When the patient presents at the GP surgery with "Hip pain"



PRACTITIONERS ASSOCIATION

The Arthroplasty Care Practitioners Association

Promoting quality care for arthroplasty patients



GP with an interest in Pain Management



How common is hip pain?

- Around 450 patients per 100,000 population will present to primary care with hip pain each year
- In my practice of 20,000 population that means 90 patients a year.

 Of these, 25% will improve within three months and 35% at twelve months

Bierma-Zeinstra SM, Lipschart S, Njoo KH, Bernsen R, Verhaar J, Prins A, Bohnen AM. How do general practitioners manage hip problems in adults? Scandinavian Journal of Primary Health Care 2000;18-3:159-64.

When the patient presents at the GP surgery with "Hip pain"

Is it from the hip?





Localisation of Hip Pain Can be divided into 3 anatomical areas:

- anterior hip and groin,
- posterior hip and buttock

Posterior and buttock

lateral hip

Anterior and groin Anterior Hip & Groin • TRUE HIP PAIN: **OA** hip Femoroacetabular impingement Labral tear Avascular necrosis Septic arthritis

Anterior Hip & Groin • GROIN PAIN Sports hernia (Gilmore groin) **Groin strain** Pubic symphysis dysfunction **Iliopsoas abscess** Meralgia paraesthetica

Posterior & Buttock Pain

- Gluteal muscle tear
- Ischial bursitis
- Pyriformis syndrome
- Sacroiliitis
- Sacroiliiac joint dysfunction

Lateral Hip Pain

- Trochanteric Tendinitis
- External Snapping Hip
- Iliotibial band thickening

Referred Pain

• Lumbar spine



Anterolateral view of the lower extremity. The black thick line represents the sharp, radiating pain, which often has a dermatomal distribution. The sharp radiating pain in S1 radiculopathy is indicated by interrupted lines. It tends to be in the center of the posterior thigh and calf. The diffuse gray areas represent the poorly localized dull ache. The circles indicate areas where pain may concentrate. The area covered by small dots indicates the location of paraesthesiae and sensory impairment. **A.** S1 radiculopathy. **B.** L5 radiculopathy. **C.** L4 radiculopathy. **D.** L3 radiculopathy.

Gait Testing



Hip range-of-motion testing

(A) Abduction

(B) Adduction



(C) Extension

(D) Internal and external rotation

FABER test

Flexion & abduction



External rotation

FADIR test

Flexion



Adduction & internal rotation

Log Roll Test - Freiberg test

Patient's leg is Extended & relaxed on examination table



internally and externally rotates

Ober test (passive adduction)



Tensor fasciae latae

Gluteus medius

Gluteus maximus

Red flags

- Acute unilateral hip pain of sudden onset and severe enough to cause nocturnal wakening is a red flag scenario.
- Urgent X-ray should be arranged to exclude a fracture or AVN of the femoral head.
- A past history of cancer, fever, malaise, night sweats, immune deficiency and iv drug use are other red flags.

Hip Osteoarthritis



Degenerative hip disease is the most common diagnosis in the adult and is the long-term consequence of predisposing conditions.

Hip Osteoarthritis

- Osteoarthritis may not be progressive and most patients will not need surgery, with their symptoms adequately controlled by non-surgical measures.
- Symptoms progress in 15% of patients within 3 years and 28% within 6 years.

Lievense AM, Koes BW, Verhaar JAN, Bohnen AM, Bierma-Zeinstra S. Prognosis of hip pain in general practice: a prospective followup study. Arthritis Care and Research 2007;57-8:1368-74.

Oxford Hip Score

- 1. How would you describe severity of the pain you usually have in your hip?
- 2. Have you been troubled by pain from your hip in bed at night?
- 3. Have you had any sudden, severe pain (shooting, stabbing, or spasms) from your affected hip?
- 4. Have you been limping when walking because of your hip?
- 5. For how long have you been able to walk before the pain in your hip becomes severe (with or without a walking aid)?
- 6. Have you been able to climb a flight of stairs?

Oxford Hip Score

- 7. Have you been able to put on a pair of socks, stockings or tights?
- 8. After a meal (sat at a table), how painful has it been for you to stand up from a chair because of your hip?
- 9. Have you had any trouble getting in and out of a car or using public transportation because of your hip?
- 10. Have you had any trouble with washing and drying yourself (all over) because of your hip?
- 11. Could you do the household shopping on your own?
- 12. How much has pain from your hip interfered with your usual work, including housework?

Oxford Hip Score (Total is up to 48)

- Score 0 to 19
- May indicate severe hip arthritis. It is highly likely that you may well require some form of surgical intervention, contact your family physician for a consult with an Orthopaedic Surgeon.
- Score 20 to 29
- May indicate moderate to severe hip arthritis. See your family physician for an assessment and x-ray. Consider a consult with an Orthopaedic Surgeon.
- Score 30 to 39
- May indicate mild to moderate hip arthritis. Consider seeing you family physician for an assessment and possible x-ray. You may benefit from non-surgical treatment, such as exercise, weight loss, and /or anti-inflammatory medication
- Score 40 to 48
- May indicate satisfactory joint function. May not require any formal treatment.

Greater trochanteric pain syndrome



Pain area in trochanteric bursitis

External Snapping Hip



Gluteus maximus tendon or iliotibial band catch on the greater tuberosity on hip flexion

Meralgia parasthetica

• Anterior thigh hypesthesia, dysesthesia



Psoas muscle lesions



The psoas is a flexor and external rotator of the hip and can be injured in sprinting and kicking and in high knee lift exercises.

