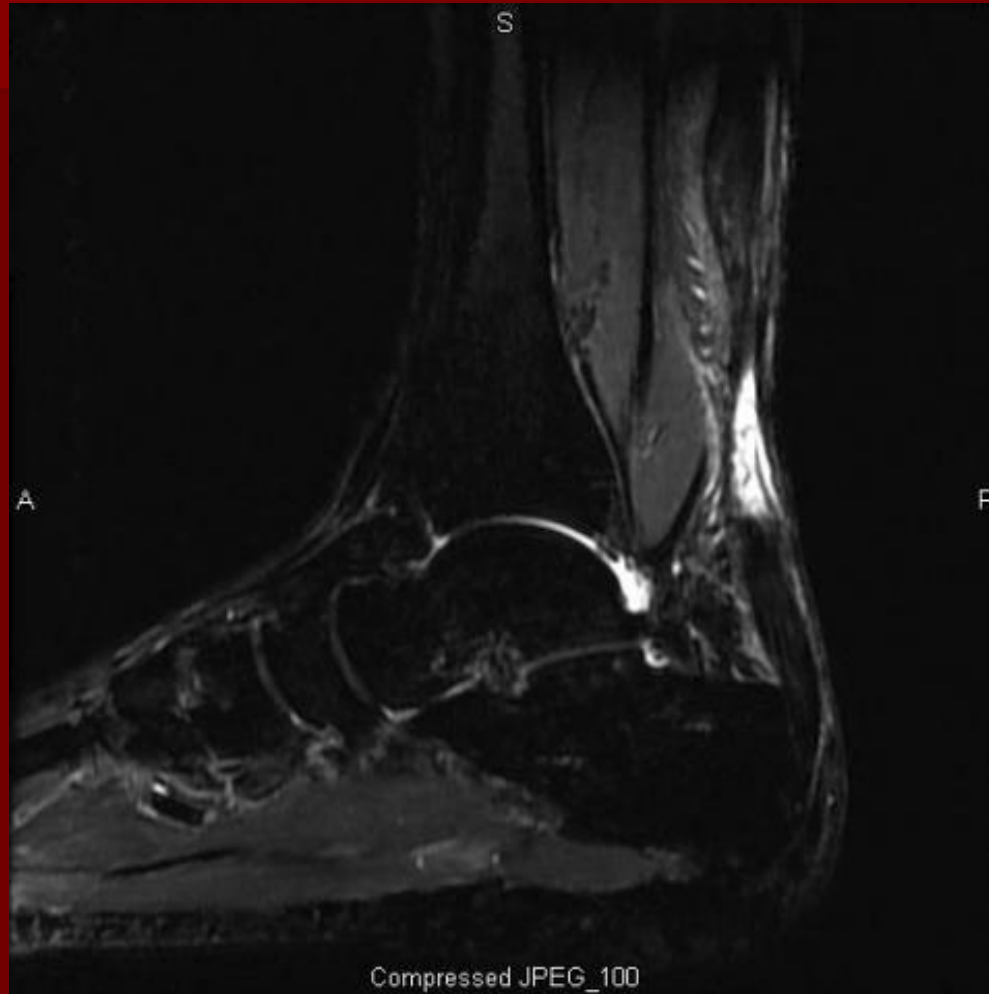


# Others

- Ankle – Achilles tear, tendonitis
- Leg – stress fractures
- Foot – fractures
- Elbow – Ulnar collateral ligament
- Spine – spondylolysis, spondylolysthesis



