

# Hip arthritis and joint replacement



## What is hip arthritis?

Arthritis is an umbrella term used to describe several conditions that lead to joint damage. Osteoarthritis (OA) is the most common type, and the hip joint/s are often affected.

Hip arthritis can cause pain in your hip, buttock, groin, and/ or thigh. This may be felt when you walk, get up from sitting, climb stairs, squat, or first get up in the morning. You might also experience stiffness and/or swelling of the joint.

If symptoms become severe, they can adversely affect your mobility, sleep and ability to participate in everyday activities. In turn, this can impact your independence and quality of life.

# What causes hip arthritis?

There isn't a single cause of arthritis, but OA is the most common. Risk factors for developing hip OA include being overweight or obese, aged over 45, having a family history of OA, or a history of injury or trauma to the hip.

Healthy joints have a protective cartilage covering over their bony ends. They are also surrounded by a protective membrane (called the synovial membrane) and bathed in lubricating fluid (called synovial fluid). This allows joint surfaces to glide over each other, giving you smooth, pain-free movement.

OA leads to wear of the cartilage covering, a reduction in synovial fluid, and joint inflammation. It can also cause bony spurs to form around the joint. In the earlier stages of the condition, your body can usually repair these tissue changes. As it progresses, however, your repair systems can't keep up – leading to damage.

Hip problems can also be associated with rheumatoid arthritis (RA) – a chronic inflammatory condition which affects your immune system. RA will typically affect both hips.

### Other conditions that can lead to hip arthritis include:

- Juvenile arthritis this term describes joint and rheumatic conditions that affect young people aged 16 years and under.
- Ankylosing spondylitis a type of arthritis that typically causes inflammation in the spine but can also affect the hips.
   Systemic lupus erythematosus – this immune system condition can cause joint inflammation and increased risk of hip arthritis.
- Psoriatic arthritis an inflammatory form of arthritis that is linked with psoriasis of the skin.

# How is hip arthritis diagnosed?

To determine what's causing your symptoms, your health professional will take a thorough medical history and ask how symptoms are affecting your daily life. They will examine your hip joint, looking at things like range of movement, leg alignment, and how you walk.

You will probably have an X-ray, which may show degenerative changes in your hip joint. It's important to note, however, that X-ray changes don't necessarily correspond well to symptoms. It's possible to have severe structural changes on X-ray but experience little pain, and vice-versa. Your doctor may also recommend other tests, such as an MRI, or blood tests to check for an inflammatory or immune condition.

#### **Treatment**

Treatment for hip arthritis aims to help you successfully manage pain and get you back to your usual activities. Most people with hip arthritis won't need surgery. Non-operative treatments can help you stay on top of symptoms and support improved function. These include:

**Weight loss** – being overweight can lead to increased pain and joint damage. If you are overweight or obese, aim for a minimum weight loss of 5–7.5% of your body weight. A dietitian can provide support with eating choices that promote weight loss. A physio or exercise physiologist can prescribe an appropriate physical activity program.

**Exercise** – land-based exercise is strongly recommended to improve pain and function in people with hip OA. An exercise professional, such as a physio or exercise physiologist, can prescribe an exercise program tailored to your needs, capability and preferences. This may include exercises to strengthen muscles around your hip, improve your flexibility, increase your fitness, and address problems with balance or mobility. Some people may benefit from aquatic exercise, where the water buoyancy takes the load off your hips.

**Physiotherapy** – aside from prescribing appropriate exercises, physios may use hands-on techniques such as massage and joint mobilisation to help with pain and flexibility. They may also advise use of heat, cold or a TENS machine to help with pain, teach you easier ways to move, and provide education about your condition and how to manage it.



**Medicines** – depending on your general health and the type of arthritis you have, your doctor may prescribe medications (or possibly injections) to help reduce pain and inflammation.

Walking aids or supports – some people may benefit from using an aid such as a crutch or walking stick to ease the load on the hip. A physiotherapist can provide advice about walking aids.

# When is surgery recommended?

Surgery may be advised if hip arthritis is significantly affecting your function and/or quality of life and your symptoms have not responded to conservative treatments. You will also need to be healthy enough and willing to have an operation.

