

A guide to the diagnosis and management of hip pain

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Learning Objectives

- Feel confident to take histories from patients with hip problems
- Know when to refer patients for imaging of the hip
- Understand common hip conditions
- Be aware of the local hip pathway within Sussex MSK Partnership (central)

This is an interactive talk

Please feel free to ask
questions

History

Pain History

- Location
- Radiation
- Aggravating factors
- Time

- Night pain

Where is the pain?

- Lateral (flat hand / point)
- Buttock
- Anterior (C-sign)
- Knee

Specific Hip questions

- What aggravates the pain?
- Specific movements
- Clicking/ Snapping / Popping
- Instability
- Stiffness (Toenails)
- Walking Aids (which hand ?)

History

- Age /Occupation of Patient
- Duration of Symptoms
- How did the pain start?
- Trauma / Previous surgery
- Effect on ADL
- Family History
- Other Arthropathies

Total Hip Extra Questions

For loosening

- Pain rising out of a chair
- Thigh pain

Instability

- Number of dislocations
- How does it dislocate?

Back questions

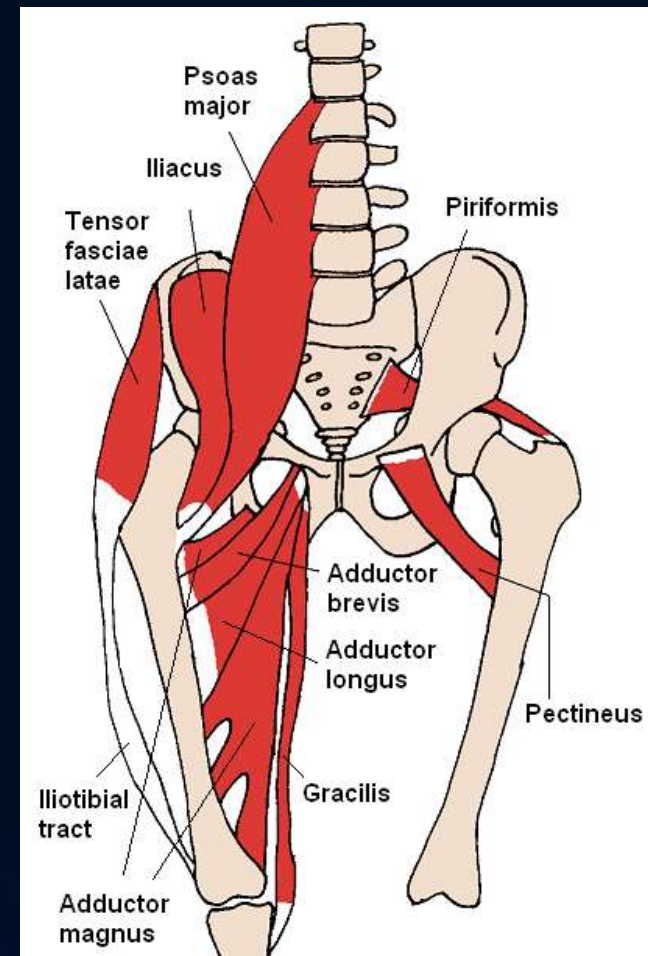
- Lumbar spine or Buttock Pain
- Numbness / Tingling / Weakness
- (Urinary disturbance)



