

A Patient's Guide To Ankle Arthritis



What is Ankle Arthritis?

A joint such as the ankle is made up of bones covered with “articular cartilage” and joined by ligaments. In Ankle arthritis the cartilage is damaged which can lead to the underlying bone being exposed and damaged as well. In the ankle joint this is most often due to previous injury or wear and tear (osteoarthritis), but can be due to inflammatory types of arthritis, such as Rheumatoid arthritis.

This can cause **pain, swelling, stiffness** and **difficulty in walking**

What can I do to avoid surgery?

Before considering surgery for ankle arthritis there are several ways of reducing the pain and loss of function, for example:

- modification of activities (fewer steps, reducing impact or twisting loads through the ankle)
- medication (such as anti-inflammatory painkillers)
- steroid or other painkilling injection into the joint (sometimes done under X-ray or ultrasound guidance)
- ankle braces / supports and shoe modifications and insoles (orthotics) or wearing lace-up boots
- walking stick

Who needs surgery?

If these measures fail to control your symptoms, and the pain is interfering with your quality of life and day to day function, surgery may be an option.

There are several different types of surgery possible, so it is important to consider with the surgeon the various different options, and find the one which is best suited to you and your ankle

What are my choices?

- Keyhole surgery (**Arthroscopic debridement**) to clear away bone spurs and loose cartilage may be suitable in selected cases of early arthritis, but there is a relatively high failure rate and a small chance of worsening pain.
- Ankle Re-alignment (**Osteotomy**). In certain ankles, where the wear and tear is limited to one side of the joint, the bones of the ankle may be cut and re positioned to alter the stresses going through the ankle – to redirect them away from the worn part of the joint. This may reduce pain and slow progression of arthritis, so can be an effective technique in younger patients with relatively early-stage arthritis, but is not suitable for all.
- Ankle Fusion (**Arthrodesis**). This is an operation where the bones of the ankle are permanently joined together, so that there is no longer a painful joint between them. This procedure therefore also means that afterwards there is no movement at the “ankle” joint, but crucially the other joints underneath the ankle retain their movement and to some extent compensate for the loss of movement at the ankle. Therefore after a successful ankle fusion with intact foot joints, you can walk without any limp, cycle, play sports such as golf and wear normal shoes. Ankle fusion is therefore a very effective operation for pain relief and restoration of function, and can also correct deformity if present before surgery. Sometimes the procedure can be performed with a keyhole technique, but sometimes larger incisions are necessary, and your surgeon can discuss this with you.

•**Ankle replacement** – the joint surfaces can be replaced with metal and plastic (very similar to hip and knee replacements). This can give excellent pain relief and good function, but like any joint replacement the components can wear out become loose at the point of their attachment to bone. This wearing process is a little more rapid than in hip and knee replacement joints, so this has to be taken into account when deciding on the best treatment option for you.

How do I decide between Ankle Replacement and Fusion?

The choice between which operation is best for you is a joint decision between you and the surgeon.

There are certain situations where ankle replacement is not an option at all, and others where it is less favourable than fusion (for example under the age of 50 or so). There are sometimes technical considerations to be taken into account by the surgeon, and if there is very severe associated ankle and/or foot deformity or instability, fusion may be more likely to be successful. On the other hand, when there is significant stiffness or arthritis affecting some of the joints in the foot (or previous surgery where those joints have been fused), an ankle replacement may be advantageous. A lot of research is currently being undertaken on the question of ankle replacement versus fusion for patients with ankle arthritis.

What happens during and after surgery?

Before surgery you will have a pre-assessment check of your fitness for surgery and will probably be asked to complete a questionnaire so we can measure the outcomes after you have recovered.

Surgery is usually performed under a general anaesthetic (you will be asleep) and some form of nerve block to numb the ankle. You will often need to stay in hospital overnight after major ankle surgery – but in certain circumstances you can go home the same day.

Commonly you will have a plaster cast on your leg afterwards, and be asked to mobilise on crutches for at least two weeks, with minimal or no weight-bearing.

The post-operative plan can vary between surgeons and hospitals, but most of the time after an **ankle fusion** you will spend up to six weeks in a plaster, and then will go into a walking boot for another six weeks (with weight-bearing allowed). X-rays are used to confirm that the fusion is solid. After an **ankle replacement** most patients are placed into a weight-bearing walking boot after two weeks and are allowed to wean out of the boot after six weeks, but this depends on whether any additional surgery was performed. X-rays are taken on a regular long-term basis to ensure the replacement is not wearing out.

What are the risks of surgery?

As with any surgery, there are associated risks - for example, if you are overweight, smoke, suffer with diabetes or other major illnesses, you are at greater risk of developing complications after surgery, and it may take longer to recover. You may want to discuss this with your GP or health professional before surgery. The more frequent or serious risks include:

- Stiffness or persistent pain in the ankle.
- Nerve damage, which could lead to chronic pain that may be worse than the pain before surgery.
- Blood clot in the leg (deep vein thrombosis, DVT), which can break off and spread to the lung (pulmonary embolus, PE). All patients should be assessed for DVT/PE risk and precautionary measures taken if the risks are high.
- Infection, either in the wounds or more deeply, which can be serious and requiring further surgery.
- Further surgery may be required if a fusion does not join or joins in a poor position.
- A joint replacement may not be stable, loosen or wear out, and further surgery may be necessary to correct it.

It's important to remember that most complications are minor and can be easily and successfully treated.

More information on arthritis –

<https://versusarthritis.org/about-arthritis/conditions/arthritis/>

Information on ankle replacement versus fusion study -

<https://www.anklearthritis.co.uk>



British Orthopaedic Foot & Ankle Society