

# Digital Amputation

## Information for Patients, Relatives, & Carers

### What is Digital Amputation?

Total (or partial) digital amputation is the removal of an entire toe (or just part of it). This operation is appropriate if:

- Severe toe deformity has occurred following injury or dislocation, and correcting the toe position would be difficult because of other existing deformities (such as a bunion).
- There is deep infection/ulceration involving bone, which may be due to trauma (injury) from footwear, or because of an underlying condition such as diabetes with peripheral neuropathy (numbness in the feet).
- Common symptoms include ulceration and irritation from footwear, catching of the digit on hosiery, and pain under the ball of the foot. Symptoms are present on a daily basis, and may have necessitated footwear changes/specialist footwear, or prolonged treatment with antibiotics and dressings for infection.

### How is the diagnosis made?

A diagnosis is made by examining the foot and asking you about your symptoms. We will ask you to have an x-ray if bone infection is suspected.

### What are the treatment options?

#### Non-surgical treatment

1. Routine podiatry treatment
2. A course of antibiotics if infection is suspected
3. Padding and strapping or splinting
4. Insoles/orthoses
5. Wider, deeper footwear
6. Semi-bespoke/Bespoke (prescription) footwear

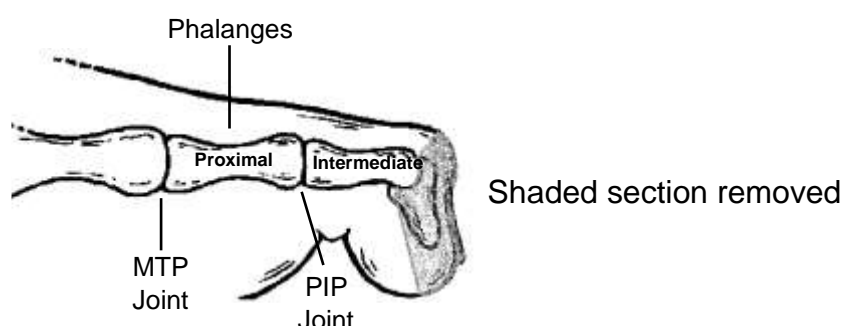
#### Surgical treatment

If non-surgical treatment is unsuccessful, we can offer you an operation to remove all, or part of the affected toe. The operation is carried out under a local anaesthetic, but is only offered to patients who are unsuitable for reconstructive surgery.

## Total Digital Amputation

An incision is made around the base of the toe, the soft tissue attachments and tendons are released, the whole toe is removed and, as far as possible, the head of the metatarsal (the long bone connecting the ankle bone to the bone in the toe) is covered with fat to provide cushioning when walking. Sutures (stitches) are used to close the skin.

## Partial Digital Amputation



The diagram shows amputation of the tip of the toe, which can be very successful for recurrent toenail problems or ulceration at the apex of the toe. Amputation can also be carried out at PIP joint level. In both cases, fat is used to cover the remaining portion of the toe and a suture is used to close the skin.

## What are the risks associated with this type of operation?

Specific complications of digital amputation include:

- Increase in the size of a bunion deformity, or drift of other toes into the space where a toe was removed – a spacer can be provided by your podiatrist.
- Delayed healing associated with fragile/ageing skin
- Phantom toe pain
- Thickened or painful scar

General Complications of foot surgery include:

- Prolonged swelling
- Continued pain
- Infection
- Blood clot
- A chronic pain syndrome

## 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 bed sheets, vacuuming and gardening) and your shopping.
- If you live alone, set up a place where you can eat meals in the kitchen, as it might be difficult to carry items such as plates or cups when you are walking on your heel.

## 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 Sidney West 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.

The operation will be done under a local anaesthetic, using a digital block, where the surgeon will give you injections to numb the toe on both sides before starting the operation. 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 cope with stairs and so on.

When the area is completely numb, we will take you into the operating theatre. The procedure takes approximately 15 minutes after which 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 the Venflon (if fitted) will be removed from your hand and your operated foot will be fitted 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 pain medication to take home with you. It is important that you start taking the 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 wearing your surgical shoe. **Do not drive.**
- You must wear your surgical shoe at all times when you are weight-bearing (i.e standing or walking) but it can be removed when resting or in bed.
- 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

- We will call you to review your recovery.
- 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, still 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 at either end of your wound – the other stitches will be absorbable. 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.**
- 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 and helps minimise swelling. You can resume normal activities when you are back in footwear.