

Adolescent Hip Injuries

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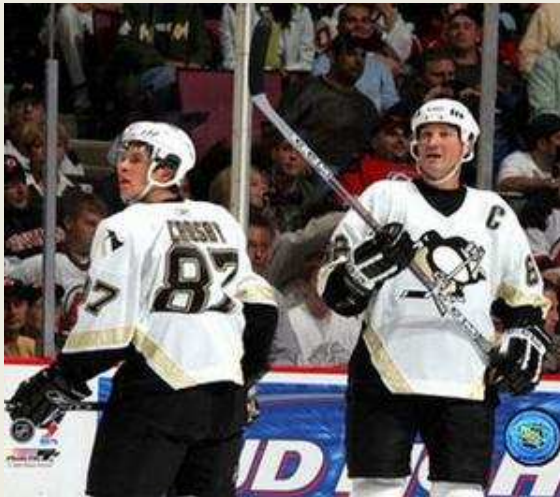
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3 years ago...





Common Problem

- 15% of athletes will have experienced hip pain in the last week & 23% in the last year
- 10% hockey injuries
- 3% football injuries w/ average 12.3 days lost



Jonasson P et al. Knee Surg Sports Traumatol Arthrosc. 2011
Feeley BT et al. AJSM. 2008
Nicholas Sj et al. Sports Med. 2002

Misdiagnosis

- “It is just a groin pull...”
- “Just a hip flexor...”
- Average time to diagnosis = **22 months**

Patient Assessment

Acute (Hours/days)

- Avulsion fracture
- Muscle sprain/tear
- Labral tear
- Hip pointer

Chronic (weeks/months)

- FAI (Impingement)
- Snapping hip
- Tendonitis
- Stress fracture
- Dysplasia

Finger Test

1. FAI
2. Labral tear
3. Hip flexor
4. Adductor



1. Avulsion fx
2. Iliac Apophysitis
3. Hip pointer

1. Snapping hip
2. IT Band syndrome
3. Trochanteric bursitis



1. Hamstring injury
2. Ischial tuberosity avulsion fx
3. Piriformis syn.

Hip Exam - Palpation



Hip Exam - ROM



Impingement Testing



FABER Test



Resistance Testing



OBER Test



Specific Diagnoses

1. FAI
2. Avulsion Fx
3. IT band syndrome/troch bursitis
4. Apophysitis
5. Muscle sprain/tear
6. Hip Snapping
7. Hip pointer

