

DISCLAIMER

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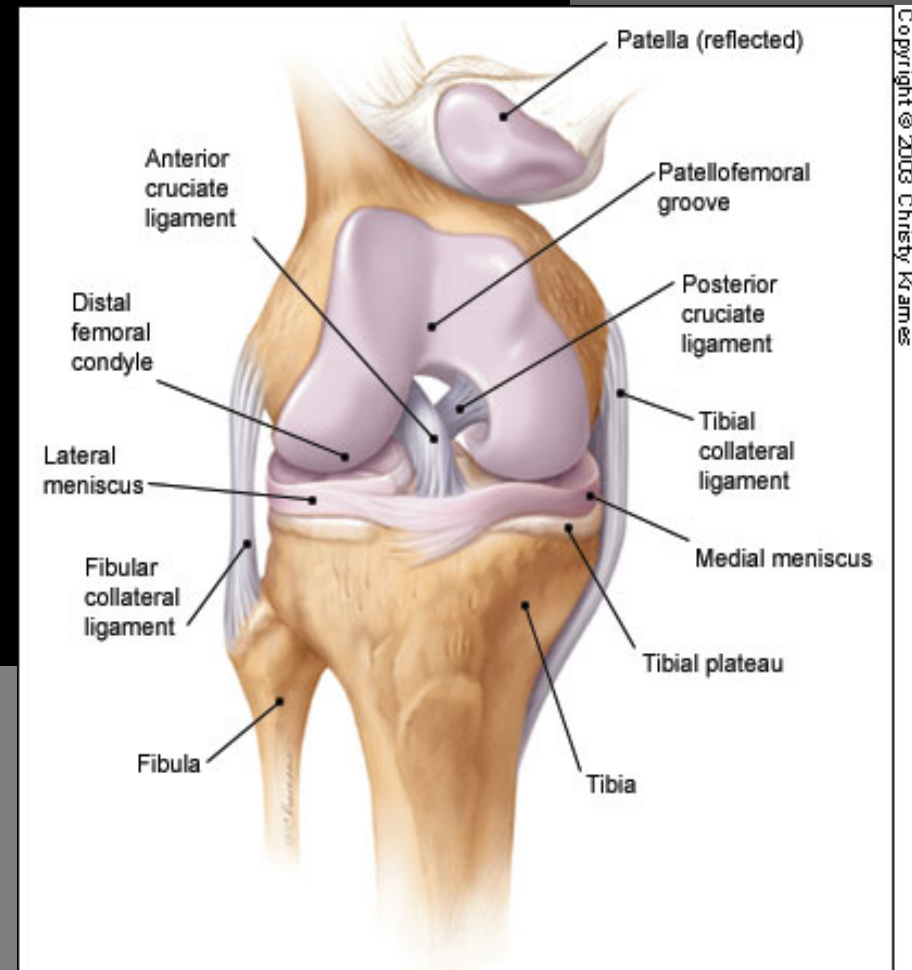
Patient with Knee Pain

