Patient information



Lower limb amputation

The purpose of this leaflet is to provide information alongside the verbal advice and information that you will receive from the various professionals you meet during your rehabilitation. As there is a lot of information to remember, this leaflet has been written as a guide for you and your family, friends and carers.

If you have any questions or concerns regarding any information in this leaflet, please speak to a member of the team. Contact details for our team are provided on the last page of this information sheet.

What is an amputation?

An amputation is a surgical procedure performed for conditions where there is reduced blood circulation to the legs. The reduced blood circulation decreases the oxygen supply to tissues which can cause painful legs, ulcers or black areas on the toes or feet (gangrene). This can be caused by a number of conditions, such as:

- Peripheral vascular disease (PVD)
- Diabetes mellitus
- Trauma
- Infection

Considerations for amputation

A limb amputation may be considered if other limb-saving treatment options are not possible. Types of leg amputation:

- Below the level of the knee joint.
- Through the level of the knee joint.
- Above the level of the knee joint.

The surgical team will offer the most appropriate option, depending on the blood supply and skin quality of the leg.

Consent for surgery

- You will need to sign a consent form before the operation.
- The surgeon will explain the benefits of the amputation to you, such as removal of necrotic dead tissue.
- The surgeon will explain the risks of the operation (e.g., chest infection, wound breakdown, bleeding, heart attack).
- You will be kept 'Nil by Mouth' for at least 6 hours prior to the operation.
- National mortality rate for the procedure is around 10%.

Pre-operative assessment

Blood tests, X-rays and an electrocardiogram (ECG) may be required prior to your operation. The anesthetist will review you beforehand to discuss whether the surgery can be carried out with you under a general anesthetic (asleep), or awake (with/without sedation) using a spinal epidural.

After surgery

Once you have recovered from the anesthetic, you will return to the ward. Below are some of the post-operative aspects involved in your care.

You are likely to remain an inpatient for a minimum of 1-2 weeks, depending on your progress on the ward after surgery.

Pain relief

Your pain may initially be managed by a patient-controlled analgesia (PCA). This is a machine that gives you a dose of pain relief when you push a button. Alternatively, an anaesthetic infusion into your lower back may be used. As the pain settles, tablets can be used to manage the pain.

Fluids

You will be given fluids by a drip in your arm until you are well enough to drink adequately yourself. If you have lost some blood during the operation, you may require a small blood transfusion.

Tubes and drains

Patients often have a urinary catheter inserted to make them more comfortable following the surgery. The surgeon may also leave a small tube in the wound to drain away any fluid that builds up afterwards, this is removed within a couple of days.

Sutures

The wound will be closed with either sutures (stitches) or clips. Sometimes these will need removing around 10-14 days later, either in hospital or by the district nurse.

How long will my wound take to heal?

Your wound will be checked after the operation by your surgeon. If there are any complications following the surgery, such as wound infection, this can delay wound healing and progression with the therapy team.

Please try not to knock the stump. We strongly advise that you DO NOT hop as this can lead to the wound splitting and also increases the risk of you falling. This may mean you need further surgery and will significantly delay your recovery and in obtaining a prosthesis.

Therapy in hospital

The Hospital Therapy Team is made up of physiotherapists alongside occupational therapists and therapy support workers. They work as a combined team to support you on your journey. The therapy team will usually see you before your amputation.

The therapy team's goal is to get you up and moving as soon as possible; sitting on the edge of the bed and usually using a sideboard to transfer into a chair. Ideally this is completed day 1 post-amputation. The therapy team tailors therapy intervention to your individual need and previous level of function.

The therapy team like to get to know you and what is important to you. They will set goals alongside you to help you see your future as a lifelong amputee. The Hospital Therapy Team will be the first therapy team to be involved in your rehab; you are likely to see many therapists along your journey. These may be at the wheelchair service, inpatient rehabilitation, community rehab teams and at the Limb Fitting Centre.

The role of the Hospital Therapy Team is to:

- help you get moving as quickly as possible after your operation, such as getting into and out of bed.
- ensure that you are measured for a wheelchair as soon as possible and order this from your local wheelchair service.
- explain options available to you when leaving hospital, such as going to inpatient rehabilitation or returning home with community therapy.
- meet with you, your family and carers to discuss your home environment and to review
 what needs to be completed before you go home, such as equipment needs and setting up
 your home to accommodate life as a wheelchair user. We aim to do this prior to your
 operation.
- start early walking aid practice using PPAM aid once the medical team is happy with your wound (explained in the next section below).
- measure and issue you with a Juzo sock (compression sock).
- To explain the therapy journey for a new amputee and set realistic goals for you to work towards.

