

Patient information and consent to lower limb amputation (permanent surgical removal of part of the foot/leg)

Key messages for patients

- **Please read your admission letter carefully. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.**
- Please bring with you any medications you use (including patches, creams and herbal remedies) and any information that you have been given relevant to your care in hospital, such as x rays or test results.
- Take your medications as normal on the day of the procedure **unless** you have been specifically told not to take a drug or drugs before or on the day by a member of your medical team. **Do not** take any medications used to treat diabetes.
- Please call the vascular surgery nurse practitioner on **01223 245151 extension 6382** if you have any questions or concerns about this procedure.
- **Important – please bring this form with you to the hospital on the day of your procedure.**

Please read this information carefully, you and your health professional will sign it to document your consent. After the procedure we will file the consent form in your medical notes and you may take this information leaflet home with you.

Important things you need to know

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent and the procedure has started (as long as it is safe and practical to do so). If you are having an anaesthetic you will have the opportunity to discuss this with the anaesthetist, unless the urgency of your treatment prevents this.

We will also only carry out the procedure on your consent form unless, in the opinion of the responsible health professional, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form. We are unable to guarantee that a particular person will perform the procedure. However the person undertaking the procedure will have the relevant experience.

All information we hold about you is stored according to the Data Protection Act 1998.

About lower limb amputation

Lower limb amputation is a major operation that is only undertaken in certain circumstances and as a last resort after other treatment options have been tried or considered. Examples of when this procedure may be carried out are as follows:

- non-healing gangrene or ulceration in the leg. The failure to heal is often due to poor arterial blood supply or poor venous drainage in the leg. Diabetes can also be a factor.
- severe chronic pain because of poor circulation and/or nerve dysfunction
- following a major injury to the leg where recovery to a useful level of function is not possible
- life-threatening infections that might spread from the leg to the rest of the body such as septicaemia or necrotising fasciitis
- cancer in the leg despite treatment(s) to remove or cure it.

All the above conditions are either life threatening or involve a significant amount of long-term pain and reduced quality of life.

Most patients attend a pre-admission clinic, when you will see the pre-assessment nurse. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring any packaging with you.

This procedure involves the use of anaesthesia. We explain about the different types of anaesthesia we may use at the end of this leaflet. You will see an anaesthetist before your procedure.

Most people who have this type of procedure will need to stay in hospital for two to three weeks. Sometimes we can predict whether you will need to stay for longer than usual - your doctor will discuss this with you before you decide to have the procedure.

Hair removal before an operation

For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team need to see or reach your skin and if this is necessary they will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

During the procedure

There are two main types of amputation, above or below the knee; either a hand's breadth above or below the knee. Other procedures at different levels are rarely performed. These levels are chosen to make the fitting of an artificial limb as successful as possible.

The muscles and skin are carefully closed to make a wound over the leg stump, and dressings are applied. The operation takes 40 to 60 minutes to perform. Sometimes we will attempt to perform a below knee amputation, but during the procedure it is apparent that this will probably not heal and an above knee amputation has to be performed.

Healing is more reliable after an above knee amputation.

After the procedure

Once your surgery is completed you will usually be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your anaesthetist. The nurses will monitor you closely until the effects of any general anaesthetic have adequately worn off and you are conscious. They will monitor your heart rate, blood pressure and oxygen levels too. You may be given oxygen via a facemask, fluids via your drip and appropriate pain relief until you are comfortable enough to return to your ward. You will also have a plastic tube into the bladder to help you pass water after your operation.

Sometimes, people feel sick after an operation and might vomit. If you feel sick, please tell a nurse and you will be given medicine to stop the sickness/vomiting.

If a wound drain (tube) is left in at surgery, this will be removed on the first day after surgery. Dressings are usually left undisturbed for four to five days. If there is an infection present, antibiotics are used to try and reduce any infection in the stump.

After certain major operations you may be transferred to the intensive care unit (ICU/ITU), high dependency unit (HDU), intermediate dependency area (IDA) or fast track/overnight intensive recovery (OIR). These are areas where you will be monitored much more closely because of the nature of your operation or because of certain pre-existing health problems that you may have. If your surgeon or anaesthetist believes you should go to one of these areas after your operation, they will tell you and explain to you what you should expect.

If there is not a bed in the necessary unit on the day of your operation, your operation may be postponed as it is important that you have the correct level of care after major surgery.



Eating and drinking. After this procedure, you should not have anything to eat or drink until your medical team considers it to be safe – this is usually about 24 hours after your operation.



