OS22 Total Ankle Replacement

What is arthritis?
Arthritis is a group of conditions that cause damage to one or more joints. Your surgeon has recommended a total ankle replacement operation. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you make an informed decision.
If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

How does arthritis happen?
The most common type of arthritis is osteoarthritis, where there is gradual wear and tear of a joint. In a few cases this is the result of a previous injury but usually it happens without a known cause. Some other types of arthritis are associated with inflammation of the joints that can eventually lead to severe joint damage. The most common inflammatory arthritis is rheumatoid arthritis.
Arthritis eventually wears away the normal cartilage covering the surface of the joint and the bone underneath becomes damaged. This causes joint pain and stiffness, which can interfere with normal activities.

What are the benefits of surgery?
If your ankle replacement is successful, you should have less pain and still have some movement in your ankle. An ankle replacement does not usually increase how much you can move your ankle.

Are there any alternatives to ankle replacement?
Simple painkillers such as paracetamol and anti-inflammatory painkillers such as ibuprofen can help the pain of arthritis. Supplements to your diet, such as cod liver oil or glucosamine, may also help relieve your symptoms. You should check with your doctor before you take supplements. Using a walking stick on the opposite side to the affected ankle can make walking easier. A plastic splint or stiff ankle boot with a cushioned heel is sometimes helpful.
Regular moderate exercise can help to reduce stiffness in your arthritic ankle. Physiotherapy may help to strengthen weak muscles.
A steroid injection into the ankle joint can sometimes reduce pain and stiffness for several months. You may get side effects if you have injections too often.
A keyhole operation (arthroscopy) to clean out the ankle joint can give some relief for six to twelve months. This is a lower-risk procedure than an ankle replacement. All of these measures become less effective as your arthritis gets worse and this is when your surgeon may recommend an ankle replacement.
An ankle replacement, like any other artificial joint, will wear out with time. For young and active people it is often best to have an ankle arthrodesis where the ankle bones are permanently fixed together using screws. This results in less pain from arthritis and almost normal walking. However, an ankle arthrodesis may cause arthritis in other parts of the foot after about 10 to 15 years because it places extra load on nearby joints.
What will happen if I decide not to have the operation?
Arthritis of the ankle usually, though not always, gets worse slowly. Arthritis is not life-threatening in itself but it can be disabling. Arthritis symptoms can be worse at some times than others, particularly when the weather is cold.

What does the operation involve?
A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and will recommend the best form of anaesthesia for you. The operation usually takes between an hour and an hour and a half.
There are many different types of ankle replacement available and your surgeon will discuss with you which sort is best for you.
Your surgeon will make a cut on the front of your ankle and remove the damaged joint surfaces of the ankle. They will then replace these with an artificial joint made of metal and plastic (see figure 1). The ankle replacement is fixed to the bone using special coatings on the metal that bond directly to the bone.

What should I do about my medication?
You should continue your normal medication unless you are told otherwise. Let your surgeon know if you are on warfarin or clopidogrel. Follow your surgeon’s advice about stopping this medication before the operation.

What can I do to help make the operation a success?

• Lifestyle changes
If you smoke, try to stop smoking now. Stopping smoking several weeks or more before an operation may reduce your chances of getting complications and will improve your long-term health.
For help and advice on stopping smoking, go to www.gosmokefree.co.uk.
You have a higher chance of developing complications if you are overweight.
For advice on maintaining a healthy weight, go to www.eatwell.gov.uk.

• Exercise
Regular exercise can reduce the risk of heart disease and other medical conditions, improve how your lungs work, boost your immune system, help you to control your weight and improve your mood. Exercise should help to prepare you for the operation, help with your recovery and improve your long-term health.
For information on how exercise can help you, go to www.eidoactive.co.uk.
Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

What complications can happen?
The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious and can even cause death. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.
The complications fall into three categories.
1 Complications of anaesthesia
2 General complications of any operation
3 Specific complications of this operation