By: Jerry Hizon, MD

HX: Acute Unilateral Knee Pain

○Trauma

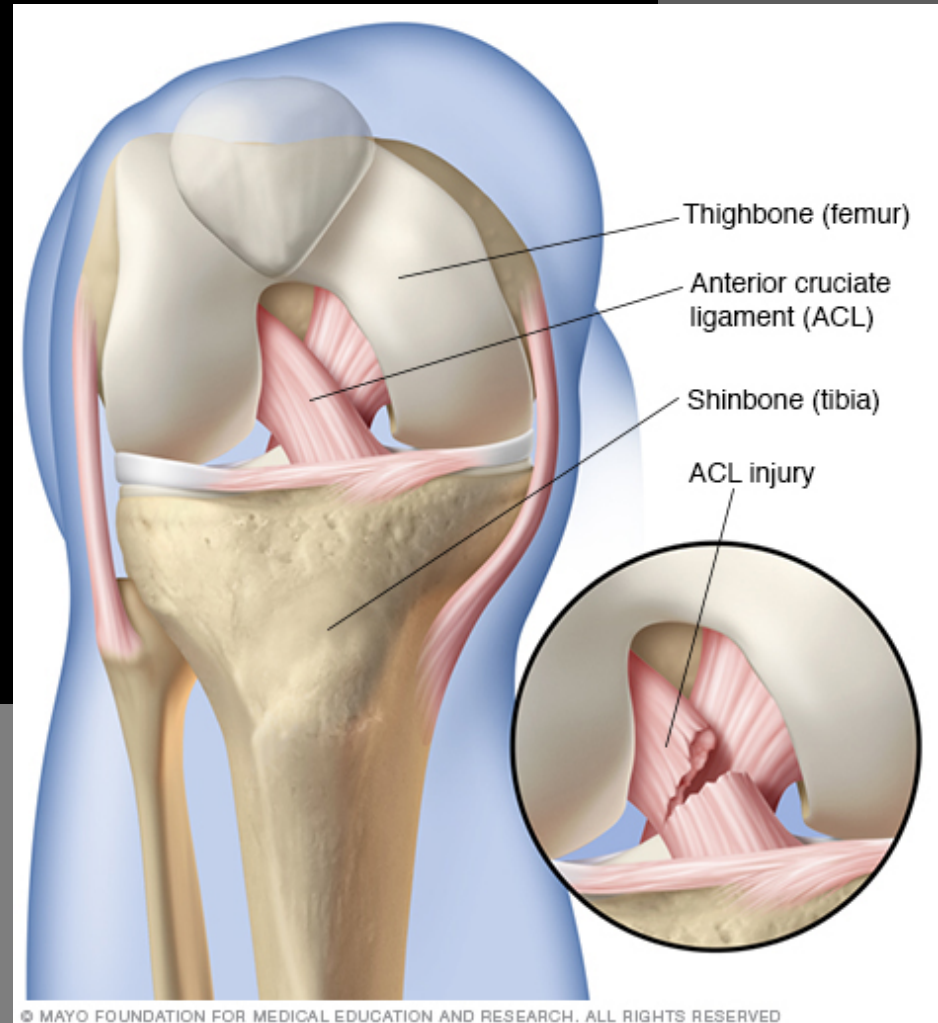
- Was the knee twisted while foot was planted? (Meniscal tear)
- Was the knee forced medially, laterally, or anteriorly? (Ligamentous tear)
- Fall or direct impact? (Fracture)
- Was there prolonged strenuous running?
- Reports of “popping” or “tearing” sensation, suggests meniscal or ligamentous injury.



HX: Acute Unilateral Cont.

ACL injury

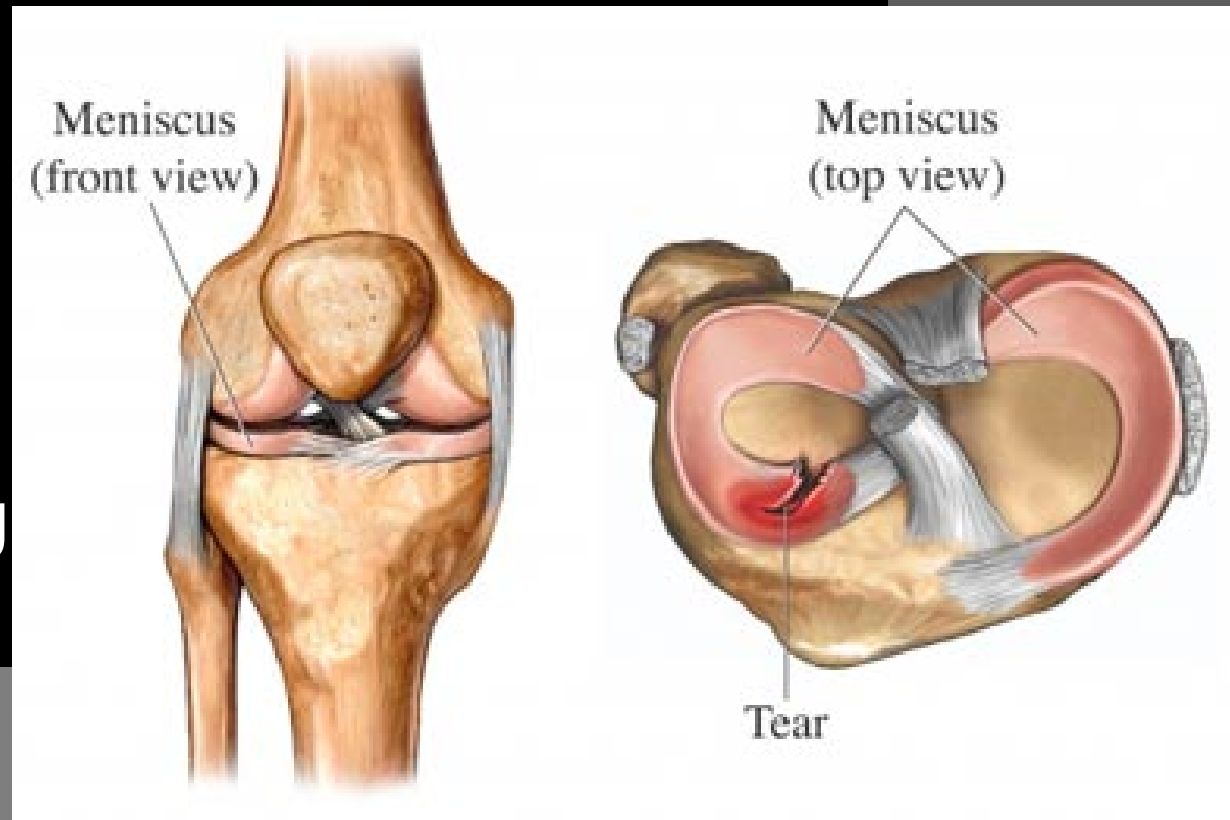
- ⊙ Associated with popping sound
- ⊙ Acute pain
- ⊙ Immediate swelling
- ⊙ “Giving out”
- ⊙ Inability to continued activity