Getting about after the procedure. As soon as you are well enough after the operation, a physiotherapist will start to show you some important exercises to help you regain your mobility. At first, you will need to use a wheelchair to help you move around. In the longer term, when you have an artificial leg, it is hoped that you will be able to walk again. While you are in hospital, you will visit the gym on most days. This is to start the process of learning to walk again. It is usually easier to walk again with a below-knee amputation rather than an above knee one. Not all patients with an amputation will be able to walk independently after the operation.



Leaving hospital. The actual period of time that you stay in hospital will depend on how quickly you recover from your operation, the type of operation, your doctor's opinion and whether any alterations need to be made at home to accommodate a wheel chair if needed.



Resuming normal activities including work. The amount of time you take off work/study depends on how quickly you regain your mobility and on the nature of your work/study.



Special measures after the procedure: It is normal for the stump to be painful at first, but we can give you painkilling tablets to make you more comfortable.

Phantom pain/sensation is often experienced in the foot or leg that has been removed. This can be disturbing at times but can be eased by taking tablets to reduce the sensitivity of the nerves in the leg. With time these problems usually settle, but there is no guarantee of this.



Check-ups and results: Before you leave hospital, we will give you a date to return to clinic for the results of your surgery. At this time, we can check your progress and discuss any further treatment that may be recommended.

Intended benefits

The intended benefit of an amputation is to remove the underlying problem, which is usually either life-threatening or likely to involve long-term pain or loss of function. For example the source of pain and infection can be removed and once the wound has healed and an artificial leg has been fitted, your mobility can be achieved, improving your quality of life.

Who will perform my procedure?

This procedure will be performed by a consultant or specialist registrar in vascular surgery.

Alternative procedures that are available

This type of permanent surgery is usually only undertaken when all other treatments have either not succeeded or are not possible.

Significant, unavoidable or frequently occurring risks of this procedure

In one in ten to one in 20 patients, the patient will experience a problem with the wound healing at the amputation site. If this persists, then further surgery to make a better stump at a higher level may be required.

In about one in ten patients, the patient will develop a wound infection. In most cases this will settle with antibiotic treatment.

In one in ten patients, the patient will develop a deep vein thrombosis (DVT). This causes swelling of the stump or leg, and requires treatment to thin the blood with a drip and tablets. The condition usually resolves.

In patients who are very unwell at the time of their operation (for example, due to infection, bad circulation, poorly controlled diabetes), there are more general risks due to the stress of the surgery and/or anaesthetic. These include heart attack, heart failure, chest infection, pulmonary embolus, kidney failure and stroke. The actual risk of dying depends on the state of health of the patient at the time of surgery. In a 'routine' planned amputation, the risk of dying is three to five in every 100 patients. In more urgent cases in very unwell patients this might be as high as three in every 10 patients.

Anaesthesia

Anaesthesia means 'loss of sensation'. There are three types of anaesthesia: general, regional and local. **The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness.** Sometimes different types of anaesthesia are used together.

Before your operation

Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery. To inform this decision, he/she will need to know about:

- your general health, including previous and current health problems
- whether you or anyone in your family has had problems with anaesthetics
- any medicines or drugs you use
- whether you smoke
- whether you have had any abnormal reactions to any drugs or have any other allergies
- your teeth, whether you wear dentures, or have caps or crowns.

Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and will review your test results.

Pre-medication

You may be prescribed a 'premed' prior to your operation. This a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects specific for the procedure that you are going to have or for any medical conditions that you may have. Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

Moving to the operating room or theatre

You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted and you may be asked to breathe oxygen through a face mask.

It is common practice nowadays to allow a parent into the anaesthetic room with children; as the child goes unconscious, the parent will be asked to leave.

Before starting your anaesthesia the medical team will perform a check of your name, personal details and confirm the operation you are expecting.

General anaesthesia

During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation. Your anaesthetist achieves this by giving you a combination of drugs.

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you at the correct level of unconsciousness for the period of the surgery. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement.

Regional anaesthesia

Regional anaesthesia includes epidurals, spinals, caudals or local anaesthetic blocks of the nerves to the limbs or other areas of the body. Local anaesthetic is injected near to nerves, numbing the relevant area and possibly making the affected part of the body difficult or impossible to move for a period of time. Regional anaesthesia may be performed as the sole anaesthetic for your operation, with or without sedation, or with a general anaesthetic. Regional anaesthesia may also be used to provide pain relief after your surgery for hours or even days. Your anaesthetist will discuss the procedure, benefits and risks with you.