Location of pain - Lateral

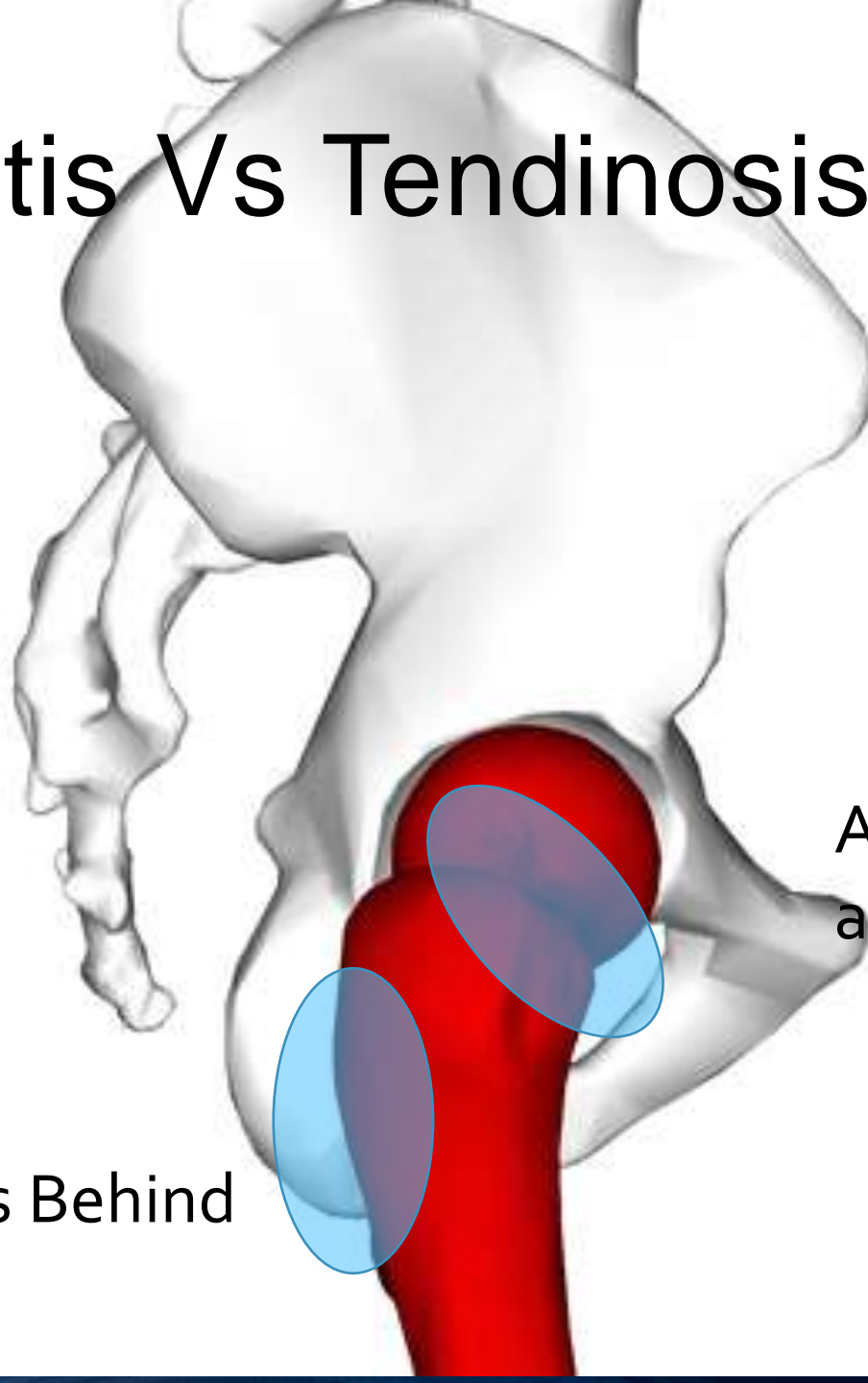
Top 3

- Trochanteric Bursitis (Lateral Hip Pain Syndrome)
- Gluteus Medius Tear
- External Snapping Hip



Bursitis Vs Tendinosis / Tear

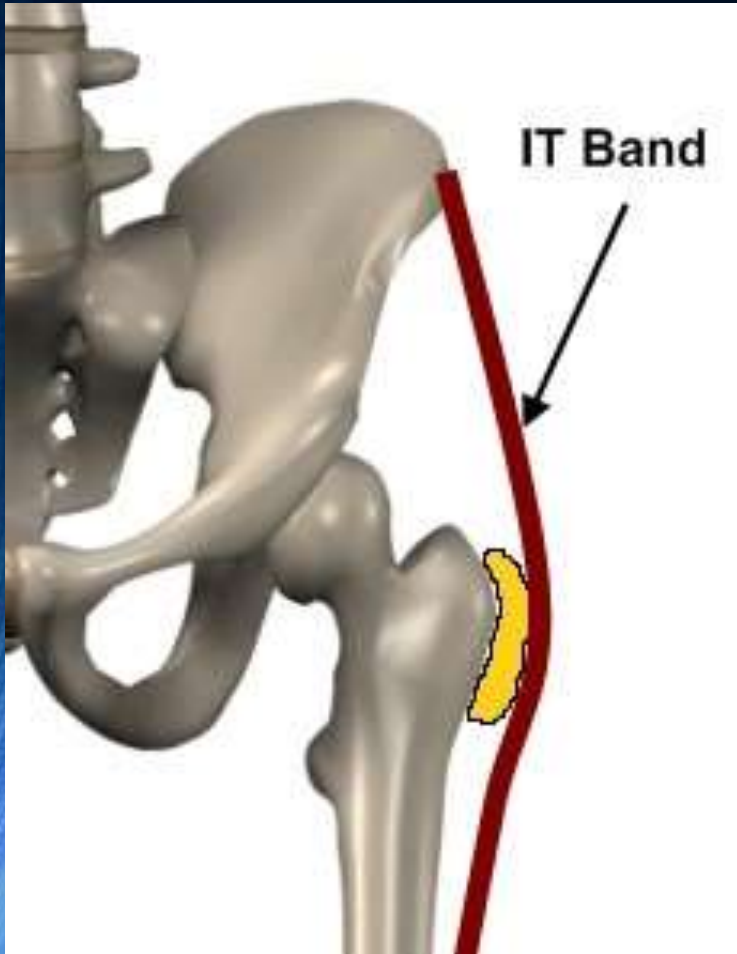
Pain Location



Abductor tendon
antero-superiorly

Bursitis Behind

Trochanteric Bursitis



- Primary = Rare
- Secondary to other joint problem, causing abnormal gait / muscle function