HX: Acute Unilateral Cont.

Meniscal Injury

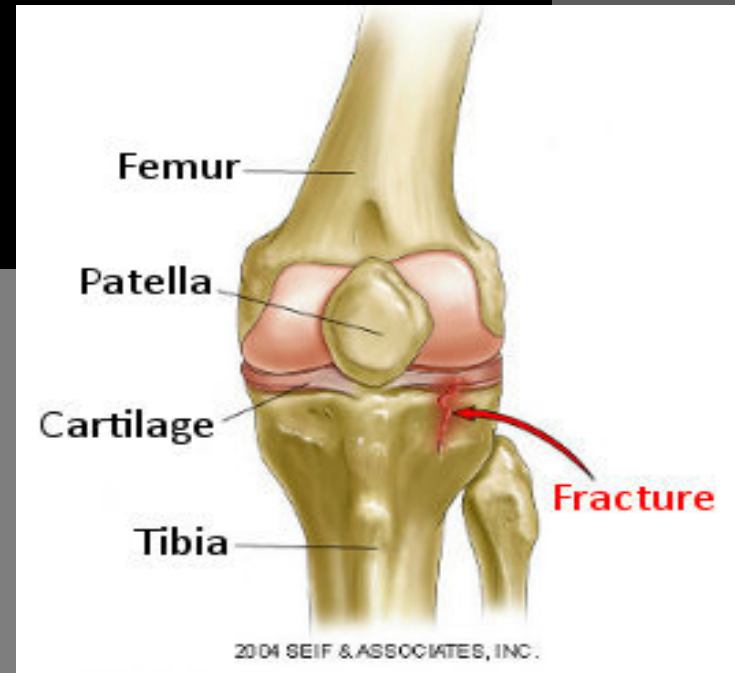
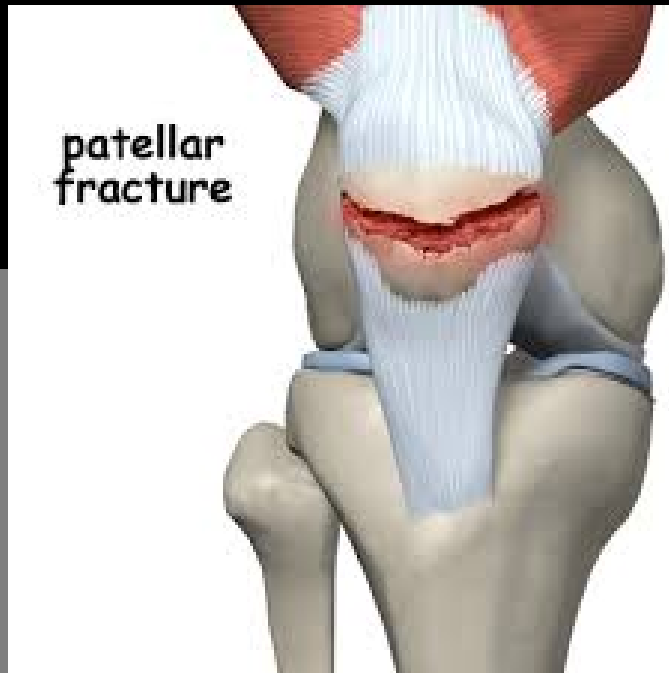
- ⊙ Locking
- ⊙ “Giving out”
- ⊙ Delayed onset swelling
- ⊙ Difficulty walking stairs
- ⊙ Difficulty squatting