PPAM aid

PPAM aid is a 'Pneumatic Post-Amputation Mobility' aid. It is used following a limb amputation to:

- assess your ability to use a prosthetic limb.
- promote wound healing and compression of limb.
- prepare you to walk with a prosthetic limb.

When can I use a PPAM aid?

Usually about 7-10 days following surgery, once the surgeon has assessed your wound and deemed it has healed enough.

Who can use a PPAM aid?

Anyone can use a PPAM aid as long as you are physically fit enough.

Is it safe to use a PPAM aid?

Before you use PPAM aid, the therapy team will review your wound to ensure it is safe to do so. The wound will be carefully monitored before and after using the PPAM aid. There may be some leakage from your wound site, particularly if the limb is still swollen - do not be concerned about this, the staff will monitor your limb closely.

Physiotherapy and occupational therapy

Juzo Sock

The Juzo sock is a compression sock. The physiotherapist will measure your residual limb; the sock will help to reduce swelling in your residual limb. This will help prepare your limb to be cast for a prosthesis.

Exercises to do as an inpatient

Prior to your operation, the therapy team will aim to give you a set of exercises which you will be able to do from day 1 following your operation.

These will include exercises for your residual limb (known as PIRPAG exercises) that you can do in bed, as well as:

- deep breathing exercises to expand your lungs and reduce the risk of a chest infection post-operation.
- arm exercises upper body strength is crucial to aid your transfers as an amputee.
- completing your exercises is a crucial part of your rehab; you will be able to do these independently once provided.

Home environment

The therapy team will speak to you about your home environment and what you may need to get back home safely. You may need setting up on one level at home and potentially in one room. You may be housebound if you live in a property with stairs access only. The therapists will assess whether there is any adaptive equipment that can be provided to facilitate your independence and refer you onto Social Services and/or community therapy teams as appropriate.

Unfortunately, therapists are unable to offer home visits, but the therapist may ask your family to provide photos and measurements of your home, such as door widths, furniture heights, access to the property. This will support the therapy team with making any necessary adaptations, which may require a referral to your local social services occupational therapy team to review major adaptations or writing a letter to support a re-housing application.

Therapists will advise you NOT to use crutches or a frame to hop on your remaining leg. This is because doing this not only increases your risk of falls, but also increases the risk of potential damage to your remaining leg as well as your amputated leg.

Wheelchair

The therapist will measure you for your own wheelchair and refer you to your local wheelchair service, it can take up to a few weeks for your wheelchair to be delivered.

Once the wheelchair is ordered, you will be known to your local wheelchair service who can contact you to review your needs in the future, such as more suitable wheelchairs in the longer term, electric wheelchair assessments and cushion upgrades.

Cognition

Learning to use a prosthetic limb requires having the ability to understand, recall and remember lots of new information. Some people may find this challenging for various reasons. The Occupational Therapy Team may suggest ways of learning this new information, or make sure that the team gives you written information, as well as talking it through with you. Formal assessments can be completed to see if there are specific areas of your cognition that are impacting on your rehabilitation progress.

Driving

Driving is still possible as an amputee. You must inform the DVLA that you have had an amputation; you can be fined £1000 if you do not inform the DVLA of a medical condition that affects your driving.

Many individuals who have lower limb prosthetics can drive vehicles safely and effectively with a few modifications; this enables you to live your life more normally and rely less on others for transportation.

Herts Ability are a local service who provide driving assessments and give expert opinion and recommendations on how to drive safely; you can refer yourself to this service:

- Telephone 01707 324581
- Email sitehertsability.org.uk

Your safety

Falls are very common following an amputation; falling post-surgery may result in you knocking your residual limb. This is not only painful but also increases the risk of opening your wound site resulting in potential infection.

Following the advice below can reduce risk of falls and injury:

- Always take your time rushing is likely to cause accidents.
- When transferring in and out of your wheelchair, make sure the brakes are on and that you have positioned yourself in the correct position to make the transfer safely.
- Ensure that you are careful when you first wake up or need to move from bed at night as you may forget that you have had your leg amputated and try to stand on it.
- Make sure your home environment has clear space for moving ensure any clutter is cleared appropriately.
- Place frequently used items within easy reach.
- Remember to avoid hopping on your remaining leg.

What should I do if I fall?

If you do fall, recover from the initial shock. Any fall is frightening, and you may be shaken. Give yourself time to settle and recognise if you are hurt before any attempt to get up. If you have carers, they can summon help and keep you comfortable. They should not attempt to lift a person who has fallen and is unable to get up themselves.

Benefits

Listed below are any benefits you may be able to access. It is advised to contact **Citizens Advice** for further support with accessing the appropriate benefits:

- Website www.citizenadvice.org.uk
- Telephone 0800 144 8848

Personal Independence Payment (PIP) assists with extra living costs if you have both a long term physical or mental health condition, or disability and/or difficulty doing certain everyday tasks or getting around because of your condition.