Your surgeon will discuss the benefits and risks of surgery, and provide advice based on your symptoms and circumstances.

# **Types of surgery**

#### Joint replacement surgery (arthroplasty)

This type of surgery involves removing and replacing the affected hip joint with an artificial one. Total hip replacement (THR) surgery aims to give you pain relief and improved mobility, so you can be more independent and get back to your usual activities.

Total hip replacement is the most common type of surgery for hip arthritis and takes one to two hours to perform. It is major surgery but has excellent results when performed appropriately and for the right reasons. Most people who have THR surgery are aged between 50 and 80, but surgery is recommended based on pain and loss of function rather than age.

#### Osteotomy

This involves cutting and realigning a bone in the hip to reduce pressure on the joint. This type of surgery is only occasionally used for hip problems.

## Synovectomy

This involves removing all or part of the hip joint lining (synovial membrane) and may be effective in early stages of inflammatory arthritis where there is no cartilage damage.

## Recovery

Your recovery will depend on the type of surgery you have. Typically, it will involve:

- Pain relief it's important to keep pain well-controlled, so be sure to ask for pain medication before your hip becomes too uncomfortable
- Other medications antibiotics to reduce the risk of infection and anticoagulants (and possibly special stockings) to reduce the risk of developing a blood clot.
- Ice packs to relieve postoperative swelling.
- A hip X-ray and a blood test.
- Help with self-care tasks such as showering, dressing and using the toilet, with assistance gradually reducing as you become more independent.
- Physiotherapy to help get you mobile and start your postoperative exercise program.
- Review with your surgeon.

Once your healthcare team feel confident you are well and independent enough, you will be discharged.

After some THR procedures, you may need to take precautions to reduce the risk of hip dislocation for several weeks after surgery. This may include avoiding low chairs, squatting or driving. Your healthcare professionals will tell you what to avoid after surgery.

#### Rehabilitation

Rehabilitation is vital for getting the best results following surgery. How it looks will depend on your operation and needs, but will usually involve:

- Exercises to improve your range of movement, strength, hip control and cardiovascular fitness.
- Progression of your mobility, including weaning off gait aids (such as walking frames and crutches).
- Management of pain and swelling.
- Training in functional tasks, such as climbing stairs, getting in and out of a car, and activities of daily living (such as preparing meals and self-care tasks).
- Support and advice for returning to your usual activities, such as work and driving.

Your rehabilitation may be supported by allied health professionals including physiotherapists and occupational therapists.

#### References

- · Arthritis Australia. Hips. https://arthritisaustralia.com.au/what-is-arthritis/areas-of-the-body/hips/ Accessed 26.7.2021.
- Arthritis Foundation. When Hip Pain May Mean Arthritis. https://www.arthritis.org/health-wellness/about-arthritis/where-it-hurts/when-hip-pain-may-mean-arthritis Accessed 26.7.2021.
- Osteoarthritis Research Society International. OARSI guidelines for the non-surgical management of knee, hip, and polyarticular osteoarthritis. https://www.sciencedirect.com/science/article/pii/S1063458419311161 Accessed 26.7.2021.
- Australian Physiotherapy Association. Choose physio for Hip osteoarthritis. https://choose.physio/your-body/hip/hip-osteoarthritis Accessed 26.7.2021.
- The Royal Australian College of General Practitioners. Guideline for the management of knee and hip osteoarthritis (2nd edn). https://www.racgp.org.au/download/Documents/Guidelines/Musculoskeletal/guideline-for-the-management-of-knee-and-hip-oa-2nd-edition.pdf Accessed 26.7.2021.
- American Academy of Orthopaedic Surgeons. Inflammatory Arthritis of the Hip. https://orthoinfo.aaos.org/en/diseases--conditions/inflammatory-arthritis-of-the-hip Accessed 26.7.2021.

  American Academy of Orthopaedic Surgeons. Osteoarthritis of the Hip. https://orthoinfo.aaos.org/en/diseases--conditions/osteoarthritis-of-the-hip/ Accessed 26.7.2021.
- Healthdirect.gov.au. Hip replacement. https://www.healthdirect.gov.au/hip-replacement Accessed 26.7.2021.
- · Mr Chris Jones, Orthopaedic Surgeon. Total hip replacement information. Please enquire for details