



Bone-Surgeon.co.uk

**Patient Information:
Preparing for Surgery**

Why have foot and ankle surgery?

Many conditions affecting the foot can produce discomfort, which can limit mobility therefore, your feet need to be strong and healthy. The foot is a complicated part of the anatomy and consists of 26 bones, 33 joints and numerous tendons, ligaments and muscles.

Sometimes the structure and mechanics of your feet or ankles change (for a number of reasons) and surgery may be required to address these. Surgery is usually only considered when all conservative measures have been exhausted.

Patient information prior to foot/ankle surgery

Foot and ankle surgery is performed to reduce pain, improve deformity and increase function and not for cosmetic purposes. Patients often ask if both feet can be operated on at the same time. Many factors have to be considered.

Your surgeon will advise you whether or not surgery to both feet is an appropriate option. Each individual is unique and every procedure is different.

If you have foot surgery, remember the healing process:

- 3 months – fair
- 6 months – good
- 12 months – regain a feeling of normality

Prior to admission for your surgery there are a number of issues that need to be considered:

- Is someone able to help you carry out basic everyday tasks such as preparing/shopping for food?
- How will you manage to get up and down stairs if necessary?
- Do you have sturdy hand rails?

- If your toilet is downstairs, it would it be easier to have your bed downstairs until you have sufficiently recovered to be able to manoeuvre up and down the stairs safely?

A member of the multi-disciplinary team will be available to offer advice if you have concerns in relation to the questions asked on page three. They may put you in touch with an occupational therapist or other relevant health workers to help you with these arrangements, if necessary.

Before coming to the hospital for an operation

- Ensure that you have a flat sturdy shoe to wear on the un-operated foot following surgery
- Remove all nail polish, cut your toenails and clean under the nails, the day before surgery
- It is important to mention any medication that you are taking, either prescribed or non-prescribed.
- This may include over the counter medication, herbal remedies, aspirin, warfarin, blood thinners, hormone replacement therapy (HRT), contraceptive pill and medication for high blood pressure.
- If you are asthmatic, ensure that you bring your inhalers with you.

The majority of foot surgery is performed under general anaesthetic.

However, a local anaesthetic may be used in conjunction with a sedative and the anaesthetist will discuss this with you before surgery. A local anaesthetic block will be administered; this is to numb the area and help with pain relief immediately following the procedure. The feeling of numbness may last between 12 to 24 hours following your operation and is normal.

What to expect following foot and ankle surgery

When you arrive back on the ward from theatre, you will either have a padded bandage or plaster of Paris cast. Your operated leg will be elevated either on pillows or on a special frame. It is important to keep your leg elevated in order to reduce bleeding, swelling and pain. As with all surgical incisions, the bandage/cast and stitches or clips are usually removed around 14 days later.

Important advice after surgery

Joint stiffness – occurs following some surgical procedures and you may be instructed to begin gentle movements of the affected joint.

Cast – if you have a cast, it is important that this does not become wet.

If this happens, the cast is no longer immobilising the affected limb. The underlying wounds will then be at risk of becoming infected if the dressings become wet.

Wound(s) – these will usually be covered with a non-adhesive dressing.

Some wounds may ooze or old blood may leak from the wound but do not panic, this is routine. However, inform the ward staff if the bleeding persists.

The dressing must remain intact until your outpatient visit (usually two weeks following the procedure). The wound site must be kept dry, so avoid taking a bath. Ask for advice regarding protective waterproof measures, for example, limbo cast protectors can be applied to the operated area.

Driving – you will be informed of when it is safe to return to driving. This will depend on the nature of your procedure.

Do not resume driving until instructed to do so. You should notify your insurance company of the procedure that has been undertaken to ensure your cover is valid.

Sport – resuming sporting activities depends on the type of surgery performed and will be discussed with you.

What is PRIE regime?

P Physiotherapy. A walking assessment by a physiotherapist will be carried out either before or after your surgery. If crutches are required, you will be instructed on their correct use. The crutches are adjusted for the individual and are not intended for use by others.

The physiotherapist will give you an exercise sheet and will show you exercises during your stay as an inpatient. It is important to wriggle your toes gently.

If your leg is not in a plaster cast, you should gently move your foot up and down periodically throughout the day and also bend the knee and ankle. This aids circulation and helps reduce swelling of the affected limb.

