

Wearing a Prosthesis

Maltings Mobility Centre

An information guide for patients following leg amputation.

In partnership with:

The Dudley Group NHS Foundation Trust

The Shrewsbury and Telford Hospital NHS Trust

Walsall Healthcare NHS Trust

Wearing a Prosthesis

An Information Guide for Lower Limb Amputees

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The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Introduction

This booklet is aimed at guiding you through the process of prosthetic rehabilitation. We hope that it enables you to understand what will happen during this time. However, if you are unsure about anything do not hesitate to ask one of the staff.

Glossary

- **Prosthesis:** Artificial limb
- **Prostheses:** Artificial limbs
- **Prosthetist:** The Prosthetist is the person responsible for the provision of an appropriate prosthesis and educating the client in its use
- **Socket:** This is a container which is made to fit the shape and measurements of your residual limb
- **Suspension:** This holds the prosthesis onto your residual limb
- **Cosmesis:** This is the outer covering, which gives the limb its shape and appearance
- **Oedema:** Excess fluid in the tissues of the body.

What is a prosthesis?

This is the formal name for an artificial limb (in this case leg).

The prosthesis only fits the person it is made for.

There are various types of prostheses available.

Prostheses vary in:

- The way they look
- The way they work
- The way in which they are held on to you (the suspension).

The type of prosthesis you have will be dependent upon:

- Your health and fitness
- Your body weight
- Your residual limb shape
- Your amputation level
- Your lifestyle.

The primary assessment by the rehabilitation team will enable a suitable prosthesis to be made for your needs and goals.

If your needs and goals alter in the future you will be reviewed to see if any part of your prosthesis needs to be changed.

Parts of a prosthesis

The next two pages give an idea of the standard parts that go into the making of a prosthesis. To make the diagrams clear, they are shown without the cosmesis, and suspension.

The diagrams are to give you an idea of what the parts are.

Please do not think that all prostheses are exactly the same as the diagrams – there are many prosthetic manufacturers and each make various types of prostheses.

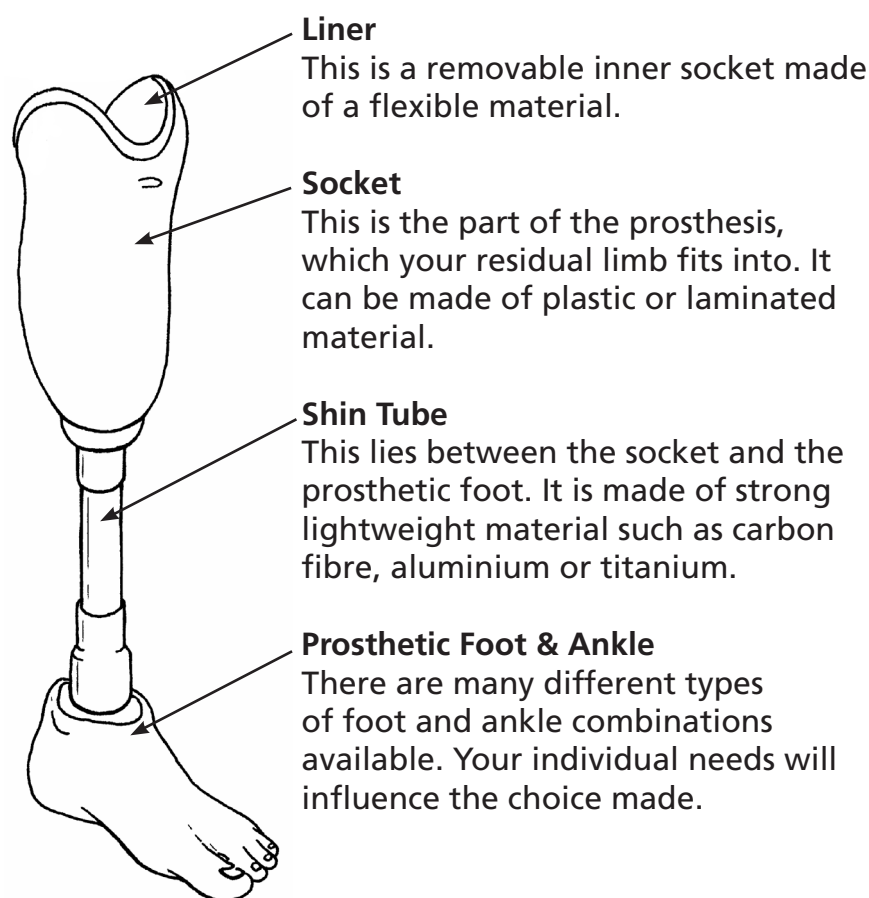
Cosmesis (not shown)