Internal Snapping Hip Syndrome



The iliopsoas tendon snaps over the femoral head or iliopectineal eminence

Pubic symphysis pain



Septic Arthritis



Other causes of groin pain

• Hernia

- Inguinal lymphadenopathy
- Iliopsoas abscess (TB)

	CAUSES O	F HIP PAIN	
		Cause	
Age group	Intra-articular	Periarticular	Referred
Childhood (2-10 years)	Developmental dislocation of hip Irritable hip Rickets Perthes' disease	Osteomyelitis	Abdominal
Adolescence (10-18 years)	Slipped upper femoral epiphysis Torn labrum	Trochanteric bursitis Snapping hip Osteomyelitis Tumours	Abdominal Lumbar spine
Early adulthood (18-30)	Inflammatory arthritis Torn labrum	Bursitis	Abdominal Lumbar spine
Adulthood (30-50 years)	Osteoarthritis Inflammatory arthritis Osteonecrosis Transient osteoporosis	Bursitis	Abdominal Lumbar spine
Old age (>50)	Osteoarthritis Inflammatory arthritis		Abdominal Lumbar spine

Source: Orthopaedics in Primary Care. Carr A, Hamilton W. London: Elsevier, 2005

INVESTIGATIONS



X-rays



Ultrasound

Ultrasonography is a helpful diagnostic modality for patients with:

- suspected bursitis
- joint effusion
- or functional causes of hip pain (e.g., snapping hip)
- and can be employed for therapeutic imaging-guided injections and aspirations around the hip.


MRI Scan



BLOOD TESTS

- FBC
- ESR
- CRP
- Bone series

90% of conditions are treated in Primary Care



MANAGEMENT

- Lifestyle advice
- Analgesia
- Physiotherapy & Stretches
- Injection



"Have you tried walking with a limp?"

Lifestyle advice

• Weight Reduction



Lifestyle advice

• Keep mobile



Lifestyle advice

• If using a walking stick it should be held on the opposite side to the painful hip



Analgesia



Physiotherapy & Stretches

© Original Artist Reproduction rights obtainable from www.CartoonStock.com DOES IT HURT WHEN I DO THIS? PHYSIO

Age does not need to be a barrier



Injection of steroid and anaesthetic



Spotting the unusual



Knowing when & where to refer the patient





Informing the patient & managing expectations



Case History 1

 Catherine 54yo presents with couple of months pain in the groin & hip

 When getting out of a chair from sitting to standing the pain catches her

• She indicates the site of the pain with a "C sign"

C Sign



FADIR Test +ve

• Discomfort on full flexion of left hip and internal rotation



Femoroacetabular Impingement



Hip Impingement

- Hip impingement comes in three common varieties: cam, pincer, and combined. Cam impingement is an extra "bump" of bone on the femoral head. (large arrow) This decreases the smoothness of rotation of the hip.
- Pincer impingement is an extra bony lip on the acetabulum. (small arrow) This creates a pinching effect of soft tissues in certain motions during activity.



 The most common type, however, is a combination of both of these entities.

MRI arthrogram showed CAM lesion left hip



Case 2

- Theresa 64y had bone grafts to left acetabular bone cysts in March 2014 and to her right hip in May 2014 with excision of labral tear
- In August 2014 she presented with increasing right hip pain.

Findings

She had an antalgic gait and pain on hip rotation
X ray showed osteoarthritic changes
CRP 4

MRI scan



Risk Factors for AVN

- Trauma femoral neck fracture of dislocation
- Hip surgery
- Corticosteroids
- High alcohol intake
- Sickle cell disease
- Pregnancy
- Inflammatory bowel disease
- Malignancy

Case History 3

 John 53y had increasing pain in his left hip to thigh over a few months

• Obese BMI 31

• Previous high alcohol intake

• Ex-smoker

- Slight decrease in hip rotation
- X ray reported as normal
- Given Paracetamol, Naproxen and Tramadol
- Despite this in pain and difficulty walking
- Started vomiting 1 week later

Blood Tests

- CRP 116
- ESR 81
- Calcium 3.74 (normal 2.1 2.55)
- Phosphate normal
- Alkaline phosphatase 153 (normal 38 126)

• CT scan showed iliac crest metastases from bronchial carcinoma



Case History 4

 Jael 70y slipped on her stairs at home. She was already having treatment for low back pain and had a past history of breast cancer. She now had right groin pain.

- X ray of her lumbar spine and pelvis did not reveal any fractures
- She continued to have groin pain particularly when walking

• CT scan revealed a fracture of the pubic ramus not visible on X ray



Case History 5

- 84 year old Doris was under the care of the Rheumatologist for Polymyalgia Rheumatica & despite Prednisolone & Methotrexate & Risedronate was experiencing pains in her low back, R hip and L anterior thigh.
- Her L Spine X ray showed L4/5 spondylolisthesis, X ray hips showed OA and she also had L knee OA

- The Rheumatologist also thought she had an element of fibromyalgia
- She was referred to an Orthopaedic Surgeon for her hip and knee pain
- She was advised to have u/s guided steroid injections into her R hip and L knee

 Before having this she visited the surgery but on her way into the building without injury she heard a "crack" and felt a severe pain in her left thigh • She had a sub-trochanteric fracture of her left hip which was treated with intramedullary nailing
What happened

• This was an atypical fracture typical of bisphosphonate therapy

- It failed to unite & the screws became loose and required removal after 5 months
- 2 months later it was replated but again failed to unite
- 7 months later there was a further revision fixation
- 7 months after this a custom made prosthesis was inserted for further failed fixation