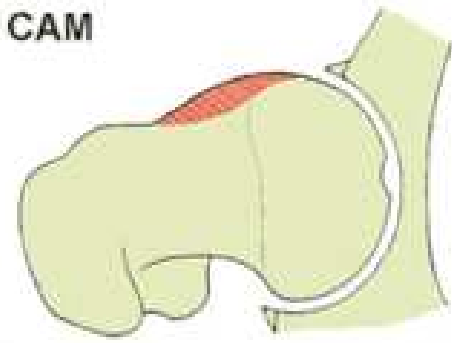
Hip Impingement



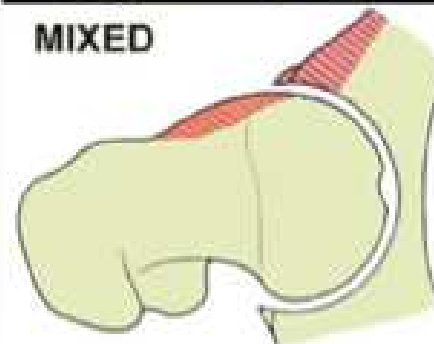
NORMAL



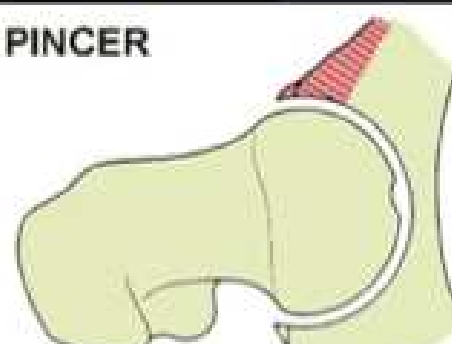
CAM



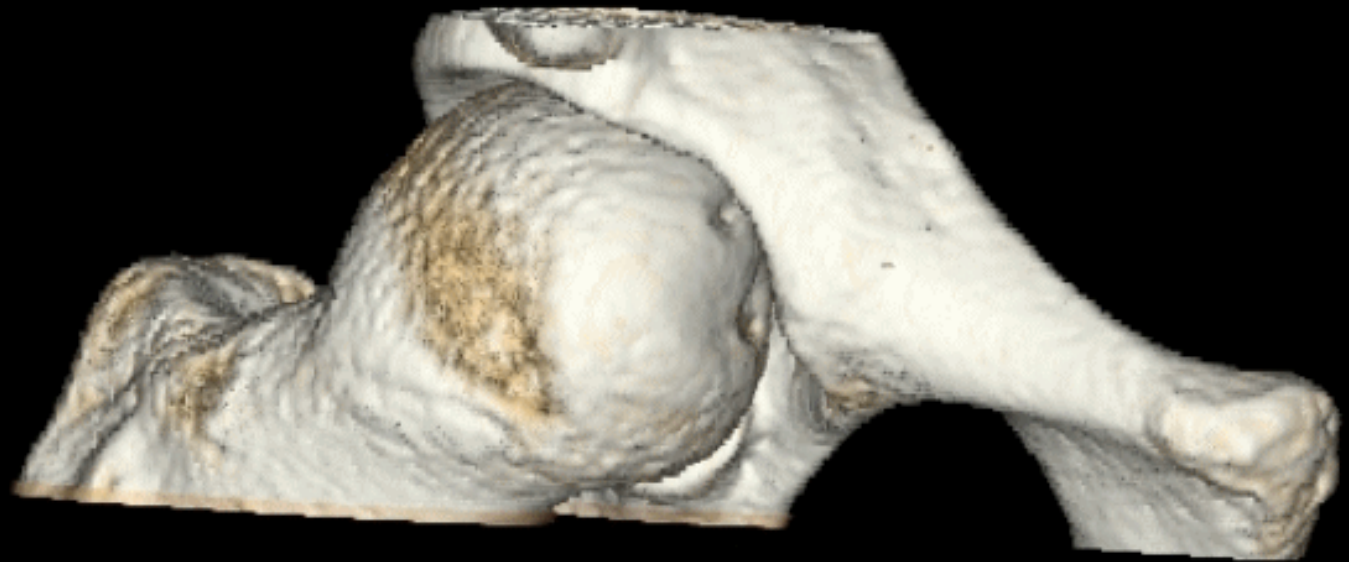
MIXED



PINCER

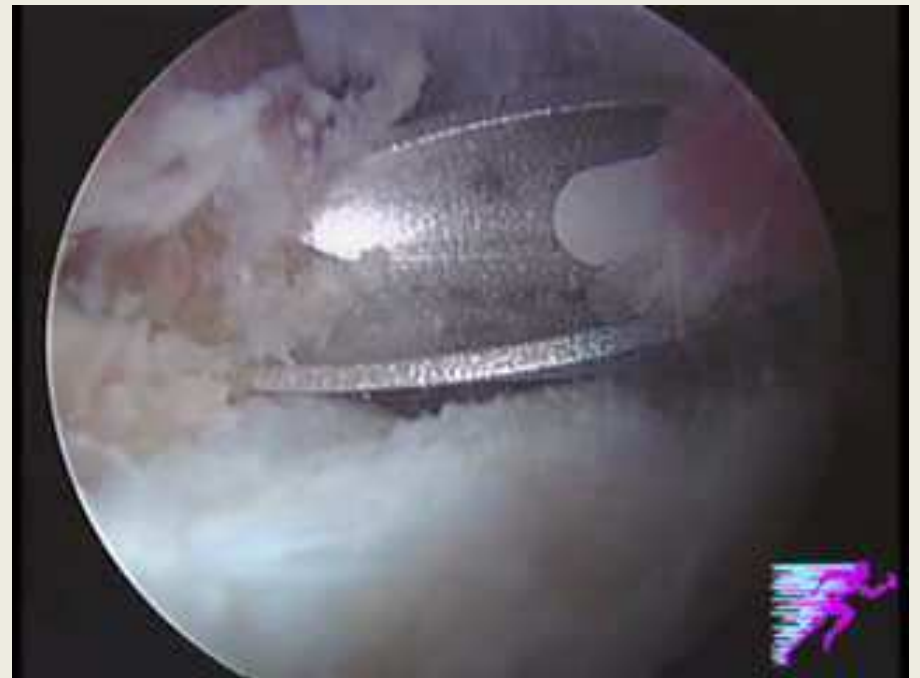


Cam Morphology 2D/3D CT
14yo Male



FAI

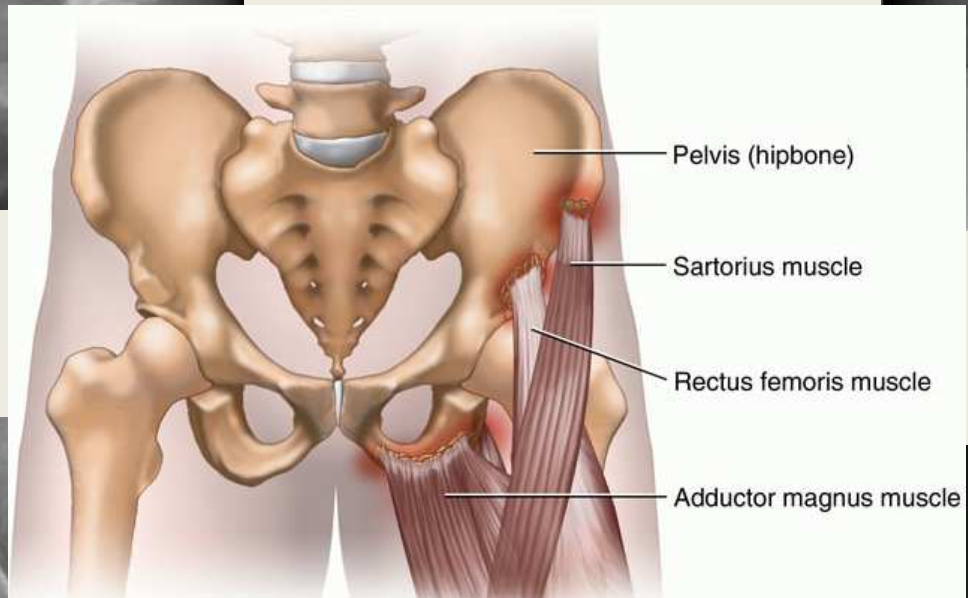
- Extremely common –register (adults) and schmitz studies (kids)
- Develops at age 10