Trochanteric Bursitis

- Usually a symptom, not a stand alone diagnosis
- Examine other joints and spine
- Main treatment is correct cause / physio
- Only inject in conjunction with physio (max X2)
- Refer if still has pain despite good course of physio

Trochanteric Bursitis

- New developments
- PRP
- Hyaluronic acid injections?



Trochanteric Bursitis - Surgical options

- Limited
- If cause can be identified - correct cause, e.g. revise hip with abnormal biomechanics
- Debride bursa and surgical lengthening of IT band.
- Often tendinosis seen at time of surgery
- Extensive rehab required

Gluteus Medius tear

- Usually affects elderly
- Unable to Abduct leg when lying on side
- Trendelenberg sign
 - Acute Tear
 - Usually sudden onset severe lateral hip pain and limp (stumble or trauma)
 - Pain settles after a few weeks, but limp does not
 - Chronic Tear
 - Trendelenberg gait

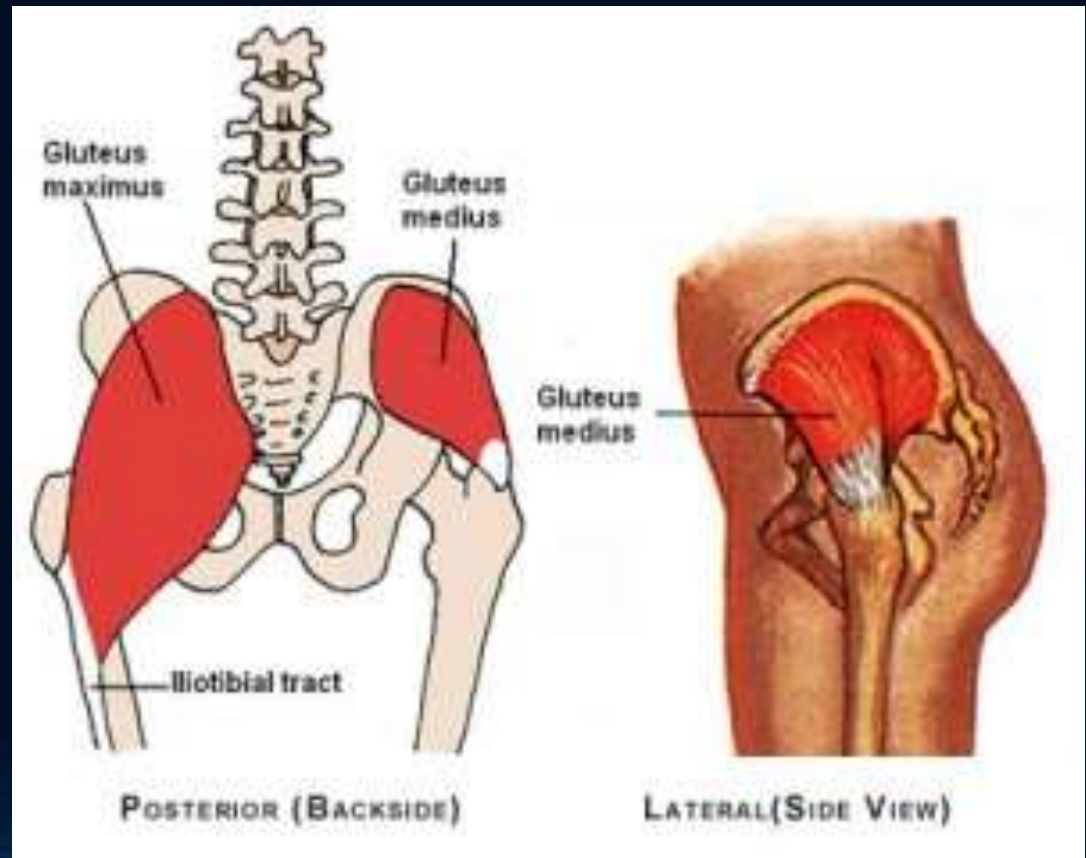


Gluteus Medius tear

Management (Rotator Cuff Tear of Hip)

- Investigation : No primary care investigation possible
- MRI can be difficult to interpret

