Ankle Replacement

Orthopaedic and Fracture Clinics

What is it?
This is an operation to replace the worn surfaces of the ankle joint.

Why would it be done?
Ankle replacements are done for arthritis of the joint. The causes of this are a previous injury that has damaged the joint (post-traumatic osteoarthritis), or a generalised condition such as osteoarthritis or rheumatoid arthritis, or another type of inflammatory arthritis.

It is now possible to treat some arthritic ankle joints by replacing the joint, in the same way as arthritic hips and knees can be replaced. However, this is only suitable in older patients without major foot deformities, or people with rheumatoid arthritis or similar diseases. It would not be suitable if:

- you are young (usually under 60) or very physically active
- you have a severe foot deformity
- your ankle is very unstable
- you have had infection in the ankle or the bones around it
- the bone under the ankle (the talus) has collapsed
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In these situations an ankle fusion would be advised instead. This would permanently stiffen the ankle, but will usually reliably relieve pain.

If you have a severe foot deformity you may be advised to have a fusion of the joint below the ankle (the "sub-talar" joint), followed by an ankle replacement.

**Do I have to have the operation?**
The operation is usually only recommended when other forms of treatment have not relieved symptoms sufficiently. These treatments may include simple painkillers or anti-inflammatory tablets, splints or insoles, and physiotherapy.

**Will I have to go to sleep (general anaesthetic)?**
The operation can be done under general anaesthetic (asleep). Alternatively, an injection in the back can be done to make the foot numb while the patient remains awake. Your anaesthetist will advise you about the best choice of anaesthetic for you.

Increasingly surgery is carried out with a regional block – the leg is numb below the knee by injections adjacent to the nerves behind the knee. You can choose to have sedation so that you sleep lightly during the operation. The block can last 24-48 hours, giving good pain relief, but you will also be given pain-killing tablets as required.

**What does the operation involve?**

A cut about 12 cm long is made on the front of the lower leg and ankle. The joint is opened up and the surfaces removed and shaped to fit the metal parts of the ankle replacement. The metal implants fit onto the bones without cement (press-fit) and are coated with a chemical called hydroxyapatite, which encourages the bone to attach to the metal.

A hard plastic bearing fits between the two metal components to allow movement. If the ankle is very stiff then the Achilles tendon may be lengthened. Dissolving stitches are used and a plaster splint applied to keep the ankle still during healing.

**How long would I be in hospital?**

After surgery your foot will tend to swell up quite a lot. You will therefore have to rest with your foot raised to help the swelling to go down. A plaster back-slab (half-plaster) is put on your leg at the end of the operation. This will be removed after two weeks if the Achilles has been lengthened. The physiotherapist will teach you how to walk with crutches. We will get you up as soon as possible! Most people are in hospital for about one to two days.

**What will happen after I go home?**
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By the time you go home you will have mastered walking on crutches (or a walking frame). You should go around like this for 2 weeks. Two weeks after your operation you will be seen again in the clinic. Your plaster will be removed and the cut and swelling on your foot checked. If all is well you will be given a boot and referred for some physiotherapy to help you learn to walk again. If the wound is not sufficiently well-healed then you would be put back into a lightweight plaster for another couple of weeks.

How soon can I....

Walk on the foot?
As explained above, you can walk on the foot in the boot as comfort allows from two weeks.

Go back to work?
If your foot is comfortable, and you can keep your foot up and work with your foot in a boot, you can go back to work within three to four weeks of surgery. On the other hand, in a job which involves a lot of standing and walking, you may need to take about three months off work. How long you are off will depend on where your job fits between these two extremes.

Drive?
If you have only your left foot operated on and have an automatic car you can drive within a few weeks of the operation, when your foot is comfortable enough and you can bear weight through it. Most people prefer to wait till the plaster is removed and they can wear a shoe.

Play sport?
After your plaster is removed you can start taking increasing exercise. Start with walking or cycling. Ankle replacements are quite delicate and will not withstand heavy impact or great stress. Golf and gentle tennis may be possible, but more energetic sports are not advisable. Many people find that because the foot is more comfortable than before surgery they can do more than they could before the operation. Most people can walk a reasonable distance on the flat, slopes and stairs, drive and cycle.

What can go wrong?
The main problem is the swelling of the foot, which may take many months to go down fully, and some people’s feet always remain slightly puffy. You may find that only trainers are comfortable for several months. Keeping your foot up, applying ice, wrapped in a towel, or wearing elastic stockings may help to keep the swelling down. Swelling is part of your body's response to surgery.

The most serious thing that can go wrong is infection of the ankle replacement. We take great precautions to prevent this, such as the Methicillin-resistant Staphylococcus aureus protected ward, antibiotics around the time of the operation and an operating theatre with specially clean air. Despite this, about 1-2% of people
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having joint replacements get an infection. This can be very serious, as further surgery to clean out and possibly remove the infected joint replacement may be necessary. You may then need yet more surgery to get the ankle to fuse in a satisfactory position.

Minor infections in the wounds are slightly more common and normally settle after a course of antibiotics.

Sometimes the cut is rather slow to heal. This usually just requires extra dressing changes and careful watching to make sure the wound does not become infected.

An ankle replacement is technically a difficult operation and occasionally a fracture of the ankle may occur during the operation. This may need to be fixed with screws at the time or may need extra time in plaster.

There are small nerves that are moved to one side during the operation and it is not uncommon to experience some numbness in the foot afterwards. This is usually in the big toe. It usually recovers in time.

Major complications involving the circulation to the foot are very rare, but these could be very serious.

Ankle replacements can wear loose. This can happen soon after the operation if there has been a technical problem or if the ankle has been subjected to too much stress, for example, jumping, heavy digging, etc. More commonly it happens much later and is recognised by increasing pain in the ankle some years on. The long-term figures show that about 85-90% of ankle replacements are still going well after 10 years.

What should I expect?
The majority (90-95%) of patients will have a comfortable ankle at rest and for walking, although many will experience some twinges or aching from the joint. The range of movement does not return to normal, but will usually be improved by the operation. People who have a very stiff ankle before the operation tend to have less improvement in movement. Overall most people are very pleased with their new ankle.

Smoking will not be permitted on any NHS site in England. Smoking will not be permitted within any of our buildings or anywhere outside on our sites. Smoking facilities will not be provided. Please be considerate of others when vaping in hospital grounds.

This information sheet is available to order in other languages and formats. If you would like a copy, please contact us on 01793 604031 or email gwh.pals@nhs.net

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