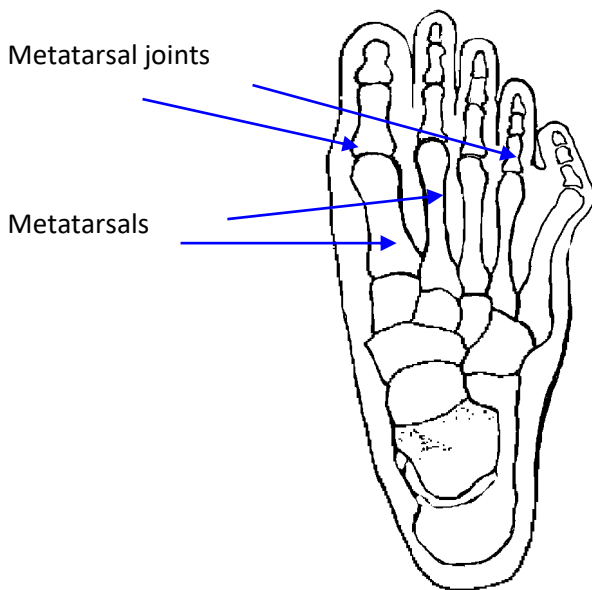


Management of Metatarsalgia

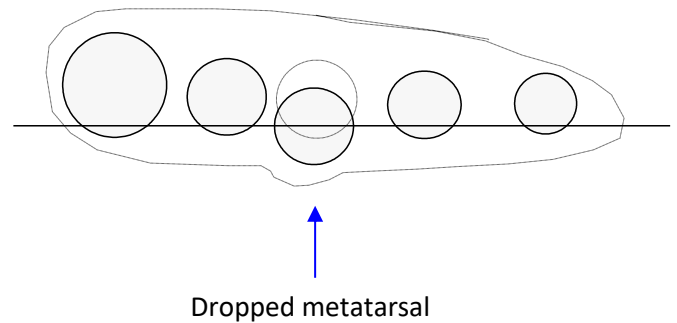
Information for Patients, Relatives, & Carers

What is metatarsalgia?

You have been diagnosed with metatarsalgia. This is a general term to describe pain and overloading of the joints in the ball of the foot, at the base of the toes. This term also includes joint inflammation of various causes.



The metatarsal may be long or dropped (see below), making it take more weight than adjacent metatarsals.



Symptoms often include a throbbing pain, a feeling of walking on a lump or a pebble, hard skin or a corn under the affected joint/ joints, and a feeling of warmth in the foot. The problem is often worse when wearing thin-soled or high-heeled shoes, when standing all day or walking long distances. Sometimes, the toes associated with the affected joints splay outwards or start to appear to float upwards.

Causes include inappropriate footwear or shoes that have a short 'toe box' (at the front of the shoe) such as high heels, which tend to cramp the toes. Metatarsalgia can also be caused by having naturally long and dropped metatarsals, or by medical conditions such as osteoarthritis, inflammatory arthritis or an injury to the foot.

How is the diagnosis made?

The diagnosis is made by examining your foot and asking you about your symptoms and any injuries you may have had to the area. We will ask you to have an x-ray, which will enable us to check the relative lengths of your metatarsals and rule out arthritis.

We may ask you to have blood tests if we suspect that the problem is due to inflammatory arthritis. We also sometimes use injections of local anaesthetic to numb the joints, as this can help us to find out the exact location of your symptoms.

What are the treatment options?

Non-surgical treatment

1. The right footwear for the right occasion. For example, supportive shoes such as trainers for walking long distances. Shoes should be the correct size for your feet, with sufficient room for your toes and a fastening (such as a buckle or laces - not slip-ons), and a stiff sole or toe spring. A toe spring creates a 'rocker' effect on the sole of the shoe, forcing the foot to 'roll' forward when walking.
2. The use of ice to relieve inflammation and swelling, which your podiatrist can explain to you.
3. Podiatry treatment to reduce hard skin and the use of protective padding to cushion the affected area.
4. Taping the affected toe to the one next to it, in order to correct toe alignment.
5. Wearing insoles or orthotics (shoe inserts which help to realign the bones and joints of the foot).
6. Steroid injections (used alongside the above treatments) may reduce inflammation and pain, although these are not a permanent cure.

Surgical treatment

If non-surgical treatment fails to relieve your symptoms, we can offer you an operation to correct the problem. This involves shortening and/ or lifting up the abnormally aligned metatarsal.

The operation may be performed at the same time as toe surgery. It is usually done as a day case under local anaesthetic, which means that you will be awake and will not need to stay in hospital overnight.

Please note that your foot, or lower leg and foot, will be numb from the anaesthetic for 6-8 hours.

If you have access to the internet, there is further information about the management of metatarsalgia on the NHS Choices website, at: <https://www.nhs.uk/conditions/foot-pain/pain-in-the-ball-of-the-foot/>

What are the risks associated with this operation?