Refer to MSK



Gluteus Medius tear

- **Acute :**

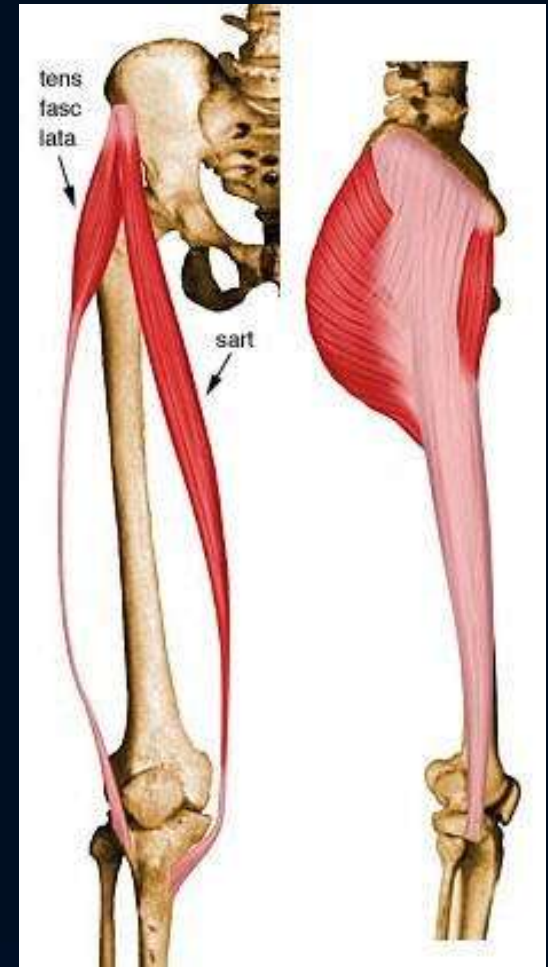
- Refer urgently
- Best surgical results within 6 weeks of tear

- **Chronic**

- Trial of physio
- Refer – assess for surgery

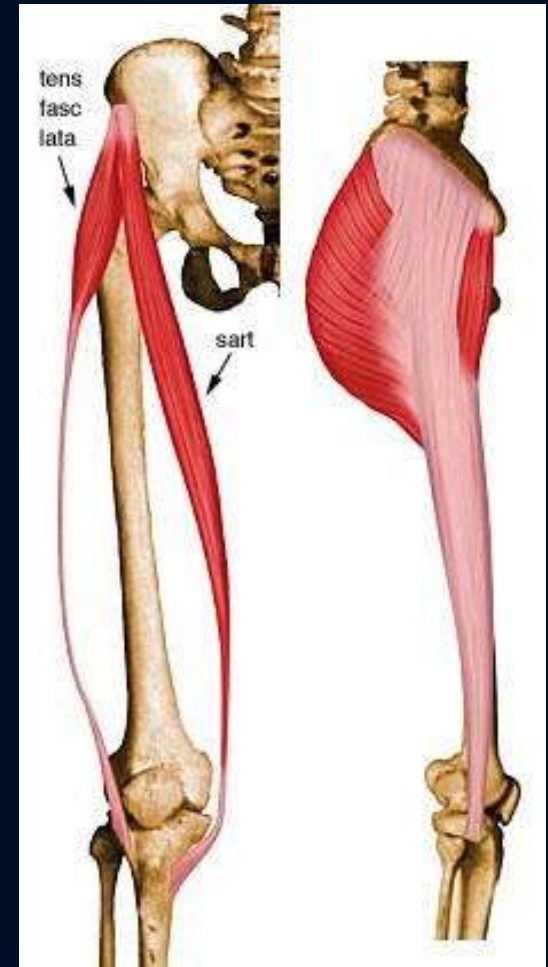
External Snapping Hip

- Usually Young Females (12 to 30)
- Party Trick
- Can be painful
- Tough rope like Ilio-tibial band rubs over greater trochanter



Snapping Hip

- History
 - Patient sometimes describes it as a dislocation
 - Snapping sound
 - +/- pain
- Examination
 - Ask patient to demonstrate
 - Hand over trochanter and rotate leg – feel clunk
- Investigation
 - None needed



Snapping Hip - Management

- Physio – TFL stretches
- Avoid party trick

- Last resort
 - Refer for surgery – Usually successful but scar
 - ITB lengthening