Local anaesthesia

In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted and some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor operations such as stitching a cut, but may also be injected around the surgical site to help with pain relief. Usually a local anaesthetic will be given by the doctor doing the operation.

Sedation

Sedation is the use of small amounts of anaesthetic or similar drugs to produce a 'sleepy-like' state. Sedation may be used as well as a local or regional anaesthetic. The anaesthesia prevents you from feeling pain, the sedation makes you drowsy. Sedation also makes you physically and mentally relaxed during an investigation or procedure which may be unpleasant or painful (such as an endoscopy) but where your co-operation is needed. You may remember a little about what happened but often you will remember nothing. Sedation may be used by other professionals as well as anaesthetists.

What will I feel like afterwards?

How you will feel will depend on the type of anaesthetic and operation you have had, how much pain relieving medicine you need and your general health.

Most people will feel fine after their operation. Some people may feel dizzy, sick or have general aches and pains. Others may experience some blurred vision, drowsiness, a sore throat, headache or breathing difficulties.

You may have fewer of these effects after local or regional anaesthesia although when the effects of the anaesthesia wear off you may need pain relieving medicines.

What are the risks of anaesthesia?

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or performed in an emergency.

Very common (1 in 10 people) and common side effects (1 in 100 people)

Feeling sick and vomiting after surgery
Sore throat
Dizziness, blurred vision
Headache
Bladder problems
Damage to lips or tongue (usually minor)
Itching
Aches, pains and backache

Pain during injection of drugs
Bruising and soreness
Confusion or memory loss

Uncommon side effects and complications (1 in 1000 people)

Chest infection
Muscle pains
Slow breathing (depressed respiration)
Damage to teeth
An existing medical condition getting worse
Awareness (becoming conscious during your operation)

Rare (1 in 10,000 people) and very rare (1 in 100,000 people) complications

Damage to the eyes
Heart attack or stroke
Serious allergy to drugs
Nerve damage
Death
Equipment failure

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK.

For more information about anaesthesia, please visit the Royal College of Anaesthetists' website: www.rcoa.ac.uk

Information and support

We will give you additional information in the form of patient information leaflets. Do feel free to contact the vascular surgery nurse practitioner on **01223 245151 ext 6382** if you have any questions or anxieties.



Further information is available from

The Vascular Society's website: <http://www.vascularsociety.org.uk>

**Privacy & Dignity**

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.



We are currently working towards a smoke free site. Smoking is only permitted in the designated smoking areas. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169



Help with this leaflet



If you would like this information in **large print**, another language or in audio format, please ask the department to contact Patient Information on 01223 216032 or patient.information@addenbrookes.nhs.uk

Document history

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Information about important questions on the consent form

1 Creutzfeldt Jakob Disease ('CJD')

We must take special measures with hospital instruments if there is a possibility you have been at risk of CJD or variant CJD disease. We therefore ask all patients undergoing any surgical procedure if they have been told that they are at increased risk of either of these forms of CJD. This helps prevent the spread of CJD to the wider public. A positive answer will not stop your procedure taking place, but enables us to plan your operation to minimise any risk of transmission to other patients.

2 Photography, Audio or Visual Recordings

As a leading teaching hospital we take great pride in our research and staff training. We ask for your permission to use images and recordings for your diagnosis and treatment, they will form part of your medical record. We also ask for your permission to use these images for audit and in training medical and other healthcare staff and UK medical students; you do not have to agree and if you prefer not to, this will not affect the care and treatment we provide. We will ask for your separate written permission to use any images or recordings in publications or research.

3 Students in training

Training doctors and other health professionals is essential to the NHS. Your treatment may provide an important opportunity for such training, where necessary under the careful supervision of a registered professional. You may, however, prefer not to take part in the formal training of medical and other students without this affecting your care and treatment.

4 Use of Tissue

As a leading bio-medical research centre and teaching hospital, we may be able to use tissue not needed for your treatment or diagnosis to carry out research, for quality control or to train medical staff for the future. Any such research, or storage or disposal of tissue, will be carried out in accordance with ethical, legal and professional standards. In order to carry out such research we need your consent. Any research will only be carried out if it has received ethical approval from a Research Ethics Committee. You do not have to agree and if you prefer not to, this will not in any way affect the care and treatment we provide. The leaflet '*Donating tissue or cells for research*' gives more detailed information. Please ask for a copy.

