

# Talo-navicular joint arthrodesis

For the treatment of rigid flat foot



**Information for patients**

Sheffield Teaching Hospitals



**PROUD TO MAKE A DIFFERENCE**

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



## What is a flat foot?

A flat foot is a condition in which the foot has an arch that is lower than usual. This causes most, if not all of the sole of the foot to touch the ground while standing. It can be caused by numerous factors and may be either flexible or rigid.

## What are the treatment options for rigid flat foot?

There are both non-surgical and surgical options available.

### Non-surgical options

Non-surgical options focus on symptom management but will not 'cure' the flat foot and/or any arthritic changes that have already occurred.

- Modifying your activity levels
- Painkillers
- Wearing supportive shoes that fit well - extra-wide fitting shoes can bring relief
- Custom-designed footwear to accommodate any deformity
- Insoles to support the foot
- Intra-articular injection (steroid) therapy

### Surgical options

There are several surgical procedures that can be used to treat this condition. The clinical team will discuss the various options and the reason for choosing this one (**Talo-navicular joint arthrodesis**).

Surgery may be considered if you are experiencing pain and activity limitation or disability along with either:

- Painful flat foot
- Painful unstable rear foot
- Painful unstable foot arch
- Talo-navicular joint arthritis or pathology

## **What are the benefits of surgery?**

- Reduce flattening of the foot
- Reduce pain associated with the talo-navicular joint
- Reduce the instability/malalignment causing the deformity

## **Are there any risks?**

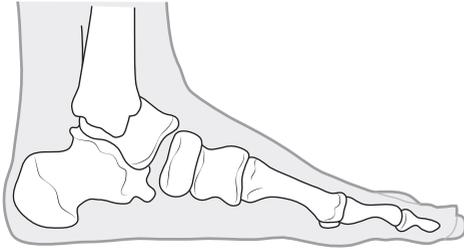
The general risks of foot surgery are outlined in the pre-operative information booklet which you will have already received.

In addition to this there are the following specific risks for this procedure:

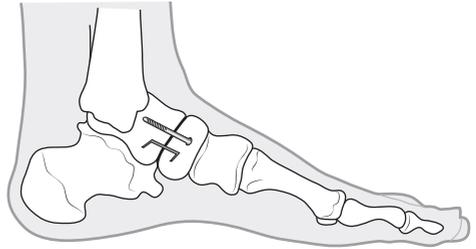
- Joint stiffness
- Arthritis of neighbouring joints
- Non-union of the bone (where the two bones do not knit together)
- Mal-union (where the bones knit together in a sub-optimal position)
- Fixation problems (screws/plates/pins)
- Recurrence/collapse of the foot
- Difficulty adapting to walking on uneven surfaces
- Over/under-correction of deformity
- Metatarsalgia (pain in the ball of your foot)
- Nerve damage (loss of sensation)

## **What does the operation involve?**

A Talo-navicular joint arthrodesis is a procedure that irreversibly stiffens one of the joints in the middle of the foot that lies between the talus (ankle) and navicular bones. An incision (cut) is made on the top of the foot, any worn out cartilage in the joint is removed, and the raw bone surfaces are secured together with screws and/or plates.



**Joint sag with pain  
and flat foot**



**Fusion restores arch**

## **Is this a day surgery procedure?**

Yes. The operation usually takes between 60 to 90 minutes, so you can usually go home the same day.

## **Where will the incision be made? Will stitches be needed?**

The incision (cut) is usually on the top of the foot. We will use dissolvable stitches where possible.

## **Will I need screws or wires?**

Internal screws, pins or plates may be used. You will not normally notice these and they do not usually need to be removed.

## **Will I have a plaster cast?**

Yes, a non-weight-bearing cast is usually in place for 4 to 6 weeks. This can vary according to personal factors such as bone healing times.

## **How long will I need off work?**

This will depend on the type of job and the speed of your individual recovery. We usually recommend approximately 10 to 12 weeks.

# The day of the operation

The operation is usually performed under a local anaesthetic which means that you will be awake. You can **eat and drink as normal and take any prescribed medications** on the day of operation (unless advised otherwise).

The local anaesthetic is administered via injections around the area of the foot and the ankle. Most patients find this to be more comfortable than a dental injection. Sometimes an injection behind the knee will be offered. The operation takes about 60 to 90 minutes, although you can expect to be in the day surgery unit for about 4 to 5 hours. This is to allow you an opportunity to rest after your operation and for us to provide you with discharge information and packs as required.