Lateral Hip Summary

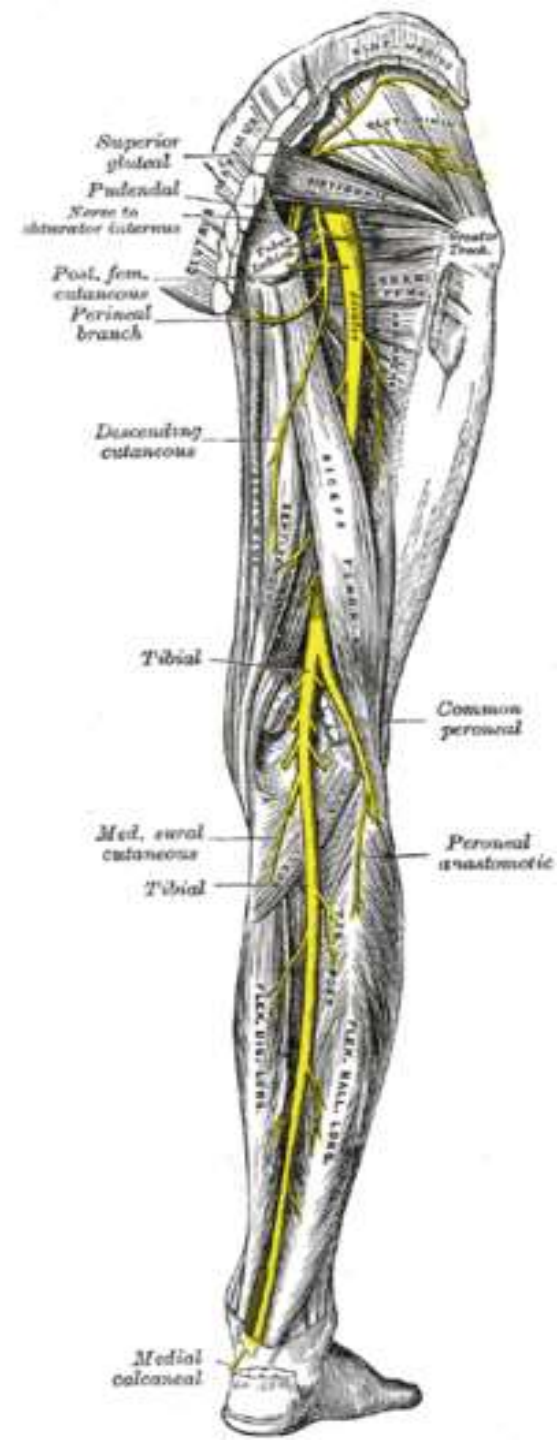
- Patient describes pain with a flat hand or points laterally
- Most conditions are managed by physio
- Injections have little benefit as a stand alone management
- Watch out for Acute Muscle tears

Buttock Pain

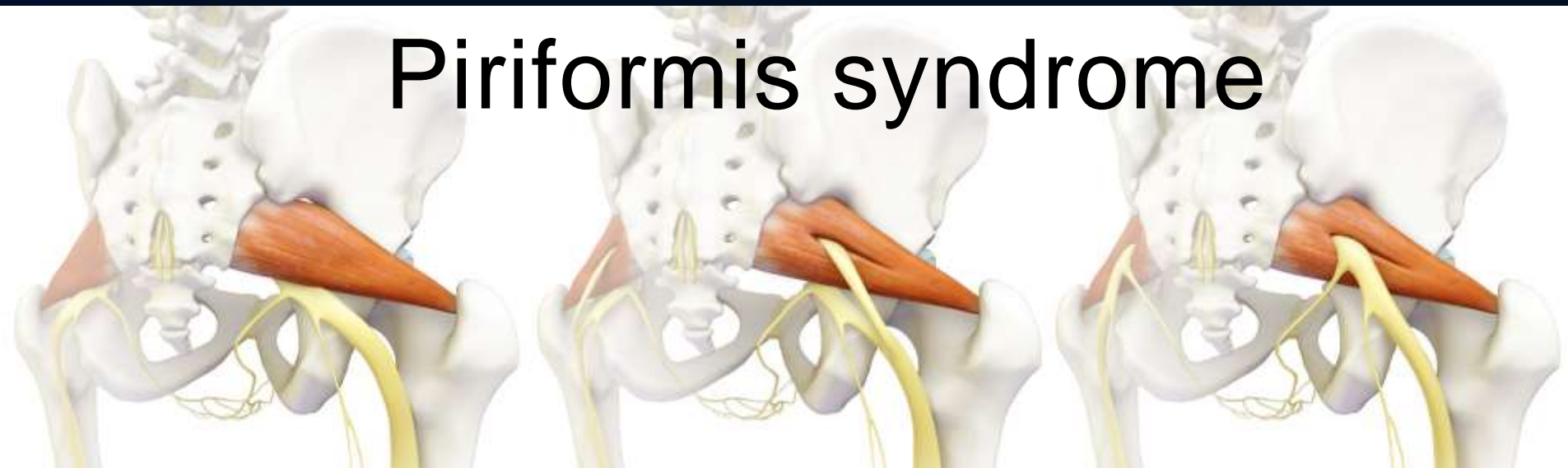


Buttock Pain

- Usually Spinal Cause
- Very rarely hip is a cause
 - Piriformis syndrome (Part of Deep Gluteal syndrome)
 - Posterior impingement.
- Refer to Spinal Triage



Piriformis syndrome



- Is a label for sciatica without obvious spinal cause
- Probably double crush syndrome
- 17% of Sciatic nerves pass through piriformis rather than under it

Piriformis syndrome

Other causes;

- Inactive gluteal muscles - people spending too much time with hips flexed
- Overactive short hip flexors
- Patient uses gluteal synergists – hamstrings, adductor magnus and piriformis to extend hip.



