The subtalar joint is below the ankle joint and allows side-to-side or tilt movements of the heel.

This operation removes the painful arthritic joint surfaces and fixes the joint together, with the aim that bone will grow across and fuse (arthrodese) the joint (glue the two surfaces together). Screws are used to compress the prepared joint surfaces and stabilise the joint to assist in achieving fusion. Once fusion has occurred then the screws are redundant but are rarely removed. Once fusion has occurred then the joint will be rigid and this usually results in abolition/substantial improvement in painful symptoms. This surgery does not typically affect the up/down movement of the ankle. Walking will not be altered on flat ground, only on uneven surfaces, when the ankle will feel a less flexible.

The surgery is performed through a 5 cm incision over the outer side of the ankle. The arthritic joint surfaces are excised (removed) and the joint fixed together with a screw through the heel. The operation takes approximately 1 hour. Sometimes bone graft is required and this taken from the area just below the knee (through a 4 cm incision) if required.

After surgery, your leg will be immobilised in a backslab (half plaster) for 2 weeks. Elevation of the foot (above the pelvis) over the first 10 days is important in helping to prevent infection. No weight must be taken though this leg for 6 weeks. The total time in plaster cast / removable boot is normally 12 weeks.

Alternatives to surgery

Your surgeon may have discussed the following with you:

- Oral analgesics (pain relieving medication)
- Activity modification (reducing activity which brings on symptoms)
- Custom orthotics (insoles)
- Modified footwear
- Ankle foot orthosis (AFO) - brace
- Steroid injection

Subtalar Fusion

Main Risks of Surgery

Swelling - initially the foot will be very swollen and need elevating. The swelling will disperse over the following weeks and months but will remain evident for up to 6-9 months.

Infection - The risk of deep infection occurring is approximately 1%. You will be given intravenous antibiotics to help prevent this. It is important to keep the foot elevated over the first 10 days to reduce the swelling and risk of infection. If there is an infection, it may resolve with a course of antibiotics but may result in failure of the fusion.

Mal position - ideally, the fusions are performed in a position that also optimum function and gives the best appearance. I take great efforts to judge the best position at surgery, but as you are asleep and lying down, it is not always possible to achieve this ‘best’ position. If the position is not optimal following surgery, this can usually be accommodated by custom insoles and footwear. Rarely is further surgery required.

Non-union - this is when the joint fails to fuse and bone has not grown across the joint. We won’t know whether this is the case for 6-12 months. The risk of this is approximately 5%. Smoking increases this risk 16 times. If a non-union does occur and is painful, then further surgery is usually needed.

Nerve damage - alongside the incision are two nerves; the superficial Peroneal and sural nerves. They supply sensation to the sides and the top of the foot and toes. They may be damaged during the surgery and this may leave a patch of numbness, either at the side of the foot or over the top of the foot and toes. This numbness may be temporary or permanent. There is approximately a 5% risk of this happening.

CRPS - This stands for complex regional pain syndrome. It occurs rarely (1%) in a severe form and is not properly understood. It is thought to be inflammation of the nerves in the foot and it can also follow an injury. We do not know why it occurs. It causes swelling, sensitivity of the skin, stiffness and pain. It is treatable but in its more severe form can takes many months to recover.
Subtalar Fusion

Main Risks of Surgery

Deep Vein Thrombosis (DVT) - This is a clot of blood in the deep veins of the leg. The risk of a clot occurring is reported as less than 1% after foot and ankle surgery which is generally substantially lower than after hip or knee surgery. Suspicion of DVT is raised if the leg becomes very swollen and painful. There are tests that can be performed to confirm / exclude the presence of a DVT. If confirmed, you will probably require treatment with a blood thinning agent (heparin preparation and / or warfarin). The main concern with regards a DVT is that rarely (<1:1000 chance with foot and ankle surgery) a piece of clot can break away in the leg and travel to the lungs which is much more serious and can be life-threatening. This is called a pulmonary embolus and signs of this include chest pain and shortness of breath.

For the first 2 weeks following surgery it is likely that you will be treated with a blood thinning agent (LMWH - low molecular weight heparin injections) to minimise the risk of DVT / PE but this does not afford total protection and exercises to keep the toes and knee moving are advised, as well as remaining generally mobile.

If you are concerned that the leg has become more swollen and painful (some swelling always occurs after surgery), or if you experience chest pain / shortness of breath, then you should contact the hospital, general practitioner, or accident and emergency department immediately.

Sick Leave

In general 4 weeks off work is required for sedentary employment, 12 weeks for standing or walking work. We will provide a sick certificate for the first 2 weeks; further certificates can be obtained from your GP.

Driving

IF have an AUTOMATIC VEHICLE and ONLY LEFT leg surgery then it is likely you will be allowed to drive after your outpatient review at 2 weeks post surgery. IF you have a MANUAL VEHICLE or RIGHT leg surgery then you will NOT be able to drive until 3 months post surgery.

These notes are intended as a guide and some of the details may vary according to your individual surgery or because of special instructions from your surgeon.