HX: Acute Unilateral Cont.

Fracture

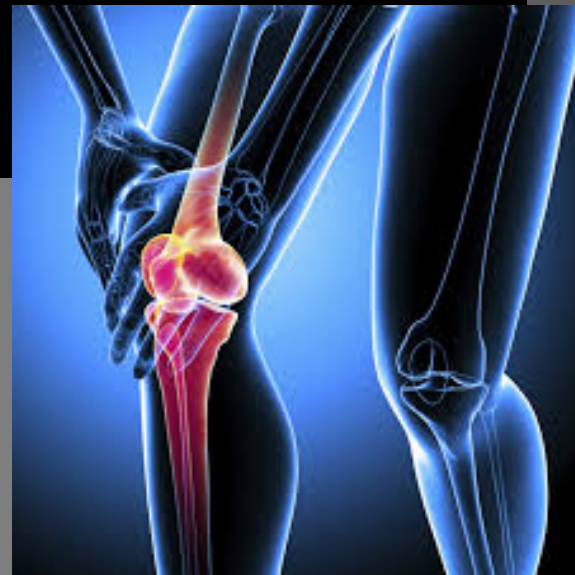
- ⊙ Difficulty, or unable, to bear weight
- ⊙ Inability to flex knee
- ⊙ Local tenderness at fibular head, or patella



HX: Acute Unilateral Cont.

Inflammation Setting

- Check prior hx of gout or pseudogout, and symptoms of rheumatoid disease
- Any hx of sickle cell or hemophilia should be noted
- Inquire into risk factors and symptoms of infectious diseases
 - High-risk sexual activity
 - Streptococcal infection
 - Dental work
 - Heart murmur
 - Etc.



HX: Acute Unilateral Cont.

In the setting of localized swelling

○Swelling occurs in absence of trauma, or diffuse joint inflammation

○Bursitis

○Baker cyst

○Popliteal vein thrombophlebitis

○Poplitea



HX: Chronic Unilateral Knee Pain

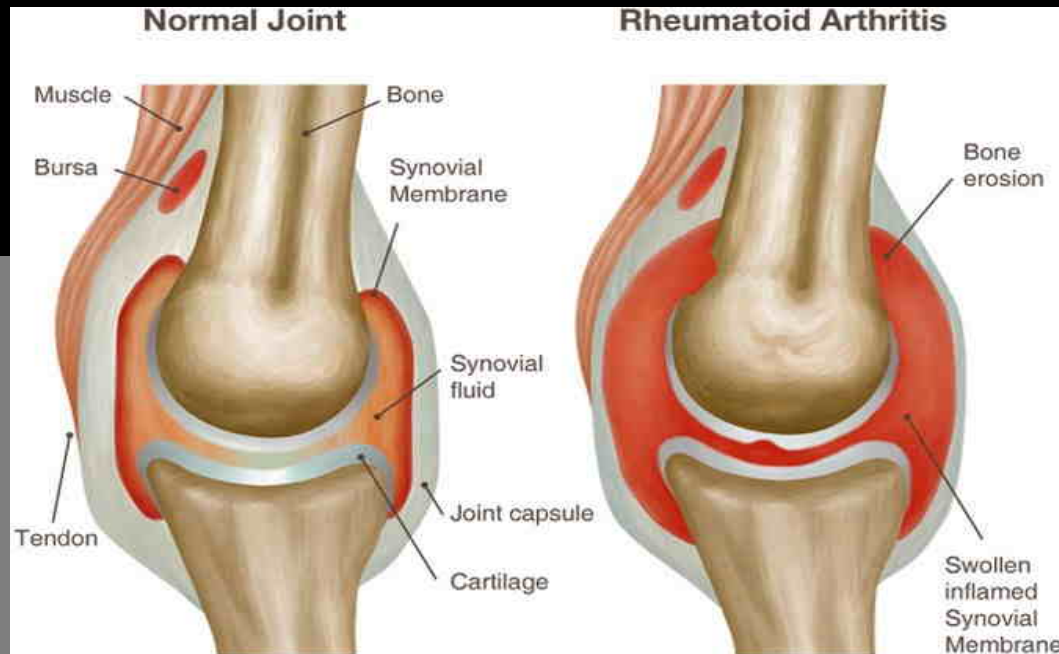
- Previous/Recurrent trauma occurring occupationally
- Pain associated with prolonged walking, standing, stair climbing, etc.
- Knee locking/buckling
- Crepitus
- Focal swelling
- Recurrent acute episodes