This is a cosmetic cover, which gives the limb its shape and appearance. A continuous foam tube is shaped, as far as possible, to match your remaining limb. Stockings or a 'plastic skin' will then cover the foam tube.

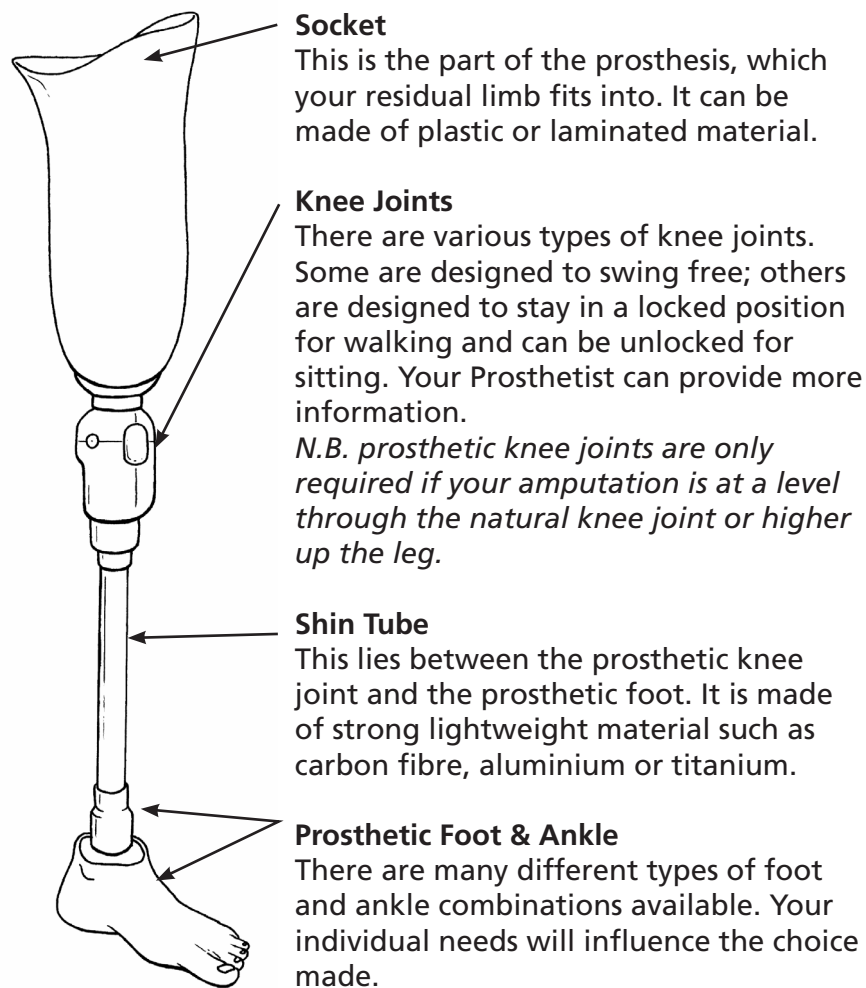
Suspension

There are different types of suspension, which secure the prosthesis to your residual limb. When your measurements are taken for your prosthesis, you will be assessed for the type of suspension you need.

