Lesser metatarsal cuneiform joint fusion for the treatment of midfoot osteoarthritis

Information for patients
Department of Podiatric Surgery
What is midfoot osteoarthritis?
Midfoot arthritis is 'wear and tear' of one or more of the joints in the central section of the foot. Arthritis is where the healthy cartilage becomes damaged and deteriorates.

What are the treatment options for midfoot osteoarthritis?
There are non-surgical and surgical options to treat midfoot osteoarthritis.

Non-surgical options
Non-surgical options usually focus on symptom management as opposed to a cure as this is not possible with arthritis. These include:

- Altering activity levels
- Using painkillers and anti-inflammatories
- Extra depth / width shoes
- Rocker sole (stiff curved sole) using an insole or orthotic foot support
- Joint injection therapy

Surgical options

- Lesser metatarsal cuneiform joint fusion

Surgery is usually recommended if you are experiencing pain and limitation / disability along with:

- Unstable or arthritic joint in the mid foot area (lesser metatarso-cuneiform joint).

What are the benefits?

- To reduce pain and deformity due to arthritis in the joint.
Are there any risks?

The general risks of foot surgery are outlined in the pre-operative information booklet which you will have already received. In addition to this, there are the following specific risks for this procedure:

- Pain from bone graft site (if graft required, this is from the heel bone)
- Arthritis in other joints
- Dorsal displacement (elevation) of the metatarsal
- Increased pressure under the ball of foot and accompanying pain
- Non-union of bone (bone does not knit together)
- Fixation problems (with the screws/plates/pins)
- Nerve irritation/damage

What does the operation involve?

The lesser metatarso-cuneiform joints are in the middle of the foot. The bony surfaces either side of the joint are cut away with a saw to remove the worn-out cartilage. The raw bone surfaces are then held together whilst they fuse (heal together). In some instances a piece of bone (graft) is inserted to help healing and position. This may be taken from another part of the foot. The incision placement will be on the top of the foot. If a bone graft is used, there may be an incision on the side of the foot near the heels.
How long does the operation take?

The operation usually takes about 60 minutes.

Is this a day procedure?

Yes, you can usually go home the same day (you will usually be admitted for half a day).

Will I have a plaster cast?

Yes for about 8 weeks.

Will I have any screws or pins in my foot?

Internal fixation (bone screws, pins or a plate) are usually used. These are buried beneath the skin so you will not normally notice them and they do not usually need to be removed.
How long will I need off work?

This will depend on the job you do and the speed of your recovery. For non-manual work, we usually recommend approximately 8-10 weeks. For manual work approximately 10-12 weeks.

Lesser metatarso-cuneiform joint fusion

The day of the operation

The operation can be performed comfortably under a local anaesthetic block, which is achieved by either a series of injections around the ankle, or an injection behind your knee. You will be fully awake during the operation and will be able to feel touch, pressure and vibration, but you will not feel any pain. If you do not wish to consider having the operation performed whilst still awake, or your Consultant does not feel this is the best option for you, you will be offered local anaesthetic with sedation or general anaesthesia. If this is the case then you may need to be referred to a different surgical team to facilitate this and your consultant will be happy to discuss with you further.

The operation takes about 60 minutes, although you will be in the Day Surgery unit for some time before the surgery and afterwards, to allow you an opportunity to rest following the operation. Your operated leg will be non weight-bearing in a cast for approximately 6 weeks and then in a walking cast for approximately a further 2 weeks. It is therefore very important that during this time you have people to look after you and to look after anyone you normally provide care for, such as children, elderly or disabled relatives.
First 2 - 4 days

This is the time you are likely to have most pain but you will be given painkillers to help. You must rest completely for 2-4 days. You will have a below knee cast and you cannot put weight on the operated foot. You will be able to stand and take weight on your non-operated foot after the operation, but you must rest, with your feet up, as much as possible. You should restrict your walking to going to the bathroom and when getting about, use your crutches in the way you will have been shown. You can get about a little more after 3 days.

One week after surgery

- You will need to attend for your foot to be checked and, if necessary, redressed / re-casted.

Two weeks after surgery

- You must attend again. Your stitches will be removed and a fresh cast applied.

Between 6 - 8 weeks after surgery

- You may require further x-rays.
- The cast will be removed and if all is proceeding well you will be allowed to start walking in a removable aircast boot or in a supportive trainer.
Between 8 - 10 weeks after surgery

• If all has gone well you will be able to start wearing a good lace-up shoe / trainer.
• Your foot will still be swollen and twinges of discomfort are not uncommon at this time due to you increasing your activity. Your leg will feel naturally weak to start with as it has been in a cast.
• You will be instructed regarding rehabilitation exercise or you may be referred to a physiotherapist.
• You may return to non manual work but may need longer if you have an active job.
• You may return to driving if you can perform an emergency stop. You must check with your insurance company before driving again.

Between 12 - 16 weeks after surgery

• The foot should continue to improve and begin to feel normal again.
• There will be less swelling. Sport can be considered depending on your recovery.

Six months after surgery

• You will have a final review between 3- 6 months following surgery.
• The swelling should now be slight and you should be getting the full benefit of surgery.

Twelve months after surgery

• The foot has stopped improving with all healing complete.

Please note: if a complication arises, recovery may be delayed.
Who do I contact if I would like any further information?

If you have any questions about the procedure or would like further information please call us on:

- 0114 271 4668