

These notes are intended as a guide only and some of the details may vary according to your individual circumstances.

RUH

Information for Patients

Arthritis of the Great Toe (Hallux Rigidus) Fusion

Advice Sheet

For more information

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Hallux rigidus is arthritis of the main joint at the base of the great toe. It may affect one or both feet but it is not normally associated with generalised arthritis throughout the body.

In most people there is no particular cause but in others it may follow an injury or another joint disease such as gout or infection. The response of the joint to arthritis is to lay down extra bone which it does mainly on the top.

Symptoms

Pain is felt at the base of the great toe. This is made worse on walking and is more noticeable when going up and down hills or stairs or when wearing a higher heeled shoe. The base of the great toe becomes stiff, particularly limiting the upward bend of the toe. The downward bend is less affected but is often painful. A swelling may develop on the top of the joint which is the extra bone that has been laid down in response to the arthritis.

An x-ray will be taken to confirm the diagnosis and assess the severity of the condition

Treatment Options

Simple measures should be tried in the first instance. These include avoiding activities that exacerbate the pain, taking analgesics and wearing comfortable shoes that do not rub. Usually stiffer soled shoes are better as they limit the amount of movement of the great toe, also avoiding high-heels.

Follow-Up

You will be seen after approximately 2 weeks, when the dressings and stitches will be removed. At this stage a plaster technician will put a fibreglass slipper around your foot. You will be seen again after 6 weeks when you will have an X-ray and the slipper will be removed if the joint appears to have united. The foot is often slightly swollen at this stage and so a comfortable pair of loose fitting shoes or trainers will need to be worn and should be brought to the out-patient appointment. You will then be seen about 3 months after the surgery.

Driving

You should not drive a manual car for 6 weeks following surgery. After this you should start gradually to see if you are comfortable. It normally takes a few days to feel confident. If you have an automatic car and have only had the left foot operated upon then you may drive after 2 weeks.

Work

If you have an office based job then you should be able to return after 6 weeks. If you have a more physical job then it may take 8-12 weeks.

Recovery

It often takes 6 months for all swelling to resolve following surgery and so minor swelling late in the day is not unusual and should not be a cause for concern.

Post-operative advice following a Great Toe Fusion

Dressings

Your foot has been dressed with a wool and crepe bandage which has a plaster strip around the great toe to give it support. This dressing should not be changed until you are seen at your first follow-up appointment after 2 weeks. The dressing must be kept clean and dry.

Elevation

It is very important that you rest as much as possible and keep your foot elevated. Try to avoid letting it hang down when sitting as this will lead to swelling and pain. This is most apparent within the first 2 weeks but swelling may occur for up to 6 months after surgery. In bed, put the foot on a pillow.

Analgesia

You will receive a prescription for pain medication on discharge. Pain is often due to swelling and this is eased by rest and elevation of the foot.

Walking

A special shoe has been supplied for you wear over your dressings which should be worn during the day for 6 weeks. A physiotherapist will show you how to use crutches and apply the shoe. It is necessary for you to walk by taking the weight on your heel so that you don't put pressure on the great toe. It is not necessary to wear this shoe in bed.

If symptoms continue then treatment depends on the severity of the condition. Initially a steroid and local anaesthetic injection can be used which will normally be done in the x-ray department to ensure that the injection is correctly placed in the joint.

If the arthritis is more advanced but only affects part of the joint then an operation can be performed which will remove the extra bone which has been laid down and the joint cleaned out. This is known as a cheilectomy. It should reduce the pain and increase the range of movement of the toe.

If the whole joint is affected then the most common operation performed is a fusion. This involves removing the joint surfaces and then holding them together with screws until they knit. Following this the toe is stiff but should be pain free.

Replacement of the joint is a newer technique. To date, long-term studies are not available and outcome is less predictable. Because of this very careful consideration needs to be given before undergoing a replacement.

Operation details

Surgery is performed as a day case or in-patient under general anaesthetic. The procedure takes 45 minutes.

An 8cm incision is made on the inner side of the foot over the base of the great toe. The joint surfaces are removed with a specific reamer and then the toe is correctly aligned and two screws are placed across the joint to hold it solidly. The skin is stitched and a wool and crepe bandage applied with a plaster strip within it.

Risks

- Infection

This is always a risk when a cut is made in the skin. Every possible precaution will be taken and intravenous antibiotics will be given at the start of the operation. In the vast majority of cases it will be eradicated with a course of antibiotics.

- Bones fail to fuse

This rarely occurs but is much commoner in smokers. If it occurs then about 50% of patients have no problem as thick scar tissue holds the bones together and the toe is pain free. In 50% there are on-going symptoms and the procedure needs to be re-done.

- Incorrect position

A few people will find that the position in which the toe is set does not suit them and they may consider further surgery to adjust this.

- Numbness

There are small nerves in the area of the surgery which may be damaged. If this occurs it causes a small area of reduced sensation on the top of the big toe. This often improves with time but may be permanent.

- Scar sensitivity

This is helped by massaging the scar regularly to de-sensitise it and usually settles.

General Considerations

- Swelling

Feet tend to swell after surgery. Excessive swelling causes pain and increases the risk of complications. The best way to prevent this is to elevate the feet as much as possible.

- Smoking

Smoking leads to a huge increase in surgical risk, particularly affecting wound healing and infection (16 times higher). It is strongly advised that you stop smoking prior to any surgery.

- Blood Clot

A blood clot in the deep veins of the leg (deep vein thrombosis/ DVT) may occur following foot and ankle surgery but is rare. There are many factors to take into account when considering the level of risk and it may be necessary to give injections or take medication to reduce the risk. There is a very small chance that the clot may break off and travel to the lungs (pulmonary embolus/ PE) and this can be dangerous, even life threatening. If you feel that the calf has become swollen and painful or you become breathless then seek medical attention immediately.

- Anaesthetic

Surgery is usually performed under general anaesthetic and so you are asleep. This is incredibly safe but there are exceptional circumstances where an adverse reaction may occur which is dangerous, even life threatening. Certain patients have many medical problems which may increase the risk and so it may be necessary to be seen by an anaesthetist to further discuss the issues prior to being brought into hospital. All patients will be checked for fitness for surgery in our specialist pre-operative assessment clinic.