Piriformis syndrome

Management

- Avoidance of contributing factors
- Short course anti-inflammatories
- Physiotherapy – core stability, flexor / lateral stretches and glut work

Anterior Groin Pain



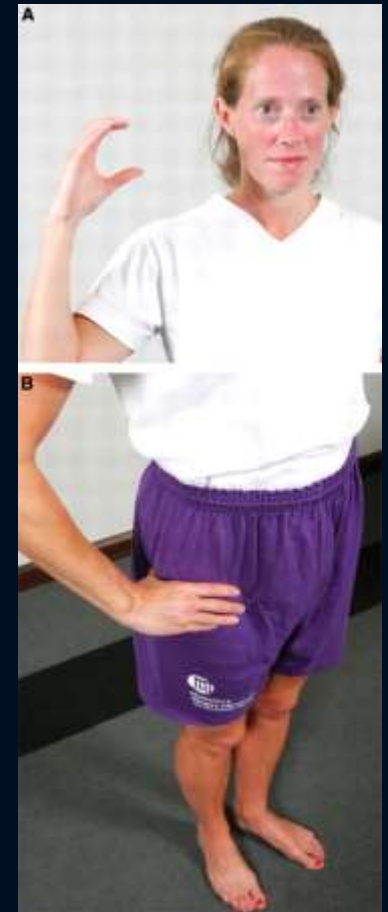
Causes of anterior groin pain

- Hip
 - Intra-capsular (ie joint)
 - Extra-capsular (muscles and tendons)
- Spine (L5 /S1 radiculopathy)
- Herniae
- Vascular
- Gynaecological



C-Sign

- Usually Specific to hip problem
- Patient makes a 'C' shape with thumb and index finger, encompassing hip

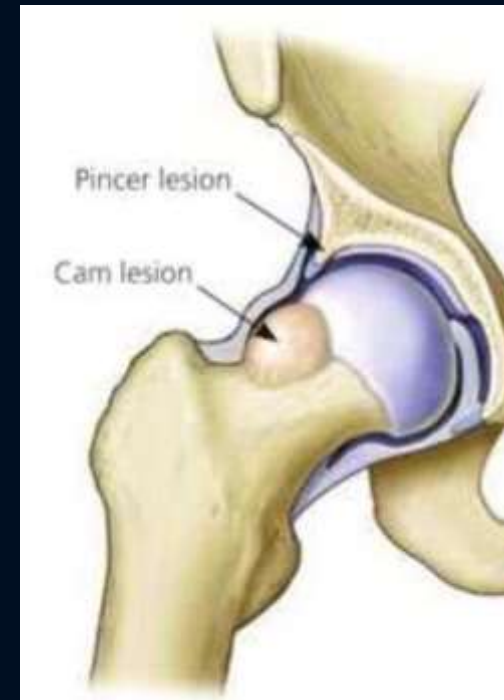


Intra-capsular Pathology

- Abnormal Shaped Hip
 - Femoro Acetabular Impingement (FAI)
- Degenerate Hip
 - Femoro Acetabular Impingement (FAI)
 - Cartilage damage (Arthropathy)
- Abnormal Bone
 - Avascular Necrosis
 - Impending Pathological Fracture