R Rest. It is extremely important that you rest and keep your foot elevated. Following surgery, your foot and ankle will tend to swell; this is painful and can lead to problems with wound healing. It is essential that you arrange time off to rest after your surgery – a few days for minor surgery and about two weeks for major surgery.

I **Ice.** Once the dressings are off and the wound has healed, the application of an ice pack will help reduce swelling and assist with pain relief. It is important to protect the affected area with a damp tea towel prior to the application of ice; often a bag of frozen peas is very effective.

Apply for 10 minutes three times a day (mark these clearly, as re-frozen peas are unsafe for human consumption).

E **Elevate.** For the first two days after your operation, sit or lie with your foot raised well above groin level for 55 minutes out of every hour. You should then decrease the amount of hourly elevation by five minutes every day, for example, 50 minutes on day three and 45 minutes on day four.

You should adjust this by the degree of swelling or discomfort that you observe. You will usually be sent home with painkillers, which will help with pain control. The foot can be very swollen for several weeks following your operation and this is normal.

However, if you notice that the foot is becoming increasingly swollen following this period, then it may be an indication that you have overdone it.

Look at the amount of pain or swelling to determine and adjust your level of activity accordingly and return to rest, ice and elevation.

Post-operative observations

Check your foot. It is normal to have a degree of bruising following surgery. Contact the ward immediately if you experience worsening pins and needles, persisting numbness or the foot/toes become excessively swollen.

If you are unable to contact the ward, please call your General Practitioner.

Post-operative shoes

You may require a special surgical shoe following your operation, depending on the type of foot surgery that you have undergone. These shoes are designed to fit over the foot with its dressings, protect it from injury and to offload the operated area. Shoes are usually provided by the ward or physiotherapist and should be worn until instructed otherwise.

Walking and mobility

The degree of mobility allowed following your surgery depends on the type of procedure that has been performed. Full weight bearing – you may walk as normal, taking the weight through the operated foot. The physiotherapist will give you instructions on the correct and safe use of your crutches.

Partial weight bearing – you may walk taking a partial degree of weight through the operated foot, using a walking aid. You will be instructed on the degree of weight that is acceptable.

Heel weight bearing – you may walk with the majority of your body weight transferred through your heel and outside of your foot. This is usually recommended following toe surgery.

Non weight bearing – you are not allowed to put any weight through the operated foot. Instructions will be given on the correct and safe use of crutches by the physiotherapist.

Stairs – The physiotherapist will instruct you on the safe and correct way to manage stairs:

- **TO GO UP** – lead with your good leg



GOOD LEG – OPERATED LEG – CRUTCHES

- **TO GO DOWN** – lead with your operated leg



CRUTCHES – OPERATED LEG – GOOD LEG

- **OR** ascend and descend on your bottom

Possible risks/complications of surgery

Common but minor risks can include:

Pain – This can be worse in the first few days after surgery but responds to the prescribed painkillers. As time passes and your body starts to heal, this pain will reduce and you will only need simple painkillers (like anti-inflammatory or Paracetamol) until the pain settles completely.

Swelling – Operated feet tend to swell and this can last for several months.

Infection – as with all invasive procedures there is the risk of infection, more so in those patients who are diabetic, suffer from rheumatoid disorders or smoke.

Scarring – any type of surgery will leave a scar, occasionally this will be painful and inflamed.

Blood or fluid leaking from the wound – This is common and usually stops after a day or so.

Bruising or discolouration – This is almost inevitable after surgery. However, if you get a lot of bleeding, a white toe or a black toe, let the team know.

Minor redness around the wound – as with all surgery there is the risk of infection and some minor redness of the

wound can happen and the wound edges take longer to heal fully. You may need antibiotics to get this to settle. Risks are higher if you are diabetic, suffer from a rheumatoid condition or smoke.

Prominent metal work – In some cases the screws or plates (if used during your operation) can become prominent under the skin and you will need to have them removed at a later date.

Numbness – After surgery you are likely to have some minor numbness and tingling around the scar due to damage to small nerves.

Less common but more significant risks:

Failure of the bone to unite – this may occur in operations where the bone is fused. Some people heal slower than others and those who smoke are at a greater risk of this occurring. The surgeon may decide not to perform surgery unless you refrain from smoking.