Osteoarthritis is the common cause if patient has any 3 of those symptoms.

Chondromalacia patellae is considered if pain is associated with patella, or patellar area.

HX: Other forms of knee pain

- Acute Bilateral
 - Chronic Bilateral
 - Polyarticular presentations
- *All suggest rheumatoid disease



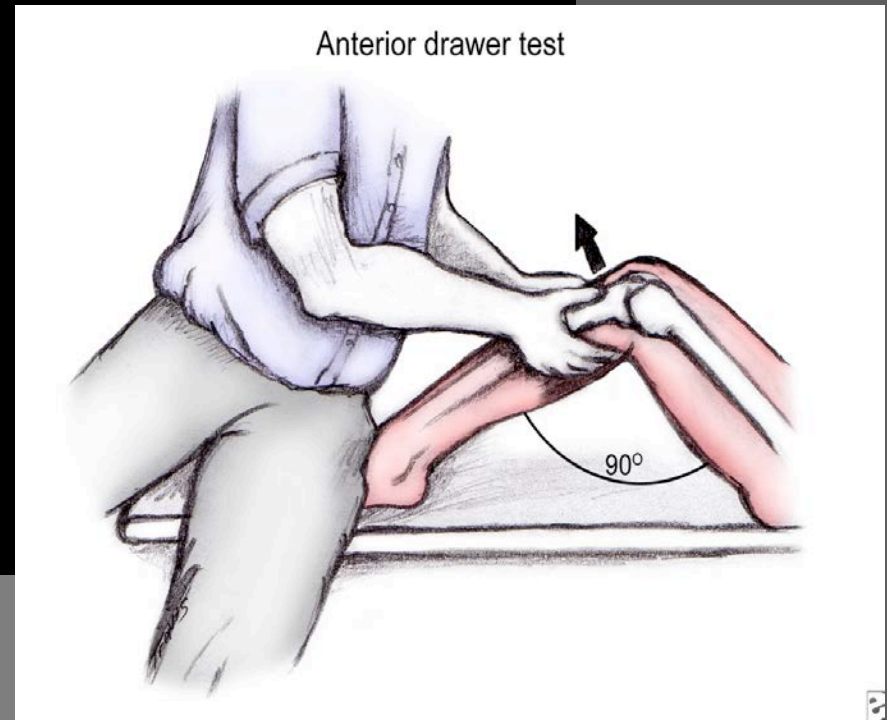
Physical Examination

Acute Knee Injury

○ Identify between fracture, meniscal injury, and/or ligamentous injury.