Specific complications associated with metatarsal surgery are:

- 7.13% risk of transfer pain (pain in another area of the foot) or a skin lesion, such as a callous or corn
- 22% risk of 'floating toe', where the toe does not heal straight, which can cause problems with wearing shoes.
- 8.17% risk of joint stiffness
- 17% risk of the scar contracting during the healing process, which can cause increased skin tension and an uncomfortable scar

- 1.14% risk of fracture of the operated bones, which is caused by putting weight on the foot too soon after surgery
- 0.83% risk of non-union of bone. This means that the two parts of the operated bone do not heal back together, which can delay recovery and may even require further surgery to correct.

Complications associated with foot surgery in general include:

- 11% risk of prolonged swelling for up to 6 months.
- 19% risk that the operation will not relieve your current pain.
- 1.1% risk of post-operative infection, which can be resolved with antibiotics.
- 1% risk of DVT/ thrombosis (blood clot) and a 0.1% risk of pulmonary embolism (blood clot in the lungs).
- 1.03% risk of delayed healing for several weeks after surgery.
- 0.62% risk of a thickened scar, which may cause irritation with footwear.
- 0.41% risk of movement of the screws or pins used to secure the bones together in their corrected position. This can cause delayed healing and problems with the two sections of cut bone joining together (also known as 'non union of bone').
- 0.62% risk of 'chronic pain syndrome'. This is a rare condition and we are not sure what causes it, but we do know that it can be associated with trauma (injury) or sometimes surgery.
- 8.68% risk of further surgery being required to correct any complications which occur after the original operation.

Before your surgery

We will ask you to come to the clinic before your operation for a pre-operative assessment. This appointment will last approximately 30 minutes, when you will be asked about your medical history, medications and allergies. Your blood pressure will be taken, you will be tested for MRSA (this procedure is explained in a separate leaflet), and asked to sign a consent form.

If you have any questions or concerns, or if you do not understand anything that is said during this appointment, please do not hesitate to ask.

Getting things ready for your return home after surgery

- Ensure that you have a supply of over-the counter analgesics at home, ready for your return after surgery. You can take Paracetamol 500mg or Co-codamol 8/500mg and/or Ibuprofen 200mg.
- Move essential items to a height that means you do not have to bend down low to reach them.

- If you have a freezer, stock it with easy-to-prepare food. Ensure you have ice or frozen vegetables in your freezer to apply to the back of your knee after your operation.
- Arrange for relatives and friends to do your heavy work (such as changing your bedsheets, vacuuming and gardening) and your shopping, as you will find it difficult to carry shopping whilst on crutches.
- If you live alone, set up a place where you can eat your meals in the kitchen. This is because it will be difficult to carry items such as plates or cups and maintain your balance.

Is there anything I should do to prepare for the operation?

- Please arrange for a friend or relative to escort you home after your operation. You will need to organise your own transport home by car with someone else driving, as you will not be able to drive and should not travel home on public transport.
- **You can take all your medications as usual. However, if you take blood-thinning medications such as Warfarin or Aspirin**, it is very important that you inform us before you come for your surgery, as you may need to stop taking them for several days beforehand. **If you have asthma or angina, please take your medicines as normal and bring a supply with you when you come for your appointment.**
- On the day of your operation, please wash your feet thoroughly with warm soapy water, lightly scrub around the toenails with a soft brush, and remove all nail polish (as appropriate).
- You can eat and drink normally unless we have told you otherwise.
- **Please do not wear make-up**, nail varnish or jewellery (including body piercings) when you come for your procedure.
- To help you relax during the operation, you can bring a personal stereo or something to read. You may spend up to three hours at the Surgery Centre on the day of your operation, so you might like to bring a drink and a snack with you.
- As your foot will be bandaged after the operation, please wear either wide-legged trousers or a skirt that you can get over your bandage. You may also wish to bring a pair of shorts with you to wear under your theatre gown.

What happens on the day of my operation?

When you arrive at the surgery centre on the day of your operation, please report to the reception desk on the first floor. The surgeon will ask you to confirm your consent for them to do the operation. If you require a Medical Certificate ('sick note') for your employer, this should be requested from your team.

We will ask you to change into a hospital gown (and shorts if you have brought a pair with you) before taking you to the prep room. First, we may insert a Venflon (small needle, or

'cannula') into the back of your hand, which will allow us to give you fluids or medicines in the event of an emergency.

Next, we will ask you to lie on your side, to allow us to insert a small needle behind your ankle for the local anaesthetic. As the anatomy behind the ankle varies a little from person to person, sometimes we use a nerve stimulator to accurately identify the nerves. This sends a small electric current down the needle, which stimulates the nerve and also the muscles controlled by it, causing them to contract and relax. When your foot starts to kick on its own, we know that we have identified the correct nerve and can then inject the anaesthetic with precision.

You will then be left to rest for a short time to allow the anaesthetic to fully take effect before surgery. You will be shown how to use crutches (if required) and given advice about coping with stairs and issued with a leaflet reminding you how to use them.

When the area is completely numb, we will take you into the operating theatre. The procedure takes 30-60 minutes, during which the metatarsal (the affected bone in the foot) will be cut, re-aligned and secured in a corrected position with screw/s. The wound will be closed with absorbable sutures (stitches) and covered with a dressing and a 'tubigrip' bandage, which must stay in place until your next clinic appointment.

