

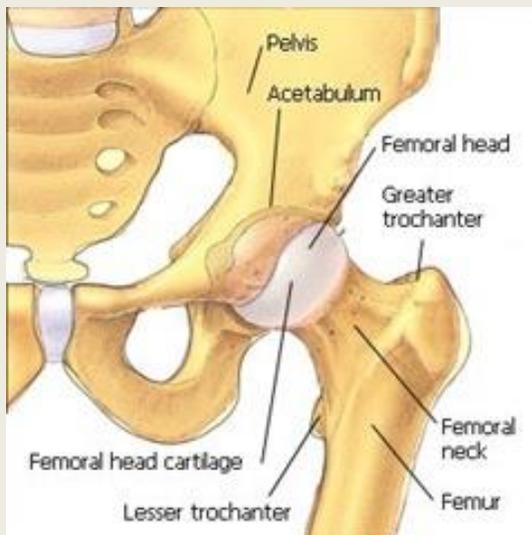


Medicine for Managers

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Oooh My Hip Hurts!

I have yet to find any real advantages to getting old! A bus pass and priority seats on the Underground do not make up for the aches and pains and the stiffness of the hips in the morning. The hip joints are amazing. They carry us around for eighty years or more allowing us to bend, kneel, run and climb by flexing, stretching and rotating the joint. If they go wrong, they can be replaced.



The hip joint is a simple ball and socket. It allows you to make all the normal movements of everyday life, has a wide range of movements and is very stable.

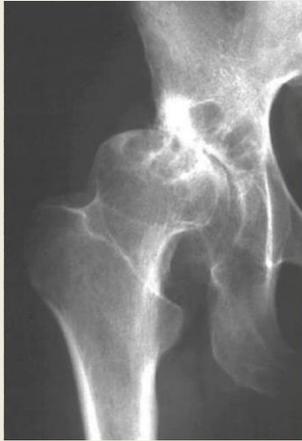
The ball is created from the **head of femur** and the socket (acetabulum) is made from a semi-circular depression in the pelvis.

It is surrounded by a fibrous capsule which holds everything together and the joint is lined by a **synovial membrane** which produces **synovial fluid** which lubricates the joint.

There are a range of causes of hip pain but the commonest and most troublesome is **osteoarthritis**. It causes pain which may be felt in the hip itself but can also present symptoms in the thigh, groin, front or back of the leg, buttock or even down to the knee.



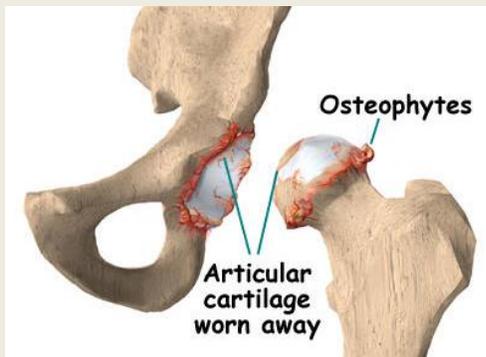
Normal hip joint showing space between pelvis and head of femur. Bone edges appear smooth, bone quality is consistent and the ball sits centrally in the socket



Osteoarthritic hip joint. Space is obliterated, bone edges are roughened and irregular, bone appears damaged and the ball is displaced in the socket

The osteoarthritic changes all compromise the normal function of the joint. They are:

- Inflammation in the joint. This may be aggravated by loss of the synovium and the smooth cartilage which coats the joint resulting in bone to bone contact with consequent inflammatory change.
- Damage to the bone of the joint, resulting in pitting, some fragmentation and the development of bony prominences called **osteophytes**, formed as the bone attempts to regenerate.



The bony excrescences limit the joint movement.

The development of the symptoms of pain and progressive limitation of movement are often

insidious and many people only seek medical assistance when the changes are quite advanced. Symptoms such as pain which keeps them awake at night, or difficulty climbing stairs are often the features which prevent people tolerating some stiffness and pain.

There are a number of joint symptoms which should be treated more seriously and are not characteristic of osteoarthritic hip pain. They are:

- Sudden onset of severe pain
- Hip symptoms associated with a fever or rash
- Pain in multiple joints
- Pain following an accident such as a fall
- Sudden limitation of movement
- Rotation of the leg or foot outwards
- Inability to take weight on the hip.

