OS10 Ankle Fracture Surgery

What is an ankle fracture?
An ankle fracture is a break of one or both of the ankle bones. Your surgeon has recommended an ankle fracture 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 an ankle fracture happen?
An ankle fracture is usually caused by a twisting injury to the ankle, resulting from sport or a simple fall or trip. There may be a break of the bone on the outer side of the ankle (fibula), the inner side (tibia), or both sides (see figure 1). There may also be damage to the ankle ligaments.

What are the benefits of surgery?
An operation will make sure that the bones heal in a good position. If the bones heal in an incorrect position, you are more likely to get problems with your ankle in the future.

Are there any alternatives to surgery?
If your ankle bones are in a good position, it may be possible to treat the fracture using a plaster cast. It is usually best to have an operation to fix your fracture if the bones will not stay in a good position.

What will happen if I decide not to have the operation?
You will be treated using a plaster cast. You will need to keep your weight off your leg, using crutches or a walking frame to move about. You will need regular x-rays to check the position of the bones in the plaster. It is usually only possible to perform the operation within about three weeks of the injury. If the bones stay out of position after this time, the fracture will heal in an incorrect position and the ankle will probably not function well.

Figure 1
Fracture of both bones of the right ankle
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 half an hour and an hour.
Your surgeon will make one or more cuts to expose the broken bones on the inner and outer sides of your ankle. They will usually fix the fractures using screws and a plate, although other devices are occasionally needed (see figure 2).

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. Nicotine is known to stop fractures from healing.
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

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. Anti-inflammatory painkillers may stop the fracture healing properly, so it is better not to take these if possible.

Figure 2
Fractures fixed using a plate and screws

At the end of the operation, your surgeon will close the skin with stitches or clips and put a bandage or plaster cast on your ankle.
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.
• Infection, which may need treatment with antibiotics or occasionally a further operation (risk: 1 in 60). Infection can sometimes stop the fracture healing.
• Unsightly scarring of the skin, although ankle 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 (risk: less than 1 in 100). 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.

3 Specific complications of this operation
• Damage to nerves. This may result in a patch of numb skin or a tender scar. It usually gets better with time, but can be permanent.
• Severe pain, stiffness and loss of use of the foot and ankle (Complex Regional Pain Syndrome). This is rare and 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.
• Loosening or breaking of the plate and screws. This can happen if your bone is soft or if you put too much weight on your foot before the fracture has healed properly. You will usually need another operation.

How soon will I recover?

• In hospital
After the operation you will be transferred to the recovery area and then to the ward. You should keep your foot lifted up to reduce swelling.
A member of the healthcare team will check the blood circulation in your foot and monitor any bleeding or swelling.
Your surgeon will tell you how much weight you can put on your foot. Your physiotherapist will help you to walk safely. You may need crutches or a walking frame. You should be able to go home after one to three 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
For most of the time during the first couple of weeks you will need to keep your leg lifted up on pillows, or a footstool, to keep the swelling down. As you begin to move about more, remember to use your walking aids as you are told.
A member of the healthcare team will ask you to go to the fracture clinic to check that the fracture is healing properly. Your ankle may be kept in a plaster cast until the bones have healed, which usually takes about six weeks.
Your surgeon and physiotherapist will tell you when you can place weight on your ankle and you will be given exercises to help get the ankle moving. It can take several months before you are able to return to normal activities.
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 after surgery and get back good function. However, your ankle may never be quite as strong as it was before the injury. Some swelling and mild stiffness is common and can last for several months after the fracture has healed. If you have slim ankles, you may find that you can feel the plate under the skin. If this is uncomfortable, you can have a further operation to remove the plate and screws once the fracture has fully healed. However, they are not usually removed unless they are causing problems. About 1 in 7 people develop mild ankle arthritis. This is a result of the injury itself and it does not usually need any treatment.

Summary
For some types of ankle fracture, an operation is the best way to make sure the ankle bones heal in the correct position. Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you 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
• Reflex Sympathetic Dystrophy and Complex Regional Pain Syndrome UK at www.rsd-crps.co.uk
• NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)
• www.eidohealthcare.com

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