First Metatarsophalangeal Joint Fusion (Big-toe fusion)

What are the indications for this surgery?

This type of surgery is undertaken where there is painful arthritis in the big toe. Surgery is usually recommended when more conservative treatments such as footwear changes, insoles and injections have not worked. The operation involves removal of cartilage from either side of the arthritic joint; the ends of these bones are held together by screws / staples / a metal plate while the bone fuses (grows across the gap). This means you will no longer have the painful arthritic joint but instead a pain-free fused area. The benefit of this operation is reduced pain and improved comfort during walking. The main disadvantage is the loss of motion to the joint.

What does surgery involve?

This procedure is usually performed as a day case. It is normally performed under general anaesthetic and frequently combined with a local anaesthetic block for pain relief.

The affected joint is accessed via an incision on the side or top of the big toe joint. The damaged cartilage is then removed and the bones held together with screws / staples / plate while the bone knits together (fuses). Occasionally, a piece of bone will need to be inserted into the gap formed by removing the joint. This piece of bone will be taken from the heel and requires another incision around the heel. After surgery your foot will be bandaged in a bulky dressing.

After the operation

Your foot will be protected in an orthopaedic shoe for 6 weeks. You will be allowed to walk on the operated foot but taking almost all of your weight through the heel. It is important to keep the foot elevated as much as possible especially for the first 3 days.

You will usually be able to go home when you feel ready. You will need to arrange for someone to drive you home. You should try to have a friend or relative stay with you for the first 24 hours.

You will be followed-up in clinic 12 to 14 days after surgery to check the wound and reduce the foot dressing. A further follow-up would be arranged roughly 4 weeks later to X-ray your foot. If the X-rays are satisfactory, you may start progressing to normal walking out of the orthopaedic shoe.

Wound care – The bulky dressing should be kept on until you clinic appointment 12 to 14 days after surgery.

Walking - Try to keep your foot elevated as much as possible to prevent swelling. You will be able to walk on the day of your surgery unless advised otherwise. You may mobilise freely around the house but long walks or standing for long periods should be avoided. You may need to use a stick or crutches for a few days.

Work - If you have a sedentary job you should be able to return to work within 2 weeks. If your job is physical, you may need to stay off work for at least 6 weeks.

Driving / travel - You will not be able to drive for 6 weeks following surgery (the only exception is if you drive an automatic AND your LEFT foot is operated on; you may start driving 2 weeks following surgery). **It is advisable to check the terms of your car insurance to ensure your cover is valid, as some policies state that you must not drive for a specific time period after an operation.**

What are the surgical risks involved?

- Infection - there is a small risk of infection with all surgery. If this occurs it will be treated with relevant antibiotics.
- Pain - for most people the pain passes after 24-48 hours and is tolerable with regular painkillers.
- Swelling - this is quite common. In some people the swelling reduces within a matter of weeks and in others could take a few months.
- Deep Vein Thrombosis - also known as Venous Thromboembolism (VTE), this is a rare complication of foot surgery.
- Nerve damage – this may leave you with numbness or a sensitive scar
- Delayed union or non-union of the fusion - 3 to 8% of operations do not fuse and require further treatment (revision). This means that the bones do not knit together firmly. The risk of non-union is increased if you smoke.

It is beyond the scope of this document to identify all the most extreme (less than one in a thousand) risks that you might be prone to but we will be very happy to discuss any worries about specific concerns and also about any family history or your own personal history of problems in the past which are much more relevant. If there is anything you do not understand or if you have any questions or concerns, please feel free to discuss them with us.

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