Standard Features of a Below Knee Prosthesis



Standard Features of an Above Knee Prosthesis



Measuring you for a prosthesis

When it has been decided that you are ready for your prosthesis the Prosthetist will record the shape of your residual limb by one of the following:

- Plaster casting
- Tape measurements
- Computer measurements
- Photography

or a combination of the above.

Your Prosthetist will decide on the most appropriate method.

Measurements will also be taken of your remaining limb. This will enable the technicians to shape the foam cosmesis to resemble your remaining limb. Following these measurements your prosthesis will be manufactured and a further appointment will be made so you can try your prosthesis for the first time. This is known as the fitting stage.

Fitting your prosthesis

At the fitting stage adjustments can be made to ensure that your prosthesis is as comfortable as possible, and to make sure it works properly. To allow easier access for these adjustments your prosthesis will not have the cosmetic cover fitted.

It is very important to let the Prosthetist know if anything is not comfortable. Please do not be afraid to say if something does not feel right, as it is important that you let the Prosthetist know what you are feeling.

The prosthesis may be left uncovered for use in the physiotherapy gym. This enables any adjustments to be made as your residual limb settles down and as you become used to the prosthesis.

Delivery Appointment

The cosmetic covering is applied at this time unless you prefer to use it without any covering. Your prosthesis may seem wider than your remaining limb; this is because appearance of the prosthesis is dependent on the shape and the remaining swelling of the residual limb. In time the residual limb usually shrinks and so smaller sockets can be provided.

Prosthetic Training

Your Prosthetist and therapist will show you how to use the prosthesis. You will need a certain amount of practice before you are safe to use it at home, please be patient. It is important to realise that it takes a lot more energy to walk with the prosthesis than with your own leg, therefore, learning to walk may be quite tiring.

The activities you practice will depend on your individual abilities and requirements, your amputation level and your general health. These activities may include practising walking outdoors, walking up and down steps, up and down slopes, getting on and off the floor, walking forwards and backwards and around obstacles, getting in and out of a car etc.

Getting on with your life

The assistance of an Occupational Therapist (OT) may be helpful as they can advise you on ways you can help maintain your independence. The OT can assess and refer for home adaptations and equipment which may help you with your personal and domestic activities of daily living, leisure activities, returning to work or driving etc. When you start using your prosthesis at home the OT may also work with you at this stage, by assessing your activities whilst you are using the prosthesis.

Things you will need to learn

- Whether your prosthesis is fitting you properly and, if necessary, how to maintain the fit by the use of more or less socks
- How to put your prosthesis on and take it off safely
- How to regain your balance on two legs
- Which walking aids are suitable for you
- Learning where you will feel pressure from the prosthesis and checking on how well your skin is coping with the new pressures
- Gradually building up the time spent wearing your prosthesis
- How to keep your prosthesis, residual limb and the remaining limb in good condition.

Socks

Socks are issued by the Prosthetic Service and worn between your skin and the prosthesis. The socks help to protect your residual limb and make your prosthesis more comfortable to wear.

Socks are made from terry towelling, plain cotton, nylon, wool or wool blend. They come in different sizes, lengths and thickness. Your prosthetist will inform you of the type of sock that you will need to use.

The number of socks you wear will depend on the size of your residual limb in relationship to the socket, e.g. sometimes the residual limb might be swollen and the socket may then feel tight, or the residual limb may have shrunk and the socket will be too big.

To achieve the correct fit, you may have to replace a thick sock with a thin one, or add a thin or thick sock to the one / ones that you are wearing. Your prosthetist and physiotherapist will be able to give you advice on how to check that you are wearing the correct combination and amount of socks.

When you have your prosthesis you will be issued with a supply of suitable socks. Once these wear out, replacement socks can be obtained through your local amputee clinic or by phoning the Prosthetic Rehabilitation Services Centre (Maltings Mobility Centre) directly.