Femoro – Acetabular Impingement

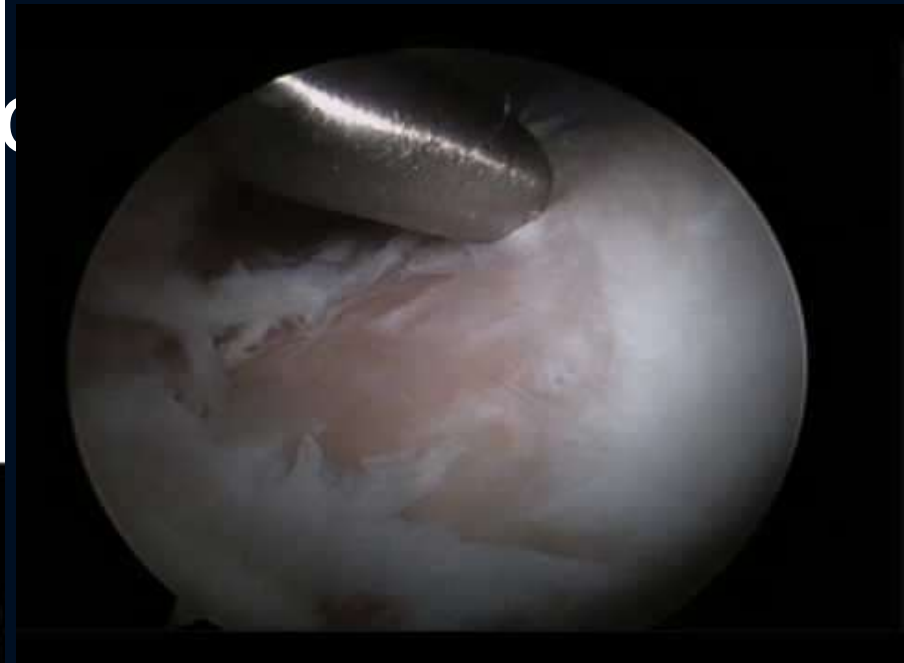
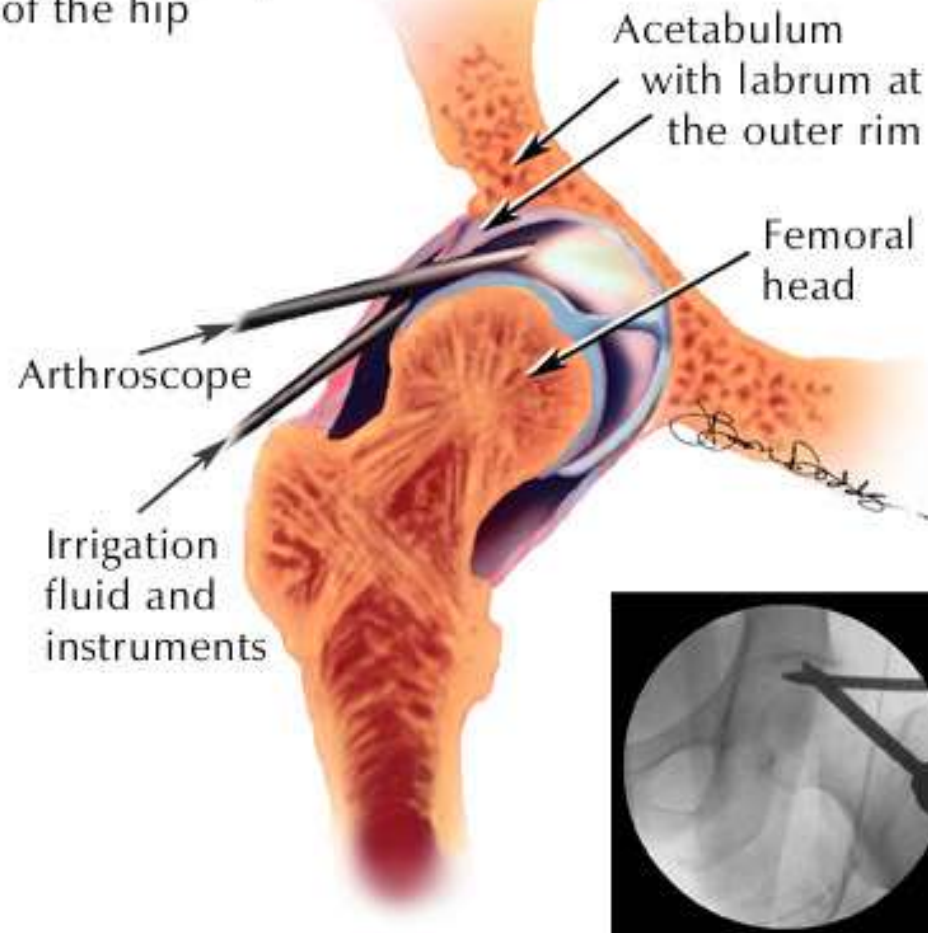
- Abnormal contact between femoral neck and acetabular structures
- 2 sorts
 - CAM
 - Pincer







Arthroscopic procedure of the hip





What is the pathogenesis?

CAM TYPE (COMMONER)

- Male > Female
- Overuse (>90% of Premiership players)
- Genetic component
- Externally rotated hips

PINCER TYPE

- Female >> Male
- Genetic
- Idiopathic

Outcomes of Arthroscopy

- Will it stop OA? – probably not – reduces rate of arthritis
- What does it do?
 - Reduces symptoms
 - Allows sports
 - Probably reduces time to replacement

Type of patient

- Usually sporty
- Any age / either sex



How does the patient present?

Symptoms

- Groin pain – movement related (not constant)
- Catching
- Feelings of instability
- Occasionally popping or snapping sound

- Often diagnosed as muscle sprain

How does the patient present?