1 Complications of anaesthesia
Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation
- Pain, which happens with every operation. The healthcare team will try to reduce your pain. They will give you medication to control the pain and it is important that you take it as you are told so you can move about as advised.
- Bleeding during or after surgery. You may need a blood transfusion afterwards.
- Infection in the surgical wound, which usually settles with antibiotics but may occasionally need another operation.
- Unsightly scarring of the skin, although ankle-replacement wounds usually heal to a neat scar.
- Blood clots in the legs (deep-vein thrombosis), which can occasionally move through the bloodstream to the lungs (pulmonary embolus), making it difficult for you to breathe. You may be given treatment to reduce the risk of blood clots.
- Difficulty passing urine. You may need a catheter (tube) in your bladder for a day or two.
- Chest infection. If this happens, you may need antibiotics and physiotherapy.
- Heart attack or stroke. This can happen because an ankle replacement is a major operation. A heart attack or stroke can occasionally cause death.

3 Specific complications of this operation
- Slow healing of the wound (risk: 1 in 10). If this happens, you will need regular dressings for a few weeks and occasionally you may need a further operation.
- Fracture of the bone on the inner side of the ankle (risk: 1 in 10). This can happen during the operation or later on. The bone usually heals on its own but sometimes you may need a further operation.
- Loosening of the metal from the bone, causing failure of the ankle replacement (risk: 1 in 14 within the first five years). If this happens, you will almost always need another major operation.
- Infection in the ankle replacement (risk: 1 in 200). An infection usually causes the ankle replacement to fail and it will need to be removed.
- Continued discomfort in the ankle, even though the ankle replacement itself works well (risk: 1 in 35).
- Severe pain, stiffness and loss of use of the foot and ankle (Complex Regional Pain Syndrome) (risk: 1 in 25). The cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. It can take months or years to get better.

How soon will I recover?

- In hospital
After the operation you will be transferred to the recovery area and then to the ward. You will usually have an x-ray to check the position of the ankle replacement.
Your physiotherapist will help you to start walking using crutches or a walking frame, usually the day after surgery.
You may have a splint, a special boot, or a plaster on your ankle for the first few weeks. Your surgeon and physiotherapist will let you know how much weight you can put on your leg.
You should be able to go home after two to five days. However, your doctor may recommend that you stay a little longer.
If you are worried about anything, in hospital or at home, ask a member of the healthcare team. They should be able to reassure you or identify and treat any complications.
• Returning to normal activities

Your surgeon, physiotherapist and occupational therapist will tell you when you can return to normal activities. To reduce the risk of problems, it is important to look after your new ankle as you are told.

To start with you should spend most of the time with your leg raised up on a chair or footstool. You will be able to move around more as the swelling gets better. You will need to use crutches or walking sticks for a few weeks.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check with your doctor and insurance company first.

• The future

Most people make a good recovery with much less pain while keeping some movement in their ankle. You should be able to walk more normally, often without needing a walking stick. However, an artificial ankle never feels quite the same as a normal ankle.

Eventually a worn ankle replacement will come loose and can cause pain. If this happens, you will usually need to have the ankle replacement taken out and the bone that is left fused together. This is not always a successful operation. About 9 out of 10 ankle replacements will last for 5 years. However, because an ankle replacement is a relatively new operation, it is not yet known how much longer than this an ankle replacement will last.

Summary

Arthritis of the ankle is often the result of previous ankle injuries or rheumatoid arthritis. If you suffer severe pain, stiffness and disability, an ankle replacement should reduce your pain and still give you some movement in your ankle.

Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Further information

• NHS smoking helpline on 0800 169 0 169 and at www.gosmokefree.co.uk
• www.eatwell.gov.uk – for advice on maintaining a healthy weight
• www.eidoactive.co.uk – for information on how exercise can help you
• www.aboutmyhealth.org - for support and information you can trust
• American Academy of Orthopaedic Surgeons at www.aaos.org
• www.thefootandankleclinic.com
• Reflex Sympathetic Dystrophy and Complex Regional Pain Syndrome UK at www.rsd-crps.co.uk
• www.keywood.demon.co.uk
• NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)
• www.eidohealthcare.com

Acknowledgements

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Local information
You can get information locally from the Patient Advice and Liaison Service (PALS) on 02380 798 498 or email PALS@suht.swest.nhs.uk. You can also contact:

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

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