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### Presentation

- 50 yo with h/o diabetes with acute worsening knee pain x 2 days
- No obvious trauma
- Unable to bear weight
- Limited range of motion
- Physical examination
- Large effusion
- Warm

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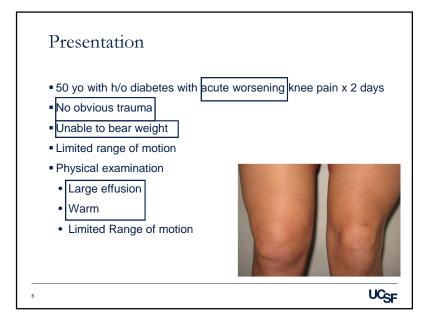
• Limited Range of motion

Infected Knee Aspiration Urgent/Emergent surgery



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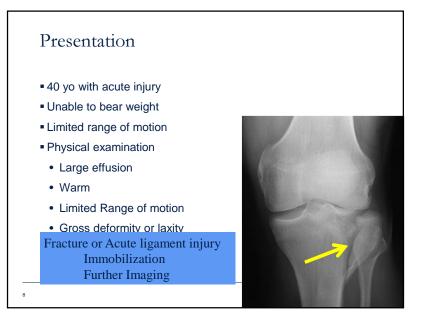
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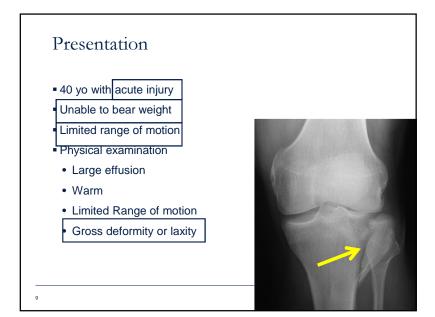


### Infected joint

- Increasing pain
- Limited ROM
- May not have systemic symptoms
- Medical co morbidities
- Aspiration
- >50,000 WBC
- Can be lower for immunocompromised patients
- Differential diagnosis
- Inflammatory arthritis
- Gout can still have secondary infection







### Fractures

- Have to have mechanism
- Treatment depends on location and severity
- Location
- Intra articular require better alignment because it is at the joint

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- Lower extremity require better alignment because of weight bearing
- Severity

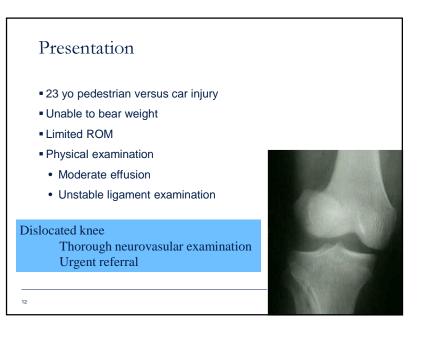
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- Displacement
- Comminution

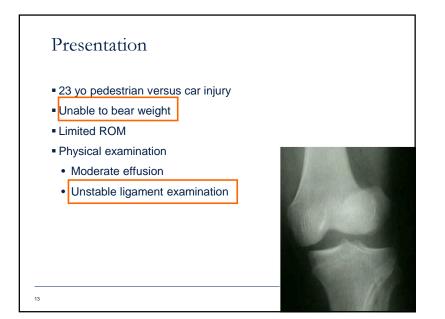
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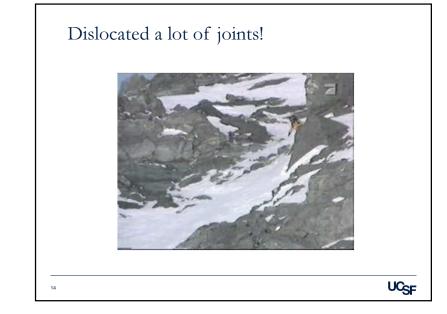
Extremity Fracture

