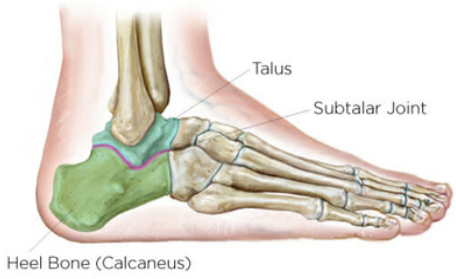
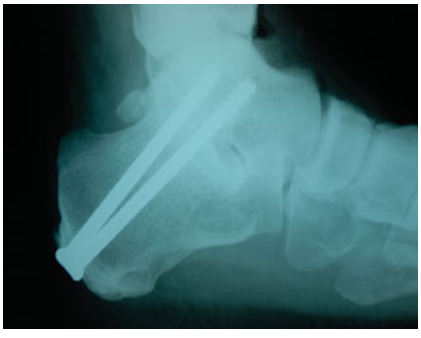
Subtalar Joint Fusion

Following your consultation with a member of the Foot and Ankle team, you have been diagnosed with arthritis of your hindfoot. This leaflet aims to give you additional information about your condition and its treatment. It is designed to give you some general details about the recovery from surgery and the common risks and complications. This leaflet is not for self-diagnosis. Please ask your surgeon if you have any further questions. If anything changes before the operation please let your surgeon or their secretary know (eg skin problems, infections, injuries).

What is the subtalar joint?

This is a joint in your hindfoot which is situated under your ankle joint. It allows side to side movements enabling you to walk more easily on uneven surfaces.





What is a subtalar joint fusion?

This is an operation to fuse/stiffen part of the hindfoot. The aim is to enable you to stand and walk more comfortably. After surgery you may be aware of the stiffness and inability to move the hindfoot. Some people report a sensation of being unable to click the ankle.

Why would it be performed?

Generally due to pain, deformity and instability.

- Arthritis of the subtalar joint due to previous injury or infection that has damaged the joint, generalised osteoarthritis or inflammatory joint disease such as rheumatoid arthritis.
- Previous surgery due to a coalition (where 2 bones are already semi-fused)
- Deformity of the foot eg flat foot or clubfoot which has led to wearing of the joint. This can sometimes be corrected by cutting the heel bone (osteotomy) but in some cases, due to pain and dysfunction, it is best to fuse the subtalar joint as well.

We usually try insoles and steroid injections to help with positioning and pain relief prior to considering surgery. If these do not give satisfactory relief then we can use the outcome to aid in our surgical planning.

What does a fusion involve?

A cut approximately 8cms is made along the outside of the hindfoot/heel area to open the joint. Sometimes a similar cut is made along the inside of the ankle too. The joint surfaces are roughened and reshaped and 1 or 2 screws are used to fix the joint together. Sometimes a small amount of bone which is taken from the hip or shin bone is used to help fill in the gaps in the surgical area. The operation can sometimes be done arthroscopically, your surgeon will advise on the best technique for you.

How long would I be in hospital?

Most people will come into hospital on the day of the operation after having a pre-operative assessment a few weeks before.

After the operation, you will need to keep your foot elevated as there may be a lot of swelling. You will be in a cast when you wake up. The physiotherapists will show you how to walk with crutches without putting weight through your foot. You will then be able to go home. Sometimes an overnight stay may be needed. You will need pain killers.

Will I have to go to sleep (general anaesthetic)?

The operation is usually performed under general anaesthetic (asleep). Alternatively, an injection can be given in the back, leg or ankle to make the foot numb while you remain awake. Your anaesthetist will advise you about the best choice of anaesthetic for you. In addition, local anaesthetic may be injected into your leg or ankle while you are asleep to reduce the pain after the operation even if you are asleep for the surgery. You will also be given pain killing medication after the operation.

Will I have a plaster on after the operation?

You will need to wear a plaster from just below your knee to your toes until the joint has fused. This is usually around 12 weeks.

What will happen afterwards?

Approximately 2 weeks after surgery

You will have a nurse-led appointment approximately 2 weeks after the surgery when your stitches will be removed and the wound checked. You will also have your plaster changed. You should continue using crutches and keeping your weight off your foot. You must elevate your foot regularly to reduce swelling.

6 weeks after surgery

You will attend clinic for x-rays and a plaster change. You will then be able to start to put some weight through your foot. Over the next 6 weeks you will build this up to being able to put all your weight through your foot.

12 weeks after surgery

At your 12 week appointment, if the bones have healed, you will be able to come out of plaster and start to use a supportive shoe.

How soon can I…

Go back to work?

In a manual job with a lot of dust and dirt around and a lot of pressure on your foot, you may need to take up to 6 months off work. If you have a sedentary job, you will be able to return to work much sooner but this is best discussed with your surgeon.

Drive?

You will not be able to drive until your plaster is removed and are able to fully weight bear. Try using the pedals while stationary and only drive short distances first. If you cannot make an emergency stop, your insurance will not cover you in the event of an accident. If only your left foot is operated on and you have an automatic car, you can drive after 6 weeks when your foot is comfortable enough and you can bear some weight through it.

Play sport?

The aim of the operation is to give you pain relief and the opportunity to walk more comfortably. It is unlikely that you will be able to play vigorous sports. Low impact sports such as walking and cycling should be possible.

Risks

- There will be significant swelling after the operation which will gradually reduce over the 12-18 months after surgery. Sometimes some swelling can be permanent. It is important to elevate your foot regularly.
- Infection of the bones in the foot is a serious concern. The risk of this is small (1%) but if it does happen it is serious as further surgery to drain and remove the infected bone, screws and pins may be necessary. You may then require more surgery to get the hindfoot into a satisfactory position. This is called revision surgery and has a higher risk of complications.

- Approximately 10% of subtalar joint fusions do not heal properly (non-union) and the bones have to be fused again ie another operation.
- There's also a small chance of the bones not healing in the correct position (mal-union) either due to a problem during the surgery or movement of the bones after surgery, before the fusion has finalised. If this is a problem, further surgery to correct it will be required.
- Minor wound infections are slightly more common and usually resolve with a short course of antibiotics.
- Sometimes the wounds are slow to heal. This is usually addressed by extra dressing changes and keeping a close eye on the wound so it doesn't become infected.
- Sometimes the screws or pins can become loose as the bone heals and cause pain. If this happens, they can be removed approximately 1 year after the operation.
- There are general risks with any operation that includes deep vein thrombosis and pulmonary embolism (blood clots), anaesthetic and tourniquet complications. Generalised pain, swelling and stiffness can occur known as chronic regional pain syndrome (CRPS).

What can I do to help myself?

Evidence from studies and our own experience shows simple measures can make a big difference to the outcome of surgery.

- Take vitamin C & D tablets needed for healing.
- Stop smoking – smoking impedes healing and is linked to increased complications.
- Keep fit and maintain a healthy weight as many foot problems are improved by losing weight.

Further reading

www.bofas.org.uk

www.footcaremd.org