



Hip arthritis

What is it?

Arthritis of any joint is the loss of the smooth lubricating and shock absorbing cartilage of the joint. This joint cartilage is called articular cartilage. The cartilage can be damaged for many reasons, however the most common cause is **osteoarthritis**. This is not a “disease” in itself but it does result in pain and suffering.

Osteoarthritis is due to many factors including:

- genetic predisposition,
- previous injury to joint cartilage,
- damage to the surrounding ligaments resulting in instability at the joint,
- fracture of the bones on either side of the joint resulting in altered mechanical loading,
- advanced age
- increased body mass

Some medical conditions (such as rheumatoid and psoriatic arthritis) also cause arthritis due to the body mounting an inflammatory reaction against the cartilage thereby damaging it.

As the thin cartilage is damaged, it can break off in small fragments resulting in mechanical symptoms such as locking, clicking or catching. As the cartilage is lost, the load on the bone itself is increased which is painful. The bone responds by laying down hard new bone and the tissues and ligaments around the joint get contracted and thickened resulting in stiffness. As the process continues, the bone itself is lost which can result in deformity of the limb.

Symptoms and signs

- pain
- stiffness
- clicking and catching (mechanical symptoms)
- difficulty in mobilising (due to pain and stiffness)
- night pain causing interrupted sleep
- start up pain (better once the joint “warms up”)
- difficulties with activities of daily living such putting on shoes, socks and pants

Natural history

The likely course of hip arthritis is slow progression. As the stiffness and pain worsens, activities of daily life become more difficult. The symptoms are often variable depending on activity level and seasonal changes. Despite the pain and discomfort, arthritis is not a life threatening condition and this needs to be understood with respect to surgical intervention.



Non-operative management

Non-surgical measures are the starting point for all patients with a diagnosis of arthritis. There is a large volume of scientific literature on non-operative management of arthritis, and factors with strong evidence of benefit include:

- medications:
 - **paracetamol** (regular)
 - anti-inflammatory medications (NSAIDs)
 - tramadol (note that this is a very strong painkiller)
- weight loss
- **physiotherapy** and strengthening program
 - exercise bike or cycling
 - swimming and hydrotherapy

Other options to consider:

- lifestyle modification and avoidance of activities that worsen the pain
- use of walking aids such as a walking stick or trekking poles
- steroid injections
- artificial joint fluid injections

Surgical management

Once non-operative measures have been exhausted and the pain and discomfort warrants surgical intervention, the most common intervention is **hip replacement** surgery. This procedure can be done safely, with good long term function through via multiple different surgical approaches utilising many different implant options. Sometimes computer navigated and robotic-assisted techniques are utilised. Dr Roe will consider the individual patient in deciding the best combination in each case.

In general terms, a hip replacement involves cutting out the ball and resurfacing the socket of the hip joint and replacing them with a metal implant that articulates through a special plastic or ceramic insert. The implants may be fixed to the bone by bone growing into the metal or by the use of bone cement.

Other, less common surgical options include:

- hip arthroscopy
 - rare to be beneficial in the setting of significant arthritis
- osteotomy of the proximal femur to realign the joint
 - very uncommon in current practice due to the excellent results from hip replacement
- hip fusion
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