**Leg amputation**

When you have poor blood flow to your leg, or a serious infection in the skin tissue or bones which has not responded to treatment then, as an absolute last resort we may need to remove (amputate) the leg. Every other possible alternative treatment will be explored first.

**The surgery**
The operation can be performed with you asleep under a general anaesthetic or numbed from the waist down using a spinal anaesthetic. The anaesthetist will discuss with you what would be best.

An amputation is performed at different levels in your leg. The decision on where to amputate is based on the likelihood of healing and your own abilities. The surgical preparation involves the therapists, surgeons, and nurses. Following recovery and rehabilitation a good level of mobility can be achieved even with an amputation through the thigh.

Any decision on treatment will be carefully considered by your vascular multidisciplinary team (MDT) and discussed with you in detail.

**What are the risks of treatment?**
An amputation of the leg is a large operation and as with any major operation there are risks involved. The risks will vary with each patient and depend on your health and any other conditions you may have, but include:

- **Wound infection (common).** If a wound infection occurs it usually requires antibiotic treatment. Occasionally, the wound may need to be cleaned out under anaesthetic.

- **Phantom limb sensations (common).** After the operation some people can feel as though the toe/foot is still there. This is due to some of the nerves being affected by surgery. This will usually subside over time. It may need medication to help reduce the symptoms.

- **Further amputation (uncommon).** Very occasionally a further amputation higher up the leg may be required. This may be because the wound does not heal properly.

- **Risk to life (uncommon).** As with any major operation there is always a risk to life. This is risk is partially dependent on your age, weight and general health.

We will be happy to discuss these risks with you, or answer any questions that you may have.

**Are there any alternatives to this treatment?**
If you do not receive treatment your symptoms will not improve and in some cases may lead to death. Amputation is usually only discussed if there is no other alternative.
Consent
We must seek your consent for any procedure or treatment before it can go ahead. Your medical team will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you’re unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

Before your surgery

Preparing for your operation
Smoking is a major risk for arterial disease, increases the chances of getting a chest infection and slows your recovery. So if you’re a smoker, you need to stop. The NHS Quitters service is available to help support you. You can contact them on 0300 123 3791 or visit www.solenthealthyliving.nhs.uk. You can also talk to your GP who can prescribe nicotine replacement for you. Exercise can boost your immune system and help your recovery so try gentle exercise such as walking and cycling.

Thinking about your return home
Before your operation, it’s a good idea to start thinking about how you will manage at home after your surgery. We encourage patients to stay with family or friends or to have a relative staying with them if possible. If you live alone or require additional support then we may need to help you make plans for a short period before you go home. The sooner we know this, the sooner we can start arranging something for you. Talk to your close family, friends and GP to see what options you have.

The occupational therapist will do a visit to your home to check that it is wheelchair friendly and discuss with you and your family/carers how you will manage, what support may be needed and any onward referrals regarding adaptations.

Pre-assessment
Before you are admitted for surgery you will be seen by a specialist nurse and possibly an anaesthetist in clinic. We’ll take a detailed medical history, as well as perform blood tests, a physical examination, blood pressure checks and a heart trace (ECG). The anaesthetist will talk to you about your anaesthetic and how your pain will be controlled.

You should bring in a list of the medications you take and when you take them. We’ll let you know if you need to make any changes to your medication for your surgery.

The therapy team will see you to ask about your home set up and what support you already have as well as asking and assessing your physical capabilities, for example how far can you walk if at all, do you have a wheelchair. They will also help you to prepare for your recovery and discharge home after the amputation, helping and supporting you and your family through this difficult time.

Coming into hospital

What to bring
When you come into hospital there are a few items that you should bring:
• All your medications (including insulins and inhalers)
• Nightwear and changes of clothes
• Toiletries
• Dentures, glasses and hearing aids if you have them
• A wheelchair, if you have one

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Bring them in a small bag labelled with your name. There isn’t much storage space on the ward so it should only be a small bag.

We recommend that you leave valuable items at home; especially as you’ll be asked to remove jewellery prior to surgery. The ward cannot accept responsibility for items left on the ward and not handed to the cashiers for safe keeping.

**What to expect during your stay in hospital**

Prior to surgery you will be assessed to ensure nothing has changed. You may need to have further blood tests.

On the day of surgery you will be taken to theatre where your details will be checked before you’re taken to the anaesthetic room and then into surgery.

After theatre you will usually return to the ward. If you require observation you will be taken to the high dependency unit. Your anaesthetist will tell you if this is necessary.

You may have a number of special tubes initially which will be removed as you recover:

- **A drip** to give you fluids directly into a vein.
- **A wound drain** into your leg so that any old blood (haematoma) can drain away. It is removed when the drainage has stopped.
- **A urinary catheter** into your bladder to drain urine. The drainage is measured closely by the staff.
- **A PCA** (patient controlled analgesia) drip that goes through a pump to give you pain relief.
- **A local anaesthetic catheter** which runs a local anaesthetic infusion to help reduce the discomfort by numbing the nerves. This is usually continued for five days after your amputation and then removed.