- Siebenrock research association with sports activities
- Treatment: Non-op – avoidance of hip flexion, rest, core strengthening
- Non-op study
- Surgery – My preference for arthroscopy



Avulsion Fractures

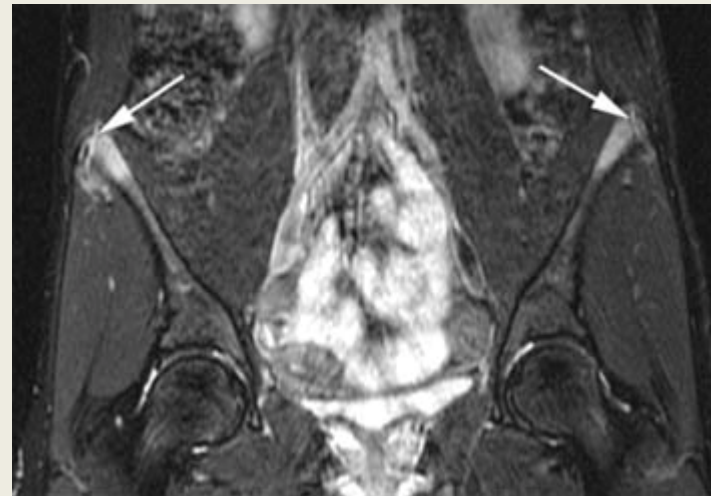
- Key is story. Explosive movement with “pop” and sharp pain
- X-ray is essential
- Non-op. Crutches 4-6 weeks then PT w/ progressive stretching, flexibility,
- *recurrence rate is high so need to go slow