Signs

- Impingement test – Flex hip and internally rotate in increasing degrees of adduction
-recreates pain

Management

- Modify behaviour (stop breast – stroke, road running, rugby, golf)
- Physio – Centralises hip. Does not work for all
- Referral (specialist Xrays/ scans required)

Arthritis

- Pain
- Stiffness
- Night pain
- Lack of function



Arthritis

- Early management
- Analgesics (WHO ladder)
- Advice – lifestyle, exercise
- Physio
- Viscosupplementation
- Shoewear



What investigations should be ordered?

- X-ray – standard AP (GP)
- MRI (arthrogram)
- 3D CT

When to refer with OA?

- Each patient different
- When it stops them doing what they want to do
- Night pain
- Not stiffness
- Patient reassurance

Avascular Necrosis



Causes

- Alcoholism
- History of steroids
- Post trauma
- Caisson disease (decompression sickness)
- Vascular compression,
- Hypertension
- Vasculitis
- Arterial embolism and thrombosis,
- Radiation damage
- Bisphosphonates
- Sickle cell anaemia,
- Gaucher's Disease
- Deep diving
- Idiopathic

- Brighton Patients – anti-HIV medication

Avascular Necrosis



Presentation

- Pain
 - Usually Severe
 - Night Pain
 - Limp
 - Painkillers no real help
- Examination
 - May have full range of motion
 - Pain worse at extremes of motion
 - Pronounced limp

Extracapsular Causes of Hip Pain

- Muscle tears / sprains (inc Gilmore's Groin)
- Tendinopathies
- Ilio-psoas syndrome (Internal Snapping Hip)
- Stress Fractures in Runners

Muscle Tears / Sprains

- Usually sport related
- If localises pain above inguinal ligament = hernia
- Management
 - Rest / NSAIDS
 - Refer to physio if not settling
 - No investigation needed initially
 - If still not settling refer to hip clinic

Tendinopathies

- Usually affect athletes
- Repetitive motion
- Commonest = Ilio-psoas syndrome (Internal Snapping Hip)
 - Ilio-psoas tendon snaps over hip joint
 - Tender anteriorly over hip
 - Normal internal rotation
 - Refer to physio – stretches
 - If no improvement - refer

Summary of anterior groin pain

- Look for other causes
- Impingement sign needs physio as a minimum
- Xray if suspect osteoarthritis
- Refer for THR if night pain or patient not doing what they want to do
- Sprains/strains – if below the inguinal ligament then refer for physio

Thank you

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Stress Fractures

- Common 5-30% of athletes
- Most common in tibia / foot
- Can occur around pelvis / hip
- Seen in runners

Stress Fractures

- Predisposing factors
- Female
- Caucasian
- Rapid increase in training program
- Hormonal / nutritional disturbance

Stress Fractures

- Types
- Pubis / Pubic rami
- Sacrum (usually osteoperotic)
- Femoral neck
 - Tension
 - Compression

Stress Fractures

Symptoms

- Variable
- Can be mild, such as experiencing increasing pain throughout run
- Or more severe – so that patient can not weight bear

Stress Fractures - Signs

Difficult and variable

- Tender over bone
- Pain at extremes of rotation of hip
- Antalgic gait

Stress Fractures - Management

- Imaging
- Mostly conservative - ? Tension fracture neck of femurs needs operation

Painful Total Hip Replacements

Infection

- Usually globally painful
- Night pain
- Constant pain
- Occasionally fevers and sweats

- Raised inflammatory markers (usually)

Painful Total Hip Replacements

- Trochanteric Bursitis
 - Lateral pain
 - Can not lie on it
 - Abnormal gait
 - Consider metal on metal hip problems

- Trial of physio
- Inject carefully
- Look for other causes – e.g. contralateral knee
- Surgery = last resort

Painful Total Hip Replacements

- Muscle tears
 - Gluteus medius tears (rotator cuff of hip)
 - Pain at tip of greater trochanter
 - Pain on abducting hip
 - Trendelenburg sign
- Trial of physio
- Surgery – limited expectations

Painful Total Hip Replacements

- Metal on Metal Damage
 - If concerned refer
 - Can be relatively asymptomatic until catastrophic damage occurs
 - Chromium and cobalt blood levels useful screening tool
 - Usually ache in hip, +/- trochanteric bursitis.
 - Tender to palpate anteriorly

Painful Total Hip Replacements

- Loose prosthesis
- Thigh pain
- Groin or thigh pain getting up from sitting
- Feelings of instability / increasing dislocations

Painful Total Hip Replacements

- Back problems?
- Knee problems?
- Herniae?

- Small print

What should we be doing?

- BOA recommends orthopaedic review at 5 yearly intervals with an Xray
- Current resources?
- If you are concerned – then refer