Many people suffer osteoarthritic symptoms without seeking any assistance.

There are things that can be done to help.

Losing weight is always helpful simply because it reduces the load on the hip (and the other weight bearing joints as well). Simple pain relief using **paracetamol** or a **non-steroidal anti-inflammatory medication (NSAID)** such as **ibuprofen** (which can be purchased over the counter) are well worth trying.

The pharmacist can advise on the use of ibuprofen and its contraindications. If there is no improvement after a week or ten days, medical advice should be sought. Other things to try are increasing exercise, which can help to improve the range of movements, and the use

of simple adjustments such as using higher chairs to reduce hip bending with sitting.

Consulting the GP about the hip may be necessary, especially if the symptoms are worsening for more than 10-14 days.

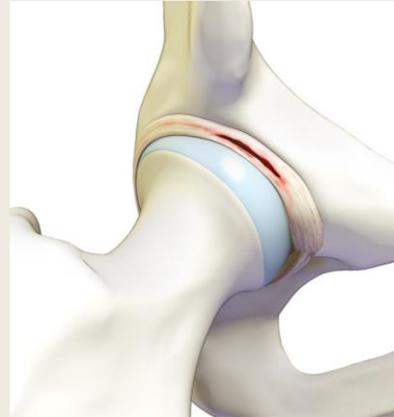
The GP will ask a host of questions about the nature and distribution of any pain, when it occurs and what limitation it causes.

An **examination** will follow to establish how limited the movements are and which ones cause pain or discomfort. **X-rays** are likely to be required to assess the joint and the degree of arthritic change (although the severity of symptoms often does not correlate with the radiographic appearance; some hip osteoarthritic changes look severe, with minimal symptoms, and some changes appear minor, with quite severe or distressing symptoms).

The GP may refer the patient to an orthopaedic surgeon if he or she suspects that surgery may be necessary. The specialist will normally order a **scan** (either a **CT** or an **MRI** – the CT scan is helpful in identifying the bony changes in the hip and the shape of the head of the femur and how it fits into the socket).

The MRI scan is more useful for assessing the muscles, tendons and the cartilage round the joint. The MRI scan may also show a torn **labrum**.

The **labrum** is a thick ring of cartilage which forms a rim around the acetabulum. It can



become torn as a result of trauma but in many cases the cause is unknown. Such tears may cause hip pain.

Osteoarthritis is not the only cause of hip pain although it is of course very common with advancing age. Other causes include:

- **Hip Fracture.** Usually obvious from the history, pain, immobility and deviation of the leg.
- **Avascular necrosis.** A strange condition where the blood supply to the head of the femur is lost, resulting in death of bone and collapse of the femoral head. The cause is unclear but it occurs in young middle aged adults and is linked to alcohol, steroid use, sickle cell disease and radiotherapy.
- **Paget's disease of Bone.** A disease of bone metabolism resulting in weakening and deformation leading to hip pain.
- **Trochanteric bursitis.** A complicated name but a simple problem. There is a sac filled with lubricant which has a cushioning effect overlying the hip. If it becomes inflamed it becomes painful. It may affect both hips.

- **Muscle and tendon injuries and inflammation.**

Treatment for hip pain is really well known.

1. **Medication**
 - a. Analgesics
 - b. Bisphosphonates. Important in Paget's disease, slow bone loss and reduce risk of fracture.
 - c. Steroid injections. Very effective for inflammatory joint pain.
2. **Physical therapies.** Physiotherapy and osteopathy. The use of walking aids might also be very helpful
3. **Hip Replacement Surgery.** It is an extremely good treatment for arthritis related pain and other causes. It is safe and effective. The prosthetic hip, originally invented by Sir John Charnley in the late 1960s revolutionised hip surgery. Pain after surgery is dramatically reduced in most cases. Over 80% of artificial hips last at least twenty years.
4. **Malignancy**
5. **Sciatica** which can be effective at masquerading as hip pain.
6. **Acetabular Labrum Surgery** for the tear described earlier can be repaired surgically by open or kehole surgery. The long term success is not evaluated.

So there we are; an amazing joint which, given how badly many of us treat it, serves us well generally. However, if anyone sees me standing in the Underground, I'd appreciate a seat.

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