Pelvic Avulsion Fracture



Apophysitis

- Iliac crest & greater troch – similar to osgood schlatter
- Importance of rest and stretching.
- If limping off for 1-2 weeks (may play through pain)

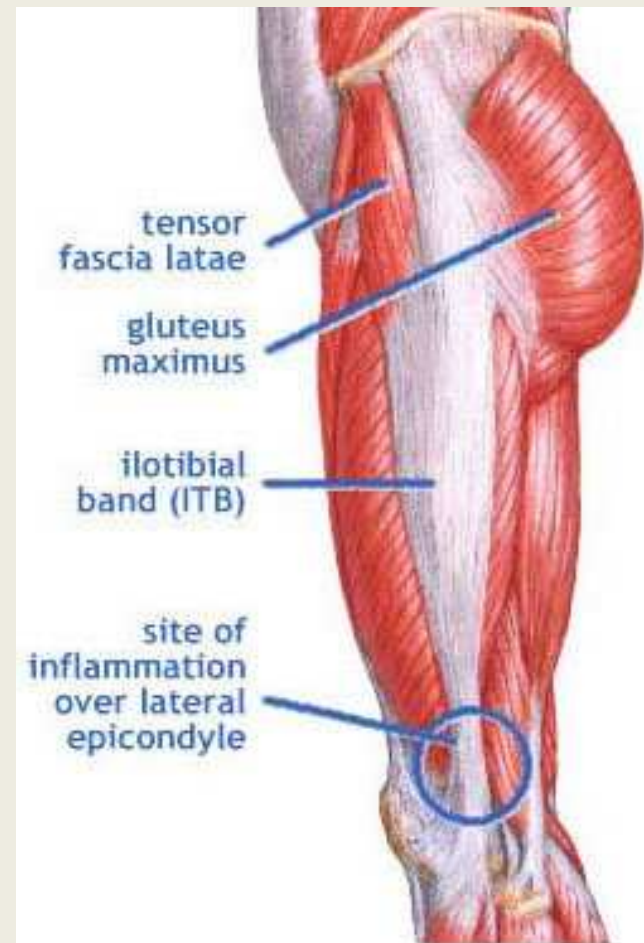


Muscle sprain/tear

- Iliopsoas/hip flexor
- Hamstring
- Adductors
- *key is rest and stretching
- Proper warm-up and flexibility

IT Band syndrome/troch bursitis

- Frequent xc runners, dancers, soccer
- Tight IT band
- Stretching & roller pad
- *Don't inject kids



Snapping hip – Coxa Saltans

- 3 types
- “Hear it when you walk in the room”
- “See it when you walk in the room”
- External – stretching then OR
- Internal – stretching/core strengthening (no evidence in the literature) last resort release my preference for arthroscopic.

Internal Hip Snapping



“Hear it when you walk in the room”

External Hip Snapping



“See it when you walk in the room”

Intra-articular snapping



Never let you guard down



Adolescent with knee pain don't forget the hip!!!

Never let you guard down

- Not all sports related injuries are musculoskeletal (hernia, varicocele, testicular torsion, kidney infections/stones, lymphadinitis)

Take Home Points

- Hip problems – Common
- Surgery rare
- “Pop, immediate pain, and limp” – Refer to MD
- If you think it is a muscle pull, rest 1-2 weeks. If no better, refer to MD.
- Chronic groin pain = FAI/labral tear until proven otherwise