# Achilles Tendon



MRI normal calcaneal tendon



# Tibial Stress Fracture



# Fibular Stress Fracture



# Metatarsal Stress Fracture



Periosteal reaction

# Metatarsal Stress Fracture



# Metatarsal Stress fracture



# Jones Fracture



# Jones Fracture



After surgical repair

# Ulnar Collateral Ligament



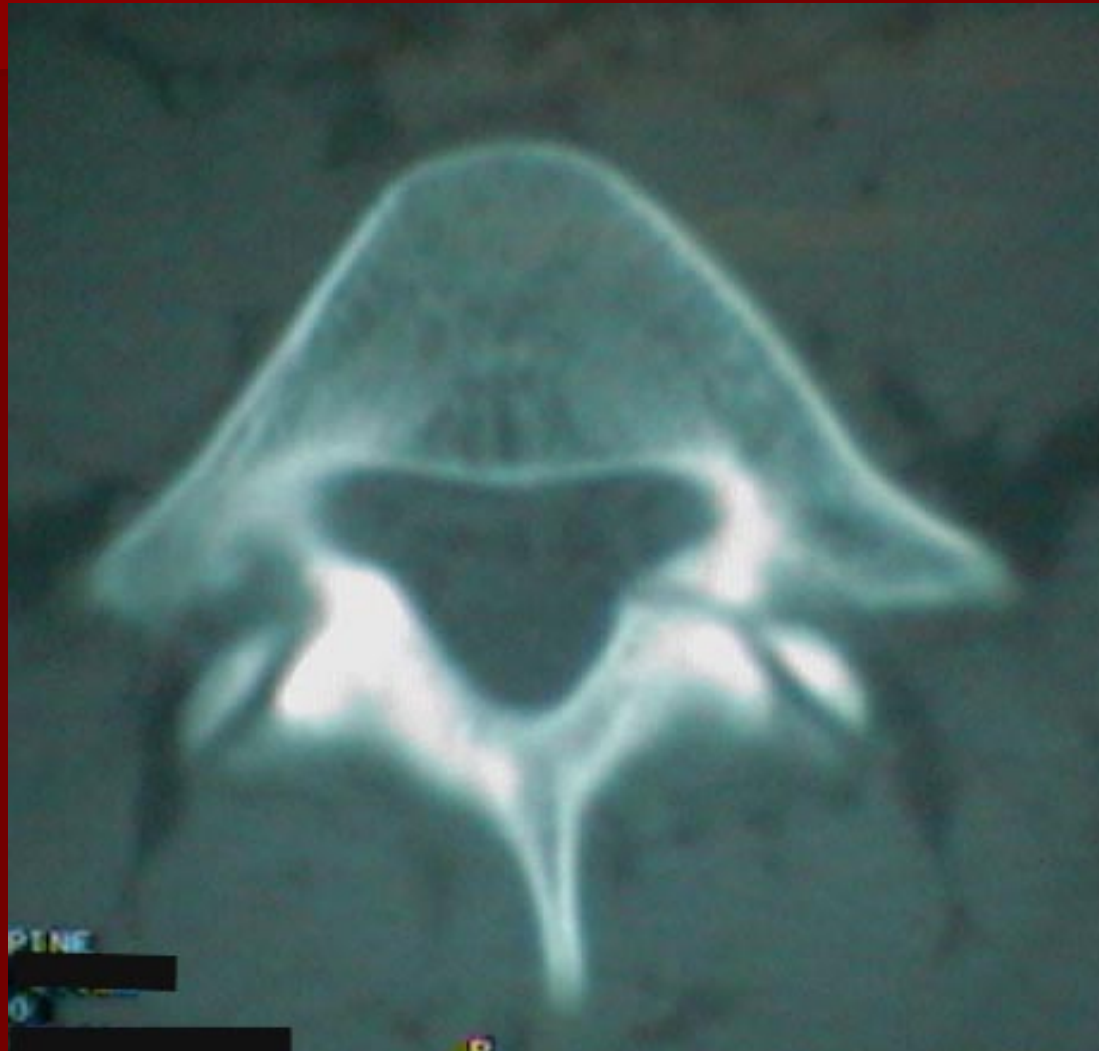
MRI UCL tear



# Spondylolysis



# Spondylolysis



# Spondylolisthesis