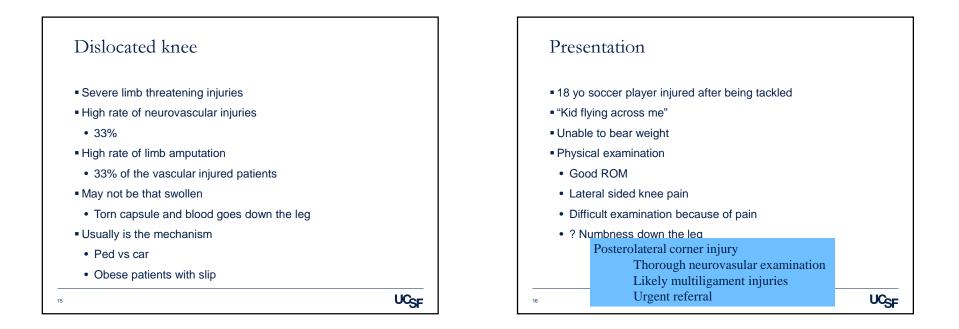
http://come.to/crashes

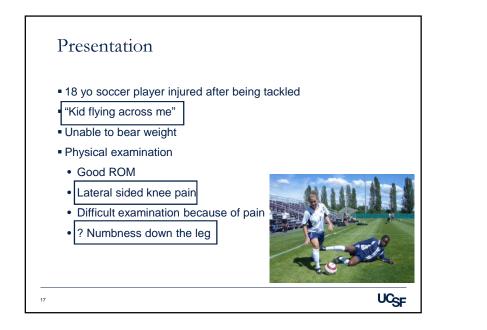


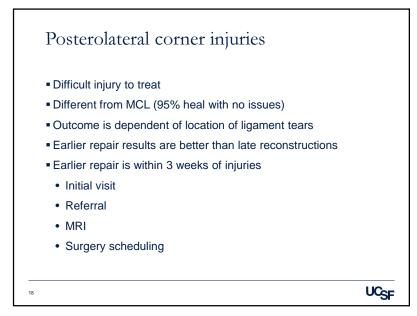
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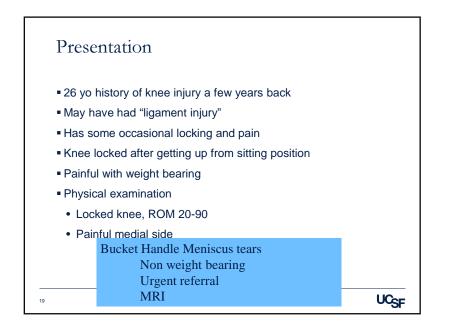








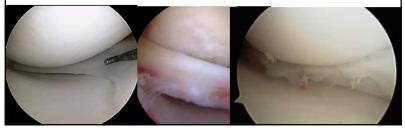






### Bucket Handle meniscus tears

- Medial more common than lateral
- Related to chronic ACL injuries or
- History of ACL reconstruction
- Difficult with weight bearing
- Locked knee appearance
- Urgent treatment



## Presentation

- 12 yo with swelling of the knee
- Not sure when it happened
- Increases after game
- Some limping but able to continue
- Physical examination
- Fairly normal gait

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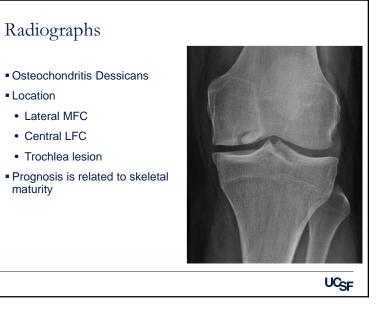
- Moderate effusion
- No pain
- Stable ligament
   No b
- There has to be a diagnosis No benign pediatric knee effusion

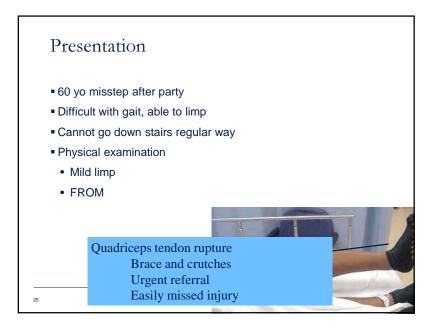
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# Differential for Effusion

- Traumatic
- Fracture
- · Ligament tear
- Bone and cartilage injuries
- Dislocation
- Acute meniscus tears
- Atraumatic
- Synovitis JRA, synovial process
- Congenital cartilage injuries OCD
- · Congenital meniscus injuries discoid





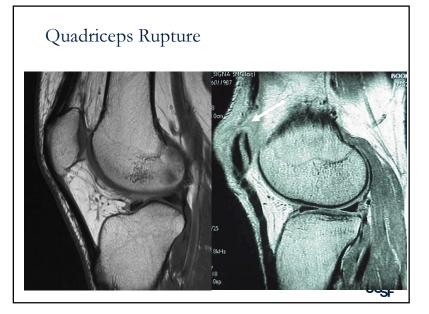


# Quadriceps Rupture

### Mechanisms:

- Indirect Trauma: forced/eccentric muscle contraction with foot planted and knee flexed
- Typically patients older than 40 years
- 3X more common than Patella tendon ruptures
- Bilateral ruptures can occur
- Usually for patients with chronic disease or steroid use
- Normal tendons do not rupture under stress loading

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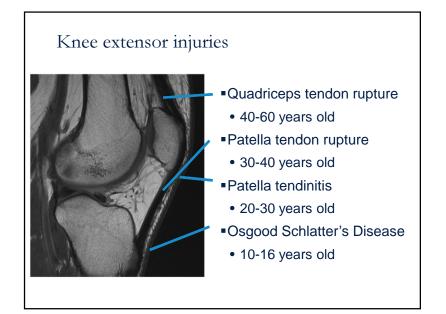
# Quadriceps Tendon Rupture

- Extensor lag on straight leg raise
- Tenderness at superior pole of patella
- Patella may be displaced inferiorly or is sitting low
- Swelling, bruising

# Extensor mechanism injuries Quadriceps or patella tendon tears All full tears require surgical intervention Inability to do straight leg raise is a sign of full tear Early repair results much better than delay reconstruction Tendons may have preexisting injuries or tendinosus



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