Suspension Sleeves

Your suspension sleeve should be cleansed regularly in accordance with manufacturers' guidelines which will be provided to you by the Prosthetist.

Important things to remember are:

- Always wear clean socks daily
- When washing your socks, follow the manufacturer's instructions
- Always give your socks enough time to dry
- Never darn or patch your socks
- If you find that you are wearing more socks than usual, please contact the Prosthetic Service for advice
- Compression residual limb shrinker sock – It is important to remember to wear this sock when you are not wearing the prosthesis. This will help to ensure that the residual limb does not swell when you are not wearing the prosthesis. They are not normally worn whilst wearing the prosthesis. You may reach the stage where this sock is no longer required – your local prosthetic team will advise you on this.

Walking aids

When you first use the prosthesis you will usually practice within a set of walking rails (parallel bars) to give you extra support and confidence. Most new prosthetic wearers will need some kind of walking aid to begin walking at home safely. Your Physiotherapist will discuss with you the best type of walking aid for your particular needs, and will arrange its supply. You will be told how to look after your walking aid and what to do if there are any problems with it.

Reviews

After taking delivery of the prosthesis, various clinic appointments will be arranged, so that the Prosthetic Rehabilitation Team may check your progress and the fit of your prosthesis.

As you become a more confident prosthetic user you will not need such regular appointments, but you will be able to request them as required. Although you may be discharged from the prosthetic training, you are never discharged from the Prosthetic Rehabilitation Service, as we need to keep a regular maintenance check on the prosthesis.

Care of your prosthesis

You will be responsible for keeping your prosthesis in good condition:

- **Hygiene**
Wipe out the socket and, if applicable, the liner of your prosthesis every day using a clean damp cloth. When washing special liners always follow the manufacturer's instructions. It is best to do this at night so they are dry for the following day
- **Storage**
Store your prosthesis in a clean, dry place when you are not using it. Do not let your prosthesis get wet; if it does allow it to dry naturally and contact your Prosthetist for advice.
- **Footwear**
Do not change the heel height of your shoes without consulting your Prosthetist; as this may change the way the prosthesis feels when you walk – making you feel unbalanced
- **Maintenance and repairs**
Your prosthesis is a mechanical device and will require maintenance at the Prosthetic Clinic. If you are a very active person the prosthesis may need more regular maintenance to avoid wear and tear problems. This also applies to heavier clients who may need to be reviewed every few months

If any part of the prosthesis needs alteration or adjustment, please contact your Prosthetic Clinic.

If you notice any of the following:

- Noises coming from your prosthesis, such as squeaking
- Looseness in any joints
- A change in how your prosthetic foot feels to walk on
- Problems with the prosthetic knee units
- You develop sore areas.

Stop using the prosthesis and contact the Prosthetic Clinic for advice.

Do not try to adjust the prosthesis yourself, as this may cause damage and make it unsafe to walk on.

Regular checks on your prosthesis ensure that it remains in a good and safe condition. This is important for your own personal safety.

Care of your residual limb

- **General hygiene**
Wash your residual limb every evening using a non-perfumed soap and warm water. Rinse it well and pat it dry
- **Regular inspection**
Examine your residual limb every day for signs of redness, rubbed or sore areas, blisters or other skin problems. It may be helpful to use a hand-held mirror to check all areas of your residual limb. If you have any worries, then contact the staff at your Prosthetic Clinic for advice
- **Creams**
Avoid the use of creams on your residual limb unless advised by a doctor / therapist
- **Socks**
Change your residual limb socks daily or more often in hot weather when you sweat more
- **Oedema**
Swelling of your residual limb will occur after amputation, but this will gradually reduce and your limb may continue to shrink for many months. A comfortable fit of your prosthesis can usually be maintained by altering the number of socks you wear, or you may need adjustments to your prosthesis.

Swelling may be kept under control by use of the compression sock whenever your prosthesis is not being worn. A member of the prosthetic team will advise you how and when to wear it.