- Ligamentous tests: Anterior Drawer, Lachman, Pivot
 - Advise MRI if positive
- Meniscal tests: Joint Line Tenderness, McMurray
 - Advise MRI if positive
- Fracture: The Ottawa Decision Rule

*Examine for IT band syndrome



PEx: Continued

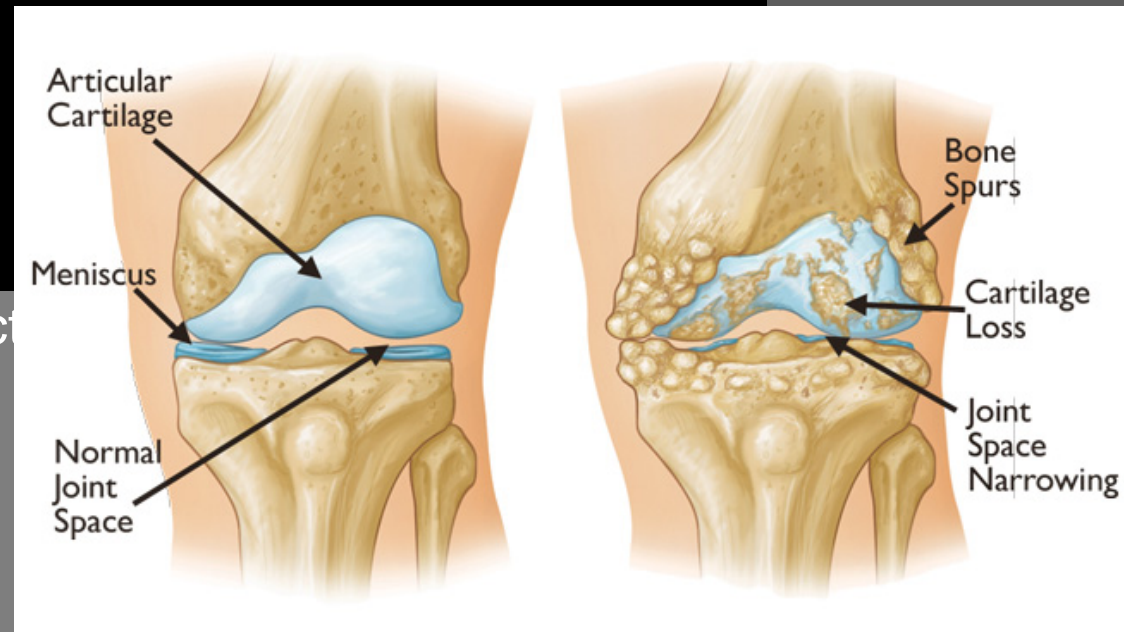
Acute Joint Inflammation

- ⦿ Palpate for warmth, redness, and tenderness of the joint.
- ⦿ Examine for effusion (Increased knee circumference)
 - Potential joint fluid analysis
- ⦿ Examine skin for signs of infection
- ⦿ Possible Baker cyst rupture

PEx: Continued

Suspected Osteoarthritis

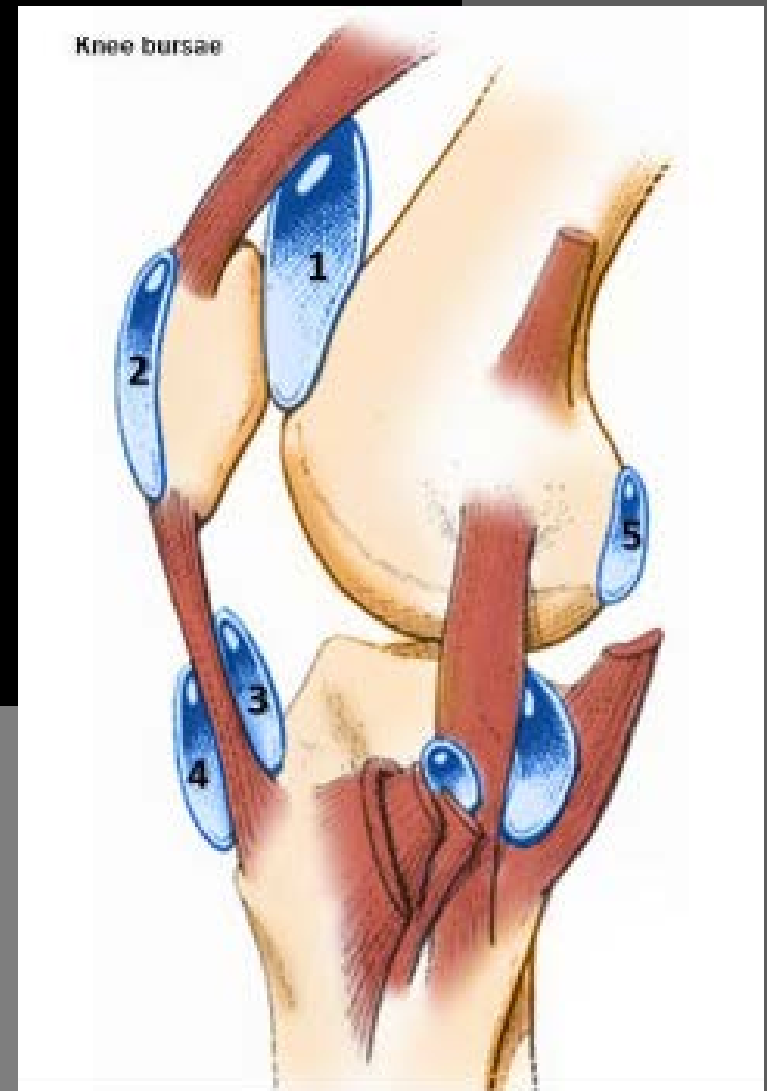
- Examine for distortion of normal contours and irregular bony prominences.
- Measure leg length
- Test ROM
- Look for signs of reduction