Your pulse, blood pressure, temperature, breathing rate and pulse will be monitored.

**Pain**

The wound on your leg is likely to be uncomfortable at first. You may have pain relief drips (PCA) or local anaesthetic catheter for the first few days after surgery. Once you are eating and drinking, you will be able to take pain relieving medications by mouth. The pain will slowly improve. It’s important your pain is controlled so that you can move about.

**Phantom limb phenomena**

About 80% of people who have an amputation will wake up with the feeling that their leg is still there. This is called phantom limb sensation. What feelings you have in the leg are very individual. It is not uncommon to want to scratch the foot that isn’t there. It’s not fully understood why this happens but it seems to be a mismatch in the information sent from the nerves that used to supply your leg and a map of your body that is present in your brain. To reassure you, this is completely normal.

A small percentage of patients can experience phantom sensations as pain. Again this is a real feeling and it’s important that you let the team know to help you to manage this with medication, exercise and massage.
Eating and drinking
Once you’re awake you will be allowed to eat and drink. You may find you’re not very hungry at first but it’s important to eat regularly to help your recovery.

Moving around
Moving around soon after surgery will help speed up your recovery and prevent complications.

Deep breathing and coughing exercises help to prevent chest infections so it’s important that you do these.

The therapy team will give you advice and the help you need to start getting up into the wheelchair and out to the toilet. The nursing staff will be able to help you practise this. It is expected that you will sit out in a wheelchair the day after surgery and then begin to use your wheelchair to move around.

You will be encouraged to maintain as much independence as possible with your personal care and toileting during your recovery.

Rehabilitation after a leg amputation
Rehabilitation following a leg amputation will depend on how you are feeling after the operation, but the first day after surgery we would expect you to be:

- Starting exercises to keep your joints flexible and muscles strong
- Rolling, bridging (lifting your bottom) in bed to help relieve pressure on your bottom and heels
- Sitting on the edge of the bed to test your balance
- Learning how to transfer out of bed into a wheelchair
- Pushing yourself around in a wheelchair
- Touching, handling and eventually massaging your operated leg (residual limb)

Treatment by your physiotherapy and occupational therapy team will focus on practicing these activities as you progress and recover after your leg amputation.

It may take some time to be able to perform everyday activities and you may be transferred to another hospital to continue your rehabilitation.

Not everyone is suitable or able to use an artificial leg but the physiotherapists, occupational therapists, nursing and medical team will support you throughout.

Your wound
There will be a dry dressing over your wound. Special dissolvable stitches are used to close the wound. Sometimes non-dissolving stitches are used which will need to be removed around 8-10 days after the operation. Your nursing staff will inform you if this is the case.

Following your surgery you may have some swelling and bruising. This is normal and will disappear within a couple of weeks. You may also notice that there are areas of numbness or oversensitive areas around the wound. This is also normal. If you are to be referred for an artificial leg, you will be measured and fitted for a special compression sock approximately one week after the operation, depending on how well the wound is healing. This is to help reduce the swelling in your residual limb.
The wound will appear to have healed within two weeks or so, but the underlying tissues can take several months to heal completely and you may find the scar and wound are lumpy and quite hard for several months. The therapy team will teach you how to do scar massage to keep the scar flexible. It also helps your leg to feel a part of you again. It can help a lot with phantom limb sensations.

If your wound becomes red, sore or is oozing please let your GP know, as this could be a sign of an infection.

Frequently asked questions

How long will I have to stay in hospital?
The majority of patients undergoing a major amputation will return home after 10 to 14 days. The therapists will discuss with you before the operation any issues that may need to be dealt with to ensure a safe and timely discharge.

Can I shower/have a bath?
Once your wound is dry you will be able to bathe and shower as normal.

Can I exercise?
Exercising after your operation will aid your recovery and help you to return to a normal daily life. Take it easy at first. You will tire easily and will need to rest but do not stay in bed. Some days you will feel better than others. Build up activity gradually over time.

It is important to regularly change your position in sitting or lying to relieve pressure on your skin and prevent any sores. Therapy and nursing staff will discuss this with you and recommend any equipment for home if it is needed.

Can I fly?
There are no reasons why you should not travel by air after treatment. There are no cases that we know of where this has been harmful. You may need to advise your insurance company of any recent illness or treatment you are receiving prior to travelling.

Storing your personal information
Vascular surgeons record information about surgical interventions on the National Vascular Database (NVD). This is a secure database that is used to help monitor and improve vascular services throughout the country. Strict data governance and confidentiality rules mean that personal details on the NVD can only be accessed by staff directly involved in your treatment. If you have any questions or concerns regarding this please speak to your surgeon.

Who should I contact if I have any queries?
If you need any further information about your surgery or anything covered in the booklet, you can contact the vascular nurse specialists between 9am and 5pm on 023 8120 6039. This number has an answerphone.
Information about general health conditions can be found at www.nhs.uk

This information is intended as a guide only. Everyone is different and treatment and recovery may vary from one person to the next.

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