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make a difference



The Royal Liverpool
and Broadgreen
University Hospitals
NHS Trust

Patient information

Therapies for Major Lower Limb Amputation

Therapies Specialties

What is an amputation?

Amputation is removal of all or part of a limb. Amputations nearly always involve the lower limb and this leaflet will concentrate on lower limb amputation.

Sometimes a leg has to be removed due to a major trauma or the circulation in a leg can be reduced to such a severe level the leg can no longer survive. If the leg has to be removed after a major accident this is because the limb could not be saved. If the leg has to be removed due to poor circulation your doctor will already have had the discussion with you regarding any possibility of improvement of the circulation – losing the limb through amputation is very much the last resort. In most cases there is time for you to discuss this with your family and plan for some rehabilitation – in others the surgery has to be undertaken as a matter of urgency to save your life.

The most common sites of major amputation are above the knee and below the knee.

What to expect after an amputation

Phantom limb pain

You may experience phantom limb pain, where you have lost the limb. This may come and go. The pain can be described as a burning, tingling, aching, itching or cramping sensation, or even a sharp, stabbing or shooting pain.

If you have phantom limb pain it is important that you inform your Doctor as there are treatments available such as medication which can reduce the symptoms.

Phantom limb sensation

Many amputees experience phantom sensations, that is, they feel they still have a limb where there is none and it is experienced by nearly all amputees.

- The limb may feel normal in size, shape and sensation.
- Some people may not feel the whole limb but rather parts of it
- Some may experience a variety of sensations such as aching, itching or squeezing

The reasons for phantom limb sensations are not known. It is important to remember phantom limb sensations are common after a major amputation.

The feelings or sensations are not painful and there are simple techniques you can use to manage these:

- Rub your stump or the remaining limb in the same area you can feel the phantom sensation.
- Touch or scratch the opposite leg at the same place you are feeling the phantom limb sensations

Phantom sensations will feel very real so therefore it is important that you focus when transferring. You are particularly at risk of this at night, when drowsy, as you may wake up and attempt to stand and fall, forgetting you have had an amputation.

Contracture and prevention of hamstring tightening

Contracture is the permanent or semi-permanent shortening of the soft tissues (muscles, skin, ligaments, tendons) limiting the movement in the joint. After time those structures lose their elasticity and become fixed.

Below knee amputees are at risk of a fixed bend at the knee and above knee amputees a fixed bend at the hip. Both will make fitting a prosthetic limb difficult, if not impossible.

Your physiotherapist will teach you exercises and stretches to complete either before your surgery or shortly after. Prevention is key, as it is very difficult and painful to deal with contractures once these develop.

Role of Occupational Therapy and Physiotherapy

Physical rehabilitation is an important part of the recovery process following an amputation. Your rehabilitation programme will usually start within a few days of your surgery and will be tailored to your needs and requirements. The initial aims of therapy involve establishing whether you are safe to sit out in a standard chair and what the safest way is for you to transfer from the bed to the chair.

Sitting out after surgery is beneficial to your recovery process and reduces the risks of chest infections and pressure sores.

The Occupational Therapist (OT) will measure you for a wheelchair and complete a referral. There are two types of wheelchairs the hospital OT can order:

- **Self-Propelling Wheelchair**

This is a wheelchair which can be propelled by yourself or can be pushed by somebody else. Self-propelling wheelchairs allow for more independence but require quite a bit of strength and endurance, therefore they are not suitable for everyone. If you have or had any heart or breathing problems, the suitability of a self-propelling wheelchair will need to be assessed and documented by the medical team.

If you are medically fit to self-propel, your Occupational Therapist will practice the use of the wheelchair with you.

- **Attendant Propelled Wheelchair**

This is a wheelchair which can only be pushed by somebody else and is for people who are not medically fit to self-propel.

Before discharge home, your Occupational Therapist may ask to visit your home to see if it is suitable for your wheelchair. If you live in a house, it is generally recommended for you to bring a bed downstairs as there is a high risk of falls involved with attempting to use the stairs. If you do not have a bathroom downstairs, we can provide you with a commode and you may be advised to have a strip wash.

The Occupational Therapists within the hospital are limited with regards to equipment provision.

The standard pieces of equipment the hospital OT can order include:

- A banana/transfer board.
- A wheeled commode.

Before you are discharged, and once all the equipment is in place and your home is all set up, your Occupational Therapist will complete a home visit during which you will be assessed in your own home.

Onward referrals to the Social Services Occupational Therapy team in the community can be made to assess for bigger adaptations such as ramps, bathrooms, stair lifts etc. Referrals to Social Services OT can only be completed when the patient has gone home.

Some patients may choose to return to a property which is not going to be suitable for the long-term. We aim to help the patient return to their home in the short-term which may mean you will need assistance to leave or enter your property (due to e.g. steps) or you may have to strip wash and/or use a commode. There is support available in the community to assist with re-housing. Contact your Housing Association or Local Council.

It is not possible to rehouse patients directly from hospital. Patients who cannot go home may have to consider other short term accommodation.

What if I'm not ready to go home?

If you are nearly “medically fit for discharge”, which means you no longer need to be in hospital for medical treatment the therapy team will discuss discharge plans with you.

The options:

- Home with equipment with or without a package of care and ongoing therapy. This is for people who are at a level where they could safely cope with the above.
- If you are not at a level where you could safely cope at home with support and equipment, yet you require further rehab, your therapy team may suggest an ICB (intermediate care bed). This means you will temporarily reside in an NHS bed in a care home and receive ongoing therapy there. **Note:** you will have to have goals and potential as well as motivation to achieve these. The plan is for you to go home from here.
- For patients who need more support there are more options available.

Prosthetics

Every amputee will be referred to the Prosthetic limb centre for an assessment; however prosthetic limbs are not suitable for everyone. The assessment for a prosthetic limb is carried out by a multidisciplinary team consisting of Doctors, Nurses, Physiotherapists, Prosthetists and Psychologists. This team decides if the patient is suitable for limb fitting.

The assessment looks at a variety of factors including:

- the type of amputation you had
- the amount of muscle strength in the remaining section of the limb
- your general state of health
- tasks the prosthetic limb will be expected to perform
- whether you want the limb to look as real as possible or whether you're more concerned with function.

The provision of a prosthetic limb is accompanied by ongoing outpatient rehabilitation. If it is thought that you would find it difficult to withstand the strain of using a prosthetic limb, a purely cosmetic limb may be recommended. This is a limb that looks like a real limb, but can't be used for standing.

Please speak to the prosthetic limb centre when attending your appointment, should you have any further queries regarding prosthetic limbs.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further advice:

Occupational Therapy Service

RLUH

Tel: 0151 706 2760

Text phone number: 18991 0151 706 2760

You can find more information on the following links

ACSIL

(Amputee and Carer Support in Liverpool)

www.acsil.co.uk

Tel: 0151 261 1166

Amputation Foundation

www.amputationfoundation.org

Tel: 01744 808850

The Douglas Bader Foundation

The Douglas Bader Foundation helps and supports both children and adults who are affected by any form of limb loss, congenital or otherwise or who are affected by any other similar disability.

<https://www.douglasbaderfoundation.com/>

Improving Access to Psychological Therapies (IAPT)

www.nhs.uk/Service-Search

Use the NHS service search to find psychological therapies services near you.

Limbless Association

The Limbless Association provides information and support to the limb-loss community. We aim to support people of all ages and backgrounds through a variety of existing programmes and services.

<http://www.limbless-association.org/index.php/information/amputee>

Talk Liverpool

www.talkliverpool.nhs.uk (psychological support)

Authors: Therapies

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All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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