PEx: Continued

Bursitis

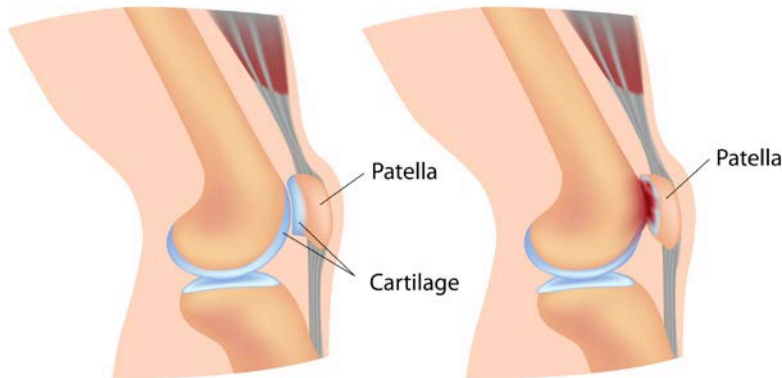
- Palpate for focal tenderness and swelling
- Inflammation w/o signs of effusion
- If bursa is angry, red, tensely swollen, very warm, very tender bursa is suggestive of a septic bursitis.
 - Especially if there is a break in skin



PEx: Continued

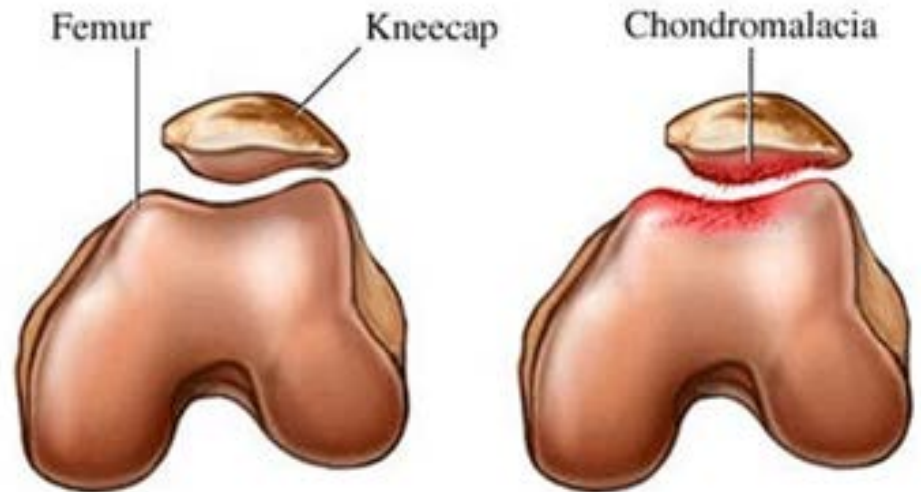
Chondromalacia Patellae

- Pain can be reproduced by applying pressure against the patella with the knee actively extended or by lateral displacement of the patella.
- Palpate patellofemoral joint for tenderness



Normal

Chondromalacia



Knee joints as seen from below