Deep Infection – Although the operation is performed under sterile conditions and all precautions are taken to prevent this, a deep infection may happen and if the wound does not settle on antibiotics, you may need further operations.

Blood Clots – because you won't be able to move around as much after surgery, you can get blood clots in the veins (deep vein thrombosis or DVT) which can lead to pain and swelling of the calf or thigh. In very rare cases these blood clots can travel to your chest (pulmonary embolism) and can be fatal. Your surgical team will probably discuss whether you should have thromboprophylaxis (drugs to reduce, but do not completely eliminate the risks of blood clots).

Thick (keloid) scar – Scars which grow excessively can occur in some people and cannot be predicted although you are at greater risk if you have previously keloid scar. Special dressings, injections into the scar or rarely surgery may become necessary to improve the appearance.

Delayed healing of the bone – This may happen if your bone is cut or fused. Some people heal slower than others and those who smoke are at a greater risk of this happening. If the bones don't seem to be knitting together, you may have to take weight off the area for longer or need more surgery.

Bone healing in a wrong position – This can sometimes happen and you need more surgery.

Persistent or recurrent symptoms – In some cases, you may continue to suffer pain and the foot may be deformed. You may need surgery or other measures.

Broken bone or metalwork – A bone could fracture or a metal pin or screw could break during or after surgery and you may need another operation.

Developing secondary problems – This can include overloading areas close to the ones operated on. In other words, surgery on your big toe may lead to pain transferring to the second toe or unusually, an overcorrected bunion may lead to a reverse deformity. A fused ankle joint can cause an overload of the surrounding hind foot joints and cause pain. Surgery to the newly affected areas may be needed.

Chronic pain – This is rare but a syndrome (such as chronic regional pain syndrome CRPS) can cause swelling, stiffness, pain and colour and temperature changes to the foot. Treatment includes medication and physiotherapy and it could take several months to improve. Doctors are still not sure exactly what causes this syndrome.

Toe deformities – In surgery to the toes, a toe can become floppy or stiff or heal in an abnormal position which might need further surgery.

Damage to the blood vessels – If the blood supply to part of the foot is damaged, it could lead to an area of permanent damage which needs surgery, but this is rare.

Nerve injury – If a larger nerve supplying the foot becomes damaged or caught in scar tissue, it could lead to on-going pain, numbness and tingling. This damage often doesn't last and the sensation usually returns over a period of time. However, in some cases it can be long-lasting or permanent and need further surgery.

Amputation – In very rare cases, part of the foot or lower leg may need to be removed if there is severe infection or blood-vessel damage or uncontrolled pain.

Death – This also is extremely rare for foot and ankle surgery but can happen if you have other medical conditions such as heart problems.

Post-operative care

- For the first two weeks following surgery, elevate your operated limb above heart level, unless otherwise indicated by your surgeon. If you have previous or existing problems with your back or hip(s), elevate to just above your groin.
- Get up for five minutes out of every hour to do necessary tasks, for example, going to the toilet then ELEVATE your limb.

- A post-operative anti-embolism stocking (provided by the ward) should be worn on the un-operated limb until you are fully mobile. This will help reduce the risk of blood clots following surgery. Wriggling your toes, massaging your calves and regular movements of your lower limbs (as able) will help maintain healthy circulation during periods of reduced mobility.

- Your body will tell you if you have overdone things – rest and elevate your foot/feet as this will help to reduce painful swelling and improve circulation, thus promoting wound healing.

Advice to patients with a cast

- Elevate your foot to above groin level as this helps to prevent swelling
- If your foot becomes too swollen, your cast will become tight, restricting circulation
- If able, wiggle your toes up and down at regular intervals throughout the day, as this helps to increase blood flow and aids circulation
- Move your hip and knee regularly as this prevents them from becoming stiff
- Keep the plaster cast dry (protective waterproof covers are available to purchase for bathing/showering and leaflets are available should you wish more information)
- DO NOT poke objects inside your cast as this can cause sores to develop

You should contact us if you notice the following:

- Extreme pain
- Tightness unrelieved by HIGH elevation for one hour
- Progressive swelling of toes unrelieved by HIGH elevation for one hour
- Localised painful pressure
- New or progressive numbness or tingling (pins and needles)

- Breakage or damage to your cast
- Offensive smell or actual discharge from under your cast

Report any severe pain, massive swelling, excessive redness or discharge from your wounds to the hospital or your General Practitioner.