This additional information will give you details on how to look after yourself when you get home, what to look out for and who to contact if you have any concerns. You should arrange for transport home with a relative or friend, ideally by car but by accompanied taxi if necessary. You should not go home by public transport.

**For your safety you must have a competent adult at home for the first day and night after surgery.**

Your operative limb will be in a **non-weight-bearing cast for approximately 6 to 8 weeks, then in a walking cast for approximately 2 weeks**. It is very important that you have people who can support you at home during this time.

## First 2 to 4 days

- This is the worst time for pain but you will be given painkillers to help.
- Your foot will be in a cast (you should not bear any weight on the affected foot).

- You must rest completely for 2 to 4 days with your foot elevated just above hip level.
- You may be advised to keep the circulation going by gently drawing circles in the air or wiggling your toes.
- You should restrict your walking to going to the bathroom only.
- If you have been given crutches or walking aids you must use them as directed.
- Take your medications as advised.
- Use ice packs as instructed to help with pain and swelling.
- Ensure you drink plenty of fluid, though avoid caffeine.

### **1 week after surgery**

- You will need to attend the clinic for your foot to be checked and re-dressed/re-casted.
- You must **remain non-weight-bearing** while in your cast.
- You may start to do a little more within pain limits. Pain may mean you are doing too much.
- You will be sent for an X-ray between weeks 1 and 2 after your operation.

### **2 weeks after surgery**

- You must attend the clinic again for removal of stitches. For absorbable stitches this normally means just trimming the ends.
- Your foot will still be very swollen.
- Provided that the wound is well enough healed you should be able to get the foot wet (briefly).
- You can keep your circulation going by wiggling your toes.
- Your below knee cast may be replaced with a non-weight-bearing below ankle cast.
- You will be advised on a gradual return to activity and may also be advised on exercises and scar care.

## 8 weeks after surgery

- The foot will still be very swollen, especially at the end of the day.
- You will need to return to clinic for removal of your cast and we may send you for another X-ray.
- Your below knee cast may be replaced with a non-weight-bearing below ankle cast or walker boot.

## Between 8 to 10 weeks after surgery

- You will normally transition out of the cast or walker boot to a stiff soled supportive shoe (**running trainer or walking boot**). However, you may need additional immobilisation for a period in a cast or walker boot; you will be advised as appropriate.
- The foot will still be swollen and twinges of discomfort are not uncommon at this time due to you increasing 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.
- Return to work, sport and driving will be advised on a case by case basis. However as a general rule, a gradual return to activity is advised and no driving until you can perform an emergency stop. You must check with your insurance company before driving again.

## Between 12 to 16 weeks after surgery

- You should remain in supportive footwear (**running trainer or walking boot**) for this period.
- The foot should continue to improve and begin to feel more normal again.
- There will still be moderate swelling particularly after prolonged weight-bearing.
- Sport can be considered after 3 months depending on your recovery.

## 6 months after surgery

- You will have a final review 3 to 6 months following surgery.
- The swelling should now be mild and you should be able to undertake the majority of your former activities.
- Any residual swelling and discomfort may continue to improve for up to 12 to 18 months.

## 12 months after surgery

- The swelling should now be slight and you should be getting the benefit of the surgery.
- The foot has stopped improving with all healing complete.
- Any residual swelling and discomfort may continue to improve for up to 18 months.

**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 any further information, please call the podiatry surgery team on:

- **0114 271 4668**



Sheffield  
Hospitals  
Charity

To help support your local hospitals visit  
[sheffieldhospitalscharity.org.uk](https://sheffieldhospitalscharity.org.uk)

Registered Charity No. 1165762



Yes I donate  
ORGAN DONATION

Alternative formats can be available on request.  
Please email: [sth.alternativeformats@nhs.net](mailto:sth.alternativeformats@nhs.net)

© Sheffield Teaching Hospitals NHS Foundation Trust 2021

Re-use of all or any part of this document is governed by copyright and the "Re-use of Public Sector Information Regulations 2005" SI 2005 No. 1515. Information on re-use can be obtained from the Information Governance Department, Sheffield Teaching Hospitals. Email [sth.infogov@nhs.net](mailto:sth.infogov@nhs.net)