Case Studies in Hip Pain

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Introduction

- History
- Examination
- Imaging
- Case Studies
Disclosures and conflicts

- None
History

- Location of pain
  - Anterior likely hip joint
  - Lateral likely gluteals
- Onset
  - Gradual anterior – think arthritis
  - Sudden anterior – possible labral tear
- Demands on hip joint
- Ask about back pain
Examination

- Volunteer?
- Gait and leg length
- Range of movement
- Flexion Adduction and Internal Rotation (FADIR)
- Flexion Abduction and External Rotation (FABER)
- Don’t forget the back
Imaging – X-ray
Image - Ultrasound

- Useful for Gluteal tears and guided injections (more about that later)
Imaging MRI

- Used for diagnosis of
  - Labral tears – MRA
  - Arthritis not seen on x-ray
  - Femeroacetabular impingement – surgical planning
  - Other diagnosis – Avascular necrosis, Transient osteoporosis, Fracture
Hip arthritis

- Pain worse with weight bearing
- No tenderness unless co-existent gluteal pain
- Usually over 40 yrs
- Imaging – x-ray usually sufficient
- Treatment
  - Simple analgesics
  - Weight loss
  - Avoid end range hip flexion
  - Consider arch support
  - Hip replacement at some point
FAL

- 3 types Cam, Pincer and Combined
- Cam classically seen in young male athletes
- Cam controversial as to management but causes pelvic overload
  - Osteitis pubis
  - Adductor strains
  - “Sportsman’s hernia”
- Pincer seen in Middle aged women
- Increased risk of developing osteoarthritis in Pincer
- Usually too late for management other than arthritis management
Femoroacetabular impingement (FAI)

- Process by which a abnormally shaped hip joint secondarily leads to break-down of the intra-articular structures causing pain and associated dysfunction, followed by premature development of osteoarthritis (Ganz, 2003)
- Pincer type, cam type, and combined impingement
FAI with CAM lesion
FAI with Pincer
Gluteal tendinopathy/Trochanteric bursitis

- Incredibly common cause lateral hip pain
- Female > Male
- Single leg stance
- Lower limb injuries
  - Post tib overload
  - Plantar fasciitis
  - Ankle instability
- Consider cortisone
Gluteal strengthening exercises
Labral tears

- Usually hyperabduction injury
- Irritable hip
- Possible clicking
- Rest/anti-inflammatories initially
- Consider MRA ?cyst
- If cyst – surgery
- Strengthen hip muscles and core
AVN

- Causes
  - Anaemia
  - Steroids
  - Ethanol
  - Pancreatitis
  - Trauma
  - Infection
  - Caissons
- Crescent sign on x-ray
- Crutches initially
- Surgical decompression then replacement
Transient Osteoporosis of Hip

- Pretty self explanatory
  - Transient
  - Osteoporosis
  - Hip
- Protect with crutches
- Vit D and Calcium?
- Reassure will improve – usually 3-6/12
Meralgia Paraesthetica

- Classic history of lateral thigh pain and paraesthesia
- Associated with tight belt, tight clothes or pregnancy/beer gut
- Reassurance usually enough
- Threaten with cortisone injection – no real evidence
- Lose weight or have the baby
Fracture!

- Sometimes it can be missed on x-rays!
Adductor pathology

- Usually kicking athlete
- Medial groin pain
- Can have tearing sensation
- Pain on adductor stretch
- Check not complete tear
- Screen underlying hip joint for arthritis/FAI
Children – Slipped Upper Femoral Epiphysis

- High index suspicion – any child with hip pain
- Usually overweight boys
- Low threshold for x-ray
- Crutches and urgent orthopaedic review
Children - Perthes

- Younger age group than SUFE
- Rare
- Long term prognosis good – most return to full activity 18-24 months
- Limit excessive activity
- Physio for range of movement exercises
Paediatric – Transient Synovitis

- Common – 3% cumulative lifetime risk
- Usually age 3-8 yrs
- Usually well, sudden onset and symptoms <1 week
- Exclude hip infection – Inflammatory markers, temp
- X-ray if they haven’t settled in 1 week
- 50% usually have history of recent URTI
Sportsman’s hernia (Obscure groin pain)
Definition - any condition causing persistent unilateral pain in the groin with no demonstrable hernia!
Multiple possible aetiologies
Investigation tricky
Rest is key
No one surgical operation
Psoas overload

- Psoas muscle runs from vertebral bodies L1-L5, inserts lesser trochanter
- Lies anterior to hip joint
- Painful with hip joint pathology
- Can be difficult to differentiate psoas strain from hip pathology
- Psoas sheath cortisone injection can be useful
- Psoas stretch and strengthening
Piriformis

- Fadir position will stretch piriformis and give lateral pelvic pain
- Always screen the back
- Tender deep gluteal region, palpate a sausage
- Find and treat cause – I have NEVER seen this as an isolated diagnosis
Tensor Fascia Lata

- Presents as pure lateral rather than posterolateral hip region pain
- Usually biomechanical errors
- Glut weakness - identify and treat cause of weakness
- Education and retraining
- Same process as hamstring tendinopathy/overload
One exercise to rule them all!
Conclusion

- Multiple causes of hip pain
- Examination will indicate pain is from the hip, but not why
- X-ray is incredibly useful, but poorly reported
- One exercise to rule them all
- Avoid end range hip flexion
Questions