Carer's Allowance – A carer may be eligible for extra money called Carer's Allowance. It is paid at a rate of £81.90 per week (2024/25) if they care for someone for at least 35 hours a week; they do not need to be related to or live with the person they care for.

• Website <u>www.gov.uk/carers-allowance</u>

What happens when I am ready to be discharged from hospital?

Once the medical team feel that you are ready to be discharged, you will become 'medically fit for discharge'. You will be discharged either home, or to an inpatient rehabilitation unit. If you are discharged home, the therapy team will ensure that you are set up with the appropriate equipment to support this. You may require a care package to support with personal care and meal provision. You will likely have a community therapy referral for further physiotherapy and occupational

therapy at home. You may also benefit from a pendant alarm prior to discharge for use if you do fall or require urgent help.

Getting a prosthetic limb

The hospital therapy team will refer you to a Limb Fitting Centre (LFC) for assessment for a prosthesis. Your therapist will advise you which limb fitting centre they will refer you to based on your address; it will likely be one of the following:

- Luton & Dunstable Hospital
- The Royal National Orthopaedic Hospital in Stanmore
- Mayflower Community Hospital in Billericay

Prior to your appointment at your local hospital, you will be seen as an outpatient. In these sessions you will practise PPAM aiding. If you receive a prosthetic limb, you will still be seen as an outpatient to practise mobility and transfer with your prosthesis.

It is important to note that not everyone will be suitable for a prosthetic limb, or you may not want one. There are many things that are used to assess if you will be appropriate for a prosthesis; your Limb Fitting Centre will assess these in your initial session and be able to provide further information.

What can I do to help myself?

- Stop smoking this may worsen your circulation further and may affect your remaining leg.
- · Eat a balanced diet.
- Avoid putting on weight this will make mobilising with an artificial limb more difficult.
- If you are diabetic, ensure good blood sugar control.
- Take good care of your remaining limb.
- · Reduce your falls risk.

Caring for your residual limb

- Wash your residual limb daily with mild soap and warm water. If you are concerned about any scabs or unhealed areas, ask the nurses for advice.
- Check your skin daily for any broken areas.
- Dry the skin thoroughly and use a gentle moisturiser but avoid using this on open areas.
- Check your residual limb regularly for signs of infection, such as warm, red and tender skin, discharge of fluid or pus, increased swelling. If you have been given a Juzo sock, wear this at all times, even when you are not wearing your prosthesis.
- In cases of below knee amputations, ensure that your residual limb is positioned on the wheelchair's stump board and the knee is kept straight when you are not wearing your prosthesis.

Phantom limb pain sensations

Phantom limb pain are sensations that seem to be coming from the amputated limb and occasionally these can be painful, but it may also feel like pins and needles or cramp.

The term 'phantom' does not mean that the sensation is not real; it is a real phenomenon which has been proven using brain imaging scans. Your brain is used to having two limbs, you have done most of your life, and so once your limb is amputated your brain reacts as if the limb is still there.

Treatment includes:

- Medication the doctor will prescribe following the amputation to limit phantom limb pain.
- Massage to increase circulation and stimulate muscles.

The physiotherapist and occupational therapist will discuss treatment options for you; they may suggest mental imagery or mirror therapy.

Psychological impact of amputation

The loss of a limb is a life-changing event and can have a significant psychological impact. Many people who have experienced this describe feelings of grief and bereavement. Accepting the psychological impact of an amputation is as important as coping with the physical demands. It is important that you talk to a member of the team looking after you about your thoughts and feelings; you may benefit from additional treatment such as counselling. Common emotions experienced following amputation include:

- Depression
- Anxiety
- Denial
- Grief
- · Feeling suicidal

Further information

There are many charities that can support people living with amputations and provide advice. These include:

The Limbless Association

• Telephone 0800 644 0185

Steel Bones

Telephone 01223 734 000

Amputation Foundation

Telephone 01744 808 850

Limb Power

• Telephone 07502 276858

Useful contact details

East and North Hertfordshire NHS Trust:

- Website <u>www.enherts-tr.nhs.uk</u>
- Telephone 01438 314333

Lister Hospital Occupational and Physiotherapy Department:

- Telephone 01438 284924
- Email respsurgtherapy.enh-tr@nhs.net

Herts Ability:

- Telephone 01707 324581
- Email sitehertsability.org.uk

Citizens Advice for further support with accessing the appropriate benefits:

- Website <u>www.citizenadvice.org.uk</u>
- Telephone 0800 144 8848

Leaflet information

You can request this information in a different format or another language; please speak to your doctor or nurse.

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