Care of your remaining limb

Having had an amputation, you must take care of your remaining limb. This is particularly important if your amputation was as a result of poor circulation or diabetes.

- **Smoking**
If you are still smoking then this will increase the likelihood of further disease in your remaining limb. If you seriously wish to give up smoking, please ask your Prosthetic Clinic or GP for information
- **Footwear and socks**
Avoid tight socks / stockings that may hinder your blood flow. Check that there are no creases in your socks. Wear comfortable supportive footwear and inspect the insides of your shoes daily for foreign objects e.g. drawing pins, nail points, torn linings and rough areas. Wear clean socks / stockings daily
- **Hygiene**
Wash your foot daily and dry it thoroughly. If you notice any red areas on your foot or any broken skin, please contact your GP

- **Chiropody**
Diabetics and those with poor circulation should arrange to have their toenails cut by a chiropodist. If you cut your own toenails this is best done after your foot has been soaked in warm water; the nails are softer and easier to cut. Cut them straight across and not too short
- **Skin Care**
Consult your GP about the most appropriate product for any skin problems. If your skin sensation is poor, then avoid excessive heat such as an unwrapped hot water bottle or sitting in front of the fire. Always check the temperature of the bath water with your hand or elbow before you get into a bath
- **Swelling**
If your foot and ankle are prone to swelling, then keep them raised on a leg rest if you are sitting for long periods. Make sure your knee is supported and that your heel has no pressure on it. Consult your GP if you are concerned about any swelling in your leg
- **In Bed**
Avoid sleeping with pillows under your knees or hips as this may lead to tight joints and muscles
- **Exercises**
Keep doing the exercises that you were taught by your physiotherapist.

If you are concerned about the condition of your remaining limb at any time then get in touch with one of the following:

- Your GP
- Consultant surgeon (if you are still being reviewed at hospital)
- A doctor in the Prosthetic Service.

Going on holiday

The Prosthetic Services throughout the UK have an agreement to allow emergency treatment for amputees away from their home.

Please contact your main Prosthetic Centre for further information.

Falls:

Preventing falls.

Avoid:

- Bad footwear e.g. old slippers, worn down shoes
- Long trailing nightdresses and dressing gowns
- Trailing telephone cables and electrical cords
- Poor lighting
- Floor obstacles, including rugs
- Wet slippery surfaces
- Bending down to pick things off the floor – use a long handled reacher.

Check:

Spectacles: Have regular eye check ups and use glasses at night if you need them during the day

- **Drugs:**
Are you taking the medication correctly?
- **Walking aids:**
Are they in a safe condition?
Does your stick / frame have worn rubber ferrules?

- **Prosthesis:**
Is it fitting correctly and in a good state of repair?
If you use a knee lock – is it working properly?
- **Wheelchair:**
Ensure brakes are in good working order. Keep pneumatic tyres inflated to the pressure indicated on the side of the tyre. Always move footplates out of the way when transferring from the wheelchair
- **Personal alarm system:**
Is it working?
Do you carry it on your person (not hanging on the back of a chair!)
- **Outside your home:**
Paths need to be even and in good repair
Keep them free from moss and leaves
Take extra care in wet and icy conditions.

How to get up off the floor

Please refer to the information given in the first part of this information package.

People with above knee amputations who were wearing their prosthesis when they fell would be able to use the second technique. Do ensure that the knee lock is unlocked before rolling over onto your knees.

Tip: if you are outside look around for something solid to help you get up e.g. a low wall or a lamp post. Failing this you may be strong enough to push up into standing from the kneeling position using your sticks or crutches.

Tip: Always ensure when you move towards something, which will help you stand, that you take your sticks / crutches with you.

If you think the prosthesis may have been damaged in the fall or it was the prosthesis that caused the fall, please call the Maltings Mobility Centre for an urgent appointment so that it can be checked.

Notes:

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਆਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。