What happens after the operation?

You will return to the recovery room, where a nurse will remove the Venflon (if fitted) from your hand and fit your operated foot with a surgical shoe. Providing you are well, you should be able to go home approximately 40 minutes after your operation.

We will give you a 3-day supply of medication to take home with you. It is important that you start taking painkillers before the anaesthetic completely wears off, as this will allow you to remain comfortable and pain-free.

Is there anything I need to watch out for at home?

You should seek assistance immediately if you experience the following symptoms:

- Unbearable pain, not relieved by painkillers
- Tight bandages – constant tingling, pins and needles or blue toes. In an emergency, you can loosen the bandage yourself, but please seek medical advice as soon as possible.
- Pain or swelling in your calves or the veins in your legs
- Difficulty in breathing or chest pain
- A high temperature or fever (38° or above)

If a problem arises during clinic hours (8am – 6pm, Monday – Friday) please contact the Podiatric Surgery Department at Sidney West Primary Care Centre, Burgess Hill on 0300 303 8063. Press 2 and ask to speak to a member of the on-call surgical team to discuss your symptoms and advise you on how to proceed.

If a problem arises outside of clinic hours for the first 4 days after your procedure, contact 111 for advice. If you have a clinical emergency after this time period please contact your GP on-call service or attend A&E.

Will I need to visit the Surgery Centre again?

Yes. You will need to return to the clinic for follow-up appointments.

How do I look after my foot at home?

For the first 7 days after surgery

- Keep your leg elevated (raised) as much as possible, as this will help minimise swelling and pain. Only walk to the toilet and back, always using your surgical shoe.
Do not drive.
- Take your painkillers at regular intervals and as prescribed, starting before the anaesthetic wears off. Even if you do not have any pain, it is advisable to take the anti-inflammatory tablets (if prescribed), as they reduce swelling.
- Ice can be used to reduce pain and swelling. At home, you should wrap some ice cubes or a bag of frozen peas (or similar) in a damp tea towel and place behind your knee; *this should be held in place for no more than 20 minutes at a time*, but you can do this several times a day. We advise that you place it behind your knee rather than on your foot, as this will prevent your wound from getting wet and can also help the anaesthetic last longer. Always check your skin afterwards, as ice can burn and cause blisters. For this reason, you should never place plastic bags of ice or frozen vegetables directly onto the skin.
- To reduce the risk of DVT (deep vein thrombosis) or the formation of blood clots,
 1. drink plenty of fluids, but avoid alcohol
 2. do not smoke, as smoking impairs wound healing.
- Help your blood to circulate to your operated foot by
 1. rotating the ankle and bending the knee regularly
 2. keeping the tubigrip up to knee level
 3. walking to the toilet and back again.
- **Please keep your wound dry** (do not bath or shower) until you have had your second follow-up appointment, approximately 2 weeks after surgery.

5 – 7 days after surgery

- If all is well, you will be able to increase your activity, although it will still be a good idea to elevate your leg regularly as this will minimise swelling.
- We will advise you to start walking on your heel, wearing your surgical shoe. Throughout the week, you should build up to putting weight on your whole foot.

- You should continue to keep your wound dry and your tubigrip up to the knee at all times.
- If you still need painkillers at this stage, you may be trying to do too much and not resting your foot enough.

10 – 14 days after surgery

- We will ask you to return to the Clinic to have the stitches removed (if appropriate). The dressing and tubigrip will also be removed at this appointment. **Please bring a thick-soled trainer or supportive lace-up shoe (for your operated foot) with you to this appointment.**
- We may give you some daily exercises to help with joint mobilisation and tendon strengthening. These exercises may cause some discomfort or pain, but they are essential to prevent joint stiffness. You should continue to do the exercises every day for the next 3 months.
- When your stitches and dressings have been removed, you will be able to bath, shower and swim as normal.
- You can massage your scar with vitamin E oil, cream or gel to improve its appearance.
- At this stage, we encourage most patients to wear a thick-soled trainer or supportive lace-up shoe for the next 6 weeks, as this protects the foot while the bone continues to heal and helps to minimise swelling.

When can I get back to normal?

You will probably need to take 4-6 weeks off work, depending on the type of job that you do, how far you need to travel and how well your foot is healing. We can issue a Medical Certificate.

Your GP will be sent a Discharge Summary on the day of your procedure, so they will be fully aware of the treatment that you have received.

We advise that you not to drive until you are able to wear a shoe on your affected foot and you can perform an emergency stop without discomfort. It is important to inform your insurance company that you have had an operation to ensure that you are covered in the event of an accident.

How do I make a comment about my treatment?

We aim to provide the best possible service and staff will be happy to answer any questions you may have. If you have any suggestions or comments about your visit, please speak to a member of the surgical team or contact the Service Experience Team as follows:

The Sussex Experience Team
Sussex Community NHS Trust

FREEPOST (BR117)
Elm Grove
Brighton
BN2 3EW

Tel: 01273-242292

Email: SC-TR.serviceexperience@nhs.net