If you wish to withdraw your consent on the use of tissue (including blood) for research, please contact our Patient Advice and Liaison Service (PALS), on **01223 216756**.

Consent Form

Lower limb amputation

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

A Patient's side left / right or N/A

Consultant or other responsible health professional

Name and job title:

Any special needs of the patient (e.g. help with communication)?

Please use 'Procedure completed' stamp here on completion:

B Statement of health professional (details of treatment, risks and benefits)

1 I confirm I am a health professional with an **appropriate knowledge of the proposed procedure**, as specified in the hospital's consent policy. I have explained the procedure to the patient. In particular, I have explained:

a) the intended benefits of the procedure (please state)

The intended benefit of an amputation is to remove the underlying problem, which is usually either life-threatening or likely to involve long-term pain or loss of function.

b) the possible risks involved. Addenbrooke's always ensures any risks are minimised. However all procedures carry some risk and I have set out below any significant, unavoidable or frequently occurring risks including those specific to the patient

- experience a problem with the wound healing at the amputation site
- develop a wound infection
- develop deep vein thrombosis (DVT)
- for patients who are very unwell at the time of their operation (for example, due to infection, bad circulation, poorly controlled diabetes), there are more general risks due to the stress of the surgery and/or anaesthetic

c) what the treatment or procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient:

Consent Form

Lower limb amputation

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

d) any extra procedures that might become necessary during the procedure such as:

Blood transfusion

Other procedure (please state)

.....
.....

The following information leaflet has been provided:

Lower limb amputation

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or I have offered the patient information about the procedure but this has been declined.

3 This procedure will involve:

General and/or regional anaesthesia

Local anaesthesia

Sedation

None

Signed (Health professional): Date: / /

Name (PRINT): Time (24hr): : :

Designation: Contact/bleep no:

C Consent of patient / person with parental responsibility

I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.

Important: please read the patient information about this procedure and then put a tick in the relevant boxes for the following questions:

1 Creutzfeldt Jakob disease (CJD)

Have you ever been notified that you are at risk of CJD or variant CJD for public health purposes? If yes, please inform your health professional.

Yes No

2 Photography, Audio or Visual Recording

a) I agree to the use of any of the above type of recordings for the purpose of diagnosis and treatment.

Yes No

b) I agree to unidentified versions of any of the above recordings being used for audit and medical teaching in a healthcare setting.

Yes No

3 Students in training

I agree to the involvement of medical and other students as part of their formal training.

Yes No

Consent Form

Lower limb amputation

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

4 Use of Tissue

a) **I agree** that tissue (including blood) not needed for my own diagnosis or treatment can be used and stored for ethically approved research which may include ethically approved genetic research.

Yes No

b) *Where additional clinical information is needed for the purposes of ethically approved research, I agree* that relevant sections of my medical record may be looked at by researchers or by relevant regulatory authorities. I give permission for these individuals to have access to my records.

Yes No

I have listed below any procedures that **I do not wish to be carried out without further discussion.**

I have read and understood the Patient Information about this procedure and the above additional information. **I agree** to the procedure or treatment.

Signed (Patient): Date: *DD/MM/YYYY*

Name of patient (PRINT):

If signing for a child or young person; delete if not applicable.

I confirm I am a person with **parental responsibility** for the patient named on this form.

Signed: Date: *DD/MM/YYYY*

Relationship to patient:

If the patient is unable to sign but has indicated his/her consent, a witness should sign below.

Signed (Witness): Date: *DD/MM/YYYY*

Name of witness (PRINT):

Address:

Consent Form

Lower limb amputation

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

D Confirmation of consent

Confirmation of consent (where the treatment/procedure has been discussed in advance)

On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.

Signed (Health professional): Date: ..D.D./M.M./Y.Y.Y.Y.....

Name (PRINT): Job title:

Please initial to confirm all sections have been completed:

E Interpreter's statement (if appropriate)

I have interpreted the information to the best of my ability, and in a way in which I believe the patient can understand:

Signed (Interpreter): Date: ..D.D./M.M./Y.Y.Y.Y.....

Name (PRINT):

Or, please note the language line reference ID number:

F Withdrawal of patient consent

The patient has withdrawn consent (ask patient to sign and date here)

Signed (Patient): Date: ..D.D./M.M./Y.Y.Y.Y.....

Signed (Health professional): Date: ..D.D./M.M./Y.Y.Y.Y.....

Name (PRINT): Job title: