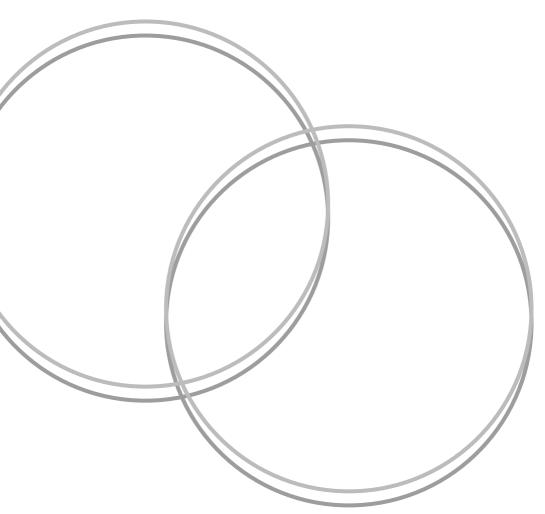


## **Transtibial Prosthesis**

Information for patients



#### **Oxford Prosthetics Service**

## Your details

Name:

NHS Number:

Please tell us if any of your contact details change.

## How to contact us

Prosthetics / Appointments01865 227 295Physiotherapy01865 227 272Occupational Therapy01865 227 279Email: oxford.prostheticservice@ouh.nhs.ukOpening times:Monday to Thursday, 8.30am to 4.30pm<br/>Friday, 8.30am to 4.00pm

## Introduction to the Oxford Prosthetics Service

The Prosthetics Service is part of the Oxford University Hospitals NHS Trust. It is situated in the Oxford Centre for Enablement Building on the Nuffield Orthopaedic Centre site. Each year it provides a service to around 1,900 users of artificial limbs who come from a large area, including Oxfordshire, Berkshire, Buckinghamshire and Wiltshire.

## The team

**Medical staff** – There is one consultant at the Service, specialising in the rehabilitation and medical care of people who have had an amputation, as well as people born with congenital limb deficiencies. Our consultant has a particular interest in pain management following amputation.

**The prosthetist** is responsible for fitting your prosthesis, otherwise known as your artificial limb.

**The physiotherapist** will give you advice on exercises, using a wheelchair and walking training, to help you to achieve independence.

**The occupational therapist** will offer you advice and training to help you perform day to day activities such as dressing, cooking, and personal care. They can assess your home, work, or school and can offer advice on any necessary changes that can help you get on with your life.

**The nurse** will provide you with nursing care, as well as on-going support and advice on health promotion issues, such as diet, exercise and stopping smoking.

**The reception / administrative staff** deal with any queries you may have about your visits to the Centre. They also organise appointments and help with transport queries.

As we are part of a training hospital, there may be doctors going through specialist training, as well as student prosthetists, occupational therapists and physiotherapists at your appointment.

## **OWLS (Onwards Without Limbs)**

### Amputee Support Group

This is an informal group who meet monthly, giving support to others in the same predicament, with the aim to enjoy themselves and sometimes gain practical advice and swap ideas.

Meetings are held on the first Monday of every month (apart from on a bank holiday, in which case it will be on the second Monday). The meeting runs from 12 noon until 2.00pm and is held in the First Floor meeting Room (No.38F23) at the Oxford Centre for Enablement.

Please contact the volunteers below for more information:

### Angela Williams

Telephone: 01296 487 943

Gail Wellings Telephone: 01494 539 021

# Psychological wellbeing after amputation

Having an amputation is a life changing experience. As you adjust to this change it is normal to experience a range of emotional reactions that come and go.

In the early days after your amputation, you may have feelings of shock and disbelief, bewilderment or perhaps relief. Many people feel sadness and, for some, the sense of loss can be quite strong. You may experience anger about what has happened and frustration as you begin to adjust to doing things in different ways. You may have anxieties about how you will cope and about how your life will be from now on. It is also possible, and natural, to experience reduced self-confidence and self-esteem. Page 5

However everyone is different and you may have different reactions and concerns.

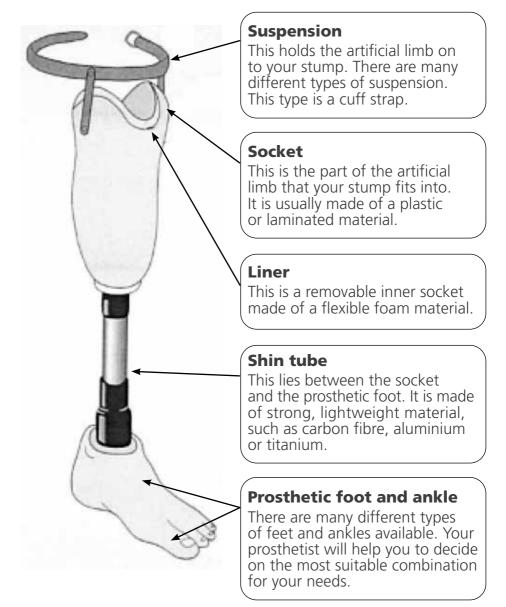
You may find that the way you feel about intimacy, sexuality and having sex is affected by amputation. Your sexuality is a unique part of who you are. It includes how you feel about your body, how you relate to others, and having physical contact. Feelings or concerns about these aspects of yourself are natural following amputation.

Making sense of your feelings and reactions can be difficult, and you may only have your own life experience to go by. It can help to talk to your partner, a close family member or friend. However sometimes it is easier to speak to a person who is not connected to your everyday life.

We fully acknowledge that losing a limb can be a very challenging experience. You can speak to any member of the team about accessing support at any time.

# A transtibial or below knee prosthesis

This diagram shows the features of a transtibial prosthesis or artificial limb.



## Care of your prosthesis

The following guidelines are intended to prolong the life of your prosthesis and to keep it in the best possible condition.

Take the time each evening to inspect and clean your socket and also liner if you have one, by wiping it out with a damp cloth every night. Leave it to dry thoroughly, preferably overnight. Keeping the socket clean will help reduce the risk of skin problems.

**Do not** allow your prosthesis to become submerged in water unless it has been designed for that purpose. Even in modern carbon fibre limbs, the bolts and screws are still made of metal and can rust.

**Do not** attempt to repair or adjust your own prosthesis. Contact the Prosthetics Service and we will be able to let you know what you may be able to do yourself, or whether you need to come into the Centre. Mechanical adjustments can cause serious damage to your prosthesis and can be dangerous if not carried out correctly.

Prevention is better than cure though, so it is a good idea to bring your prosthesis in for a check once a year, even if you think there is nothing wrong.

Trimming the lining or putting pads in any part of the socket can lead to serious problems with your stump and skin, as well as safety issues.

**Do not** put oil, grease or any other chemicals on your prosthesis, as this can cause damage to certain parts. If your prosthesis is noisy, damaged or broken please contact the Prosthetics Service.

**Do not** lean your prosthesis against a radiator, as this may distort it. **Keep your prosthesis away from naked flames.** 

Outer coverings can be difficult to keep clean. Use soap and water on PVC skins or a damp cloth on stockinette. If a stain will not wash off, or the cover is damaged, we will be happy to fit a new one for you.

## Wearing your prosthesis

You should wear your prosthesis as instructed by your prosthetist or physiotherapist.

When you are walking with your prosthesis for the first few days at home, you **must** check the skin over the whole of your stump regularly. Take off your prosthesis after 5 minutes and check your skin. Put the prosthesis back on and check your skin again after another 5 minutes. This is to see whether there are any areas that are becoming sore.

To check the skin over your whole stump you will need to use a hand mirror. This will let you check those areas that you can't see, such as at the end and behind. If any areas are becoming red, leave your prosthesis off until the redness goes. If it does not go, do not put your prosthesis on again until you've seen a member of the prosthetics team.

If any blisters or sore areas of skin form, do not put your prosthesis on again until you have seen a member of the prosthetics team. Please see your practice nurse or doctor at your GP surgery if you are concerned about any blisters or abrasions. This is especially important if there are any signs of infection. This includes any swelling, increase in skin temperature, or any leaking of fluid.

If your skin is tolerating the prosthesis then you can gradually increase the time you wear it by 5 minutes. Even if all is going well do not be tempted to wear your prosthesis for longer periods without checking your skin regularly in the first few days.

## Changes to your stump

Sometimes we refer to the remaining part of your leg as residual limb. For clarity we have used the word 'stump' in this leaflet. If you have a preferred term for the remaining part of your leg, please do not hesitate to let your treating clinician know. If you are a new amputee you should expect your stump to change in shape and size.

After your surgery your stump will be swollen. As this swelling subsides you will need to put on extra stump socks to maintain a comfortable fit. Your prosthetist will tell you the number of socks you need to wear to start with.

As your stump shape begins to change you may find the socket is less comfortable. When this starts to happen, you will need to make an appointment with the prosthetist, who can alter your socket fit. If your stump has changed significantly you might need to have a new socket made.

If you have been prescribed diuretic medication, also known as water tablets, please take this at your normal time before you come to the clinic. This will help to reduce the swelling in your stump and will help us when fitting your artificial limb.

For all prosthesis users, the shape of your residual limb can be affected by factors such as changes in weight or medication. If you are experiencing any problems with the fit of your prosthesis, then contact the prosthetics department and make an appointment to see your prosthetist.

## Appointments

A review appointment will usually be set up for you once you have your prosthesis. In the early stages, you will have frequent routine appointments made for you. If you have any problems in between these appointments, please call us to arrange an earlier appointment.

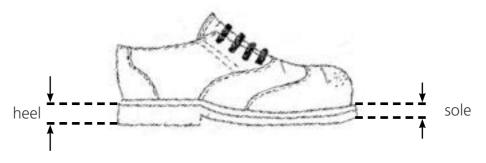
Once you've had your prosthesis for a while, we will ask you to request appointments when you need one. You can telephone our appointments staff on **01865 227 295** and do not need to go through your GP.

## **Putting on your prosthesis**

- Put on one stump sock at a time. Make sure there are no wrinkles.
- Take the soft liner out of the prosthesis.
- Keeping your knee slightly bent, pull the liner onto your leg. It must go on straight; you should not twist it into place.
- Pull the thin nylon sock over the liner.
- Keeping the heel of the prosthetic foot on the floor and your knee slightly bent, push into the artificial limb.
- The edges of the artificial leg and the inner liner should line up.
- If you have a cuff strap, pull the strap up over your kneecap. It should be firmly fastened but with enough space to get one finger underneath the strap at the back.
- If you have a suspension sleeve, pull this up onto your thigh. Make sure it has no wrinkles and is in direct contact with your skin, not just your stump socks.
- Your prosthetist will recommend the number of socks to wear with your prosthesis.
- If your stump increases in size and the socket becomes tight you will need fewer socks. If it decreases in size and the socket becomes loose you will need to wear more socks.

## **Heel heights**

If you want to change your shoes you will need to make sure the shoes have the same heel height as the ones used when your prosthesis was fitted.



### **Measuring heel height**

Measure the height of the heel of your shoe, then measure the height of the sole. Subtract the sole measurement from the heel measurement. This figure is the heel height of the shoe. For example, if the heel of the shoe measures 20mm and the sole measures 5mm, then the heel height of the shoe will be 20 minus 5, which equals 15mm.

If you are unsure about changing your shoes please make an appointment to see your prosthetist, who will be happy to check this for you.

Heels higher or lower than those your prosthesis has been set up for will alter the alignment of the prosthesis and may make walking unstable.

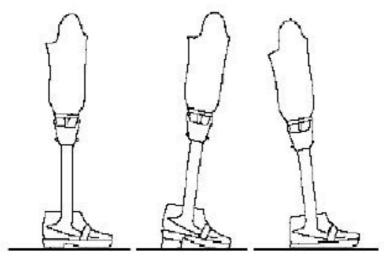


Figure 1 – Correct heel height, prosthesis is vertical.

Figure 2 – Heel of shoe is too high. Prosthesis leans forward in the shoe.

Figure 3 – Heel of shoe is too low. Prosthesis leans back in the shoe.

## **Getting dressed**

Due to swelling after your operation, the socket may need to be rather large, especially around your knee. This may make it difficult for you to pull your trouser leg down over the socket and suspension strap or sleeve. If so, put your trousers on to the prosthesis before you put the prosthesis on. It should then be possible to pull your trousers up once you are wearing it.

If you need to adjust the number of socks that you wear several times during the day, you may want to think about wearing trousers with a side zip on the lower leg such as tracksuit trousers, or to fit a Velcro fastening on the inner seam of your trousers to allow easy access to your prosthesis.

## Care of your stump socks

Please make sure you replace worn or damaged socks, as these may rub your stump and cause sore patches. Please ask your prosthetist for new stump socks when you visit the Service, if you need them. Alternatively, you can phone the Prosthetics Service and ask for socks to be posted to you.

When putting on your stump socks make sure they are comfortable, with no wrinkles. If you need to wear more than one sock, put each one on separately.

You may be given a special elasticated sock called a compression sock. This can help with swelling. Do not try to stretch this lengthways as it will lose its effectiveness. You should only wear this elastic sock when you are not wearing your prosthesis. Do not wear the compression sock at night.

You will need to change your stump socks **daily**, or more often if necessary. Your stump will sweat inside the socket, particularly in the summer. Keeping your stump and socks clean will reduce the risk of skin problems. Washing your socks regularly will keep them in good condition and help to keep your skin healthy.

**Never** try to mend a hole in a stump sock; always make sure you throw a damaged or worn sock away and replace it.

## Care of gel socks/liners

- Gel socks and liners should be hand washed in mild soap after use.
- In order to avoid skin reactions to soap it is best to use the same soap as you normally use on your own skin. Do not use washing up liquid.
- Once washed, pat excess water from sock or liner with a towel do not rub as this will damage the sock or liner.
- Leave the gel sock or liner to air dry.
- Do not put gel socks or liners in the washing machine, tumble drier or dry them on a radiator or other heat source. The gel is likely to melt and change shape.

### Washing instructions for all other socks:

Type of sock	Washing	Drying
Wool	40°C wool cycle or hand wash in lukewarm water Non-biological washing powder Fabric conditioner, if desired. <b>Do not</b> bleach.	Do not tumble dry. Do not wring by hand, as this misshape the sock.
Cotton	60°C cotton cycle Non-biological washing powder Fabric conditioner, if desired. <b>Do not</b> bleach.	May be tumble dried.
Nylon	Washing machine at 40°C or by hand Non-biological washing powder Fabric conditioner, if desired. <b>Do not</b> bleach.	Do not tumble dry.

## **Goal setting**

You may find it helpful to work with your family and health professionals, to identify a range of goals which will set you up for life with your new prosthesis.

## **General health**

Changes in your weight will affect the fit of your prosthesis. Try to eat a balanced diet and keep to any diet instructions you have been given. Excessive weight gain will make walking with your artificial leg more difficult.

Continue with the exercises you have been taught. Details of exercises are shown at the end of this leaflet. Changing your position regularly will help your joints to stay flexible and will help with your circulation. Try not to sit or stand in the same position for too long.

## Care of your stump

### It is very important to keep your stump clean.

- Wash it daily with soap and warm water and pat dry, don't rub.
- Use moisturising cream such as aqueous cream such as E45. Apply this at night when you remove your prosthesis. Avoid perfumed creams or talcum powder – these are more likely to cause allergies or irritate your skin.
- Examine your stump daily, using a hand mirror if necessary.
- If you do discover a sore area, clean it carefully and apply a simple dressing. Contact the prosthetic centre for advice. You could also seek advice from the practice nurse at your Doctor's surgery.
- Change your stump socks every day.
- When you are not wearing the prosthesis, rest with your stump raised to about level with your hip, to prevent it swelling.
- If you have been given one, wear the elasticated compression sock during the day when you are not wearing your prosthesis. Continue doing this until your stump shape has settled.

### Massage is good for your stump

- It is good for your circulation and will help your wounds to heal.
- It will stop scar tissue from sticking to the bone underneath.
- It may help to ease phantom limb sensations.
- It will help you to notice any changes to your stump and skin sooner rather than later.

## Foot care

You must look after your remaining leg and foot.

### Keep your foot clean to prevent irritation and infection

- Wash your foot at least once a day with soap and warm water.
- Dry thoroughly, especially between your toes. Pat dry rather than rub dry.
- Wear clean stockings or socks made of natural fibres, such as cotton or wool; avoid nylon if possible.
- Make sure the top of your sock is not too tight.
- Use a moisturising cream like aqueous cream such as E45.

### Examine your foot daily

- Check for any change in usual colour.
- Check for any unusual swelling.
- Check for any unusual pain or discomfort; gently feel all over your foot and around your toes.
- Check for any visible sores, blisters or red patches.
- Use a hand mirror if necessary, so that you can see all of your foot.

### Avoid injury to your foot

- Wear properly fitting shoes that have enough room for your toes and a comfortable heel.
- Avoid going barefoot.
- Take extreme care when cutting your toenails.
- Don't remove dry or hard skin with sharp blades.
- When bathing, check the temperature of the water before putting your foot in.

### What to do if you develop a problem

- Don't treat your foot yourself.
- Contact your Practice Nurse, podiatrist, Family Doctor (GP) or Diabetic clinic for advice.
- Rest your foot as much as you can.

If you have diabetes and/or have circulatory problems, you may have less feeling in your foot. You will need to take extra care to look after your remaining foot, as you may not be able to feel when something is wrong.

## Skin care

### Normal skin

Healthy skin provides a barrier between the body and the external environment. In normal skin, natural oils fill spaces between plump skin cells to form a good skin barrier – keeping moisture in and irritants out. Skin cells and the surrounding natural oils are often shown as a brick wall. The skin cells are the bricks and the natural oils are the mortar.

### Dry skin – an impaired skin barrier

When the skin is very dry and lacks its natural oils, it allows moisture to escape from the skin too quickly. The skin cells shrink, opening cracks which allow greater moisture loss and irritants to get in. The skin will become dry and may be itchy. Scratching damages the skin even more.

People with dry skin conditions, such as eczema and psoriasis, need to be extra careful. Dry skin can affect people of any ethnic origin and any age group, from the very young to the elderly. Older people are more likely to develop dry skin, as the skin becomes thinner and less efficient at producing natural oils.

Most small breaks in the skin such as blisters will heal within a few days of not using your prosthesis. It is very easy to get infections in the remaining part of your leg after amputation. If a skin infection develops, you should stop wearing the prosthesis and make an appointment to see your GP or Practice Nurse.

### Restoring dry skin using a moisturiser

Moisturisers rehydrate the skin by forming a layer of oil which traps moisture in the skin. This allows the skin cells to swell and close the cracks. Some moisturisers also contain humectants, such as glycerol or urea, which keep water within the skin. As dry skins are thirsty, moisturisers should be applied regularly in large amounts. This helps to rehydrate and soften the skin, making it smooth, supple, less itchy and helps the skin to recover. Moisturisers are available as lotions, creams, ointments, gels, soap substitutes and bath moisturisers. Moisturisers are easy to use and can be used as often as you like – the more the better! Apply enough so that your skin looks shiny, ideally 3 to 4 times a day, or as often as required.

## Smoking

Smoking damages your health even a few cigarettes will affect your circulation. Smoking is damaging to your remaining leg, as well as your lungs and heart. Try and give up smoking or reduce the amount you smoke.

If you live in Oxfordshire, you can ask the staff at the Prosthetics Service to refer you to our hospital Health and Wellbeing Team. They can give you guidance and support to help you give up smoking. Alternatively you can contact the Practice Nurse at your GP's surgery.

## **Occupational therapy**

After your amputation, the occupational therapist can help you to take a fresh look at the way you carry out daily tasks and adjust to the difference in your life. They can help you with:

### Day to day activities, for example:

- carrying out a bathing routine
- washing, drying and sorting the laundry
- cooking a meal.

### Home adjustments, for example:

- advice on making your home safe for you to move around in
- discussing equipment that may help
- adaptations to your home, if necessary.

### Work, for example:

- adapting the workplace to make it safe for you to move around
- adapting your role
- raising awareness of your needs amongst managers and colleagues.

### School, for example:

- talking to teachers and pupils about amputations
- offering advice to the school and Local Education Authority
- suggesting techniques and equipment to carry out school based tasks.

### Leisure, for example:

- advice on techniques and equipment useful for hobbies, such as fishing, gardening, ice skating, etc.
- pursuing new interests as well as rediscovering former ones.

Occupational therapists can offer you support, in dealing with your amputation, as well as your family, carers, and others such as teachers, colleagues and friends. The occupational therapist may also act as your key worker, working with other professional and voluntary agencies. They can offer you practical guidance as well as emotional support.

## What to do if you fall

- Stay calm; take a moment to get over the shock
- Check yourself for possible injuries.
- If you think you are not injured and can get up off the floor, do so when you are ready. Don't rush.

## Getting up after a fall

Your physical ability and level of amputation may determine which technique is better for you to use when getting up. Your physiotherapist may show you how to do these with you as part of your prosthetic training.

## There are two techniques you can use to get up off the floor:

1. Place a low stool or cushion in front of a chair, which has its back to the wall so the chair will not move. Sitting on your bottom with your back to the stool or cushion, bend your remaining leg and place your foot flat on the floor. Now place your hands behind you on the stool or cushion. Then, push with your remaining leg. At the same time, use your hands and lift your bottom from the floor onto the stool or cushion. Use the same technique to lift yourself up onto the chair. This technique can be done in several stages if needed, or straight up from the floor if you have enough strength. 2. From a sitting position, roll over onto your knees by turning torwards your remaining limb. Now bring your remaining foot forwards by bending your knee. Then place your foot flat on the floor. Hold the arms of the chair and using your arms and remaining leg, push yourself up, turn and sit down.

If you think that you may have an injury, or you find that it is too difficult to get up off the floor without assistance then get help by:

- using your personal alarm if you have one
- phoning from a mobile phone or a land line if you can reach one
- shouting for a carer/neighbour.

Remember to keep warm while you wait for help. Use anything available to keep warm, such as towels, coat, bed covers.

### Information for carers:

You can help a fallen person into a comfortable position, e.g. sitting up or lying with a pillow under their head. Take care if they are injured. You should not attempt to lift a fallen person, if they cannot get up by themselves. You should summon help.

## Tips to help avoid a fall:

- Avoid wearing bad footwear when you are moving around, such as old slippers or worn down shoes.
- Avoid long trailing nightdresses and dressing gowns.
- Tidy away trailing telephone cables and electrical cords.
- Make sure the lighting in your home is good.

Avoid bending down to pick things off the floor.

### Stay healthy

- **Glasses** have regular eye check-ups and use your glasses at night if you usually need them during the day.
- **Medicines** Are you taking your medicines correctly? If you are unsure, talk to your GP.

### If you use a wheelchair:

- Make sure the brakes are in good working order.
- Keep air filled tyres inflated to the pressure shown on the side of the tyre.
- Always move the footplates out of the way when you are moving to and from the wheelchair.

### Keeping safe:

- Is your personal alarm working or is your mobile phone charged?
- Do you carry it on you?

## Driving

For detailed advice about starting to or returning to driving, contact the Regional Driving Assessment Centre (RDAC). There is a Centre in Eynsham, Oxfordshire but the contact address is in Birmingham:

### **Oxford Mobility Centre**

Regional Driving Assessment Centre Patricks Farm Meriden Road Hampton In Arden B92 OLT

Telephone: 0300 300 2240 / 0121 359 4222 Email: <u>info@rdac.co.uk</u> Website: <u>www.rdac.co.uk</u>

Alternatively, you can find a centre from the Forum of Mobility Centres. Website: <u>www.mobility-centres.org.uk</u>

### By law, you must notify the DVLA of your amputation.

DVLA Swansea SA6 7JL Telephone: 0300 790 6806 Website: <u>www.gov.uk/contact-the-dvla</u>

You can also find further information at: <u>www.gov.uk/driving-medical-conditions</u>

## Advice and support groups

### **The Limbless Association**

Charity providing information and support for amputees and the limb-loss community. Helpdesk: 0800 644 0185 Website: <u>www.limbless-association.org</u>

### The Douglas Bader Foundation

Charity providing information and support, as well as grants and activities for younger people. Telephone: 01225 865172 Website: <u>www.douglasbaderfoundation.com</u>

### **Disabled Living Foundation**

Information about equipment and solutions for independent living. Telephone: 0300 999 0004 Website: <u>www.dlf.org.uk</u>

### Diabetes UK

Support for everyone affected by diabetes. Telephone: 0345 123 2399 Email: <u>careline@diabetes.org.uk</u> Website: <u>www.diabetes.org.uk</u>

### Blesma

Military charity that supports servicemen who have lost limbs, whilst representing their country. Telephone: 0208 590 1124 Website: <u>www.blesma.org</u>

### LimbPower

Charity aiming to engage amputees and individuals with limb impairments in physical activity, sports and the arts. Address: LimbPower, Whitecroft, Tandridge Lane, Lingfield, Surrey, RH7 6LL Email: <u>info@limbpower.com</u> Website: <u>www.limbpower.com</u>

### Motability

Help with exchanging your mobility allowance for a car, mobility scooter or electric wheelchair. Telephone: 0300 456 4566 Website: <u>www.motability.co.uk</u>

### **Disability Rights UK**

(Formerly the Royal Association for Disability and Rehabilitation) Telephone: 0330995 0400 Website: <u>www.disabilityrightsuk.org</u>

### REACH

The Association for Children with Hand or Arm Deficiencies Telephone: 0845 1306225 Website: <u>www.reach.org.uk</u>

### ReMAP

Custom made equipment for people with disabilities. Oxfordshire and Thames Valley contacts: Telephone: 01865 323 401 / 01865 773 123 Website: <u>www.remap.org.uk</u> Page **27** 

#### **Directory of Prosthetic Centres**

For an up to date list of Prosthetic Centres in the United Kingdom (if you need help with your prosthesis while you are away from the area) please visit the Limbless Association website: <u>https://limbless-association.org</u>

Alternatively, you can contact the Oxford Prosthetic Service: Telephone: 01865 227 295

### **Exercises**

These exercises, produced by P.I.R.P.A.G. (Physiotherapy Inter Regional Prosthetic Audit Group), are designed to increase your muscle power and strength and maintain the movement in your joints. Hopefully you will be familiar with some of them already. Your physiotherapist will advise you of how many and how often to perform the exercises.



### Static quadriceps

- Push your legs straight out in front of you.
- Push the back of your knees into the bed and tighten your thigh muscles.
- Hold for 5 seconds.

### Straight leg raise

- Put your legs out in front of you.
- Tighten your thigh muscle.
- Lift your leg off the bed.
- Aim to hold for up to 5 seconds
- Slowly lower.

Repeat the above with the other leg.





#### Inner range quads

- Sit with both legs straight out in front of you.
- Place a rolled up towel, blanket or pillow under your knee.
- Straighten your knee.
- Hold for up to 5 seconds.

Repeat the above with your other leg.





## Hip abduction with resistance

- Sit with both legs out in front of you.
- Place a pillow or rolled up towel between your knees.
- Squeeze your legs together.
- Hold for up to 5 seconds.

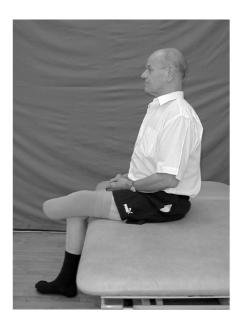
Note: This exercise can also be performed when sitting in a wheelchair or at the edge of a bed.



### Outer range quadriceps

- Sit on a chair or edge of the bed. Place your hands on your lap.
- Straighten one knee.
- Hold for up to 5 seconds.
- Now bend your knee.

Repeat the above with the other leg.



### **Static gluteal contractions**

- Lie on your back.
- Keep both legs straight and close together.
- Squeeze your buttocks as tightly as possible.
- Hold for up to 5 seconds.



### **Hip flexor stretch**

- Lie on your back, preferably without a pillow.
- Bend your knee towards your chest and hold with your hands.
- Push your opposite leg down flat on to the bed.
- Hold for 30 to 60 seconds, then relax.

Repeat the above with the other leg.



### Bridging

- Lie on your back with your arms at your side.
- Place a couple of firm pillows or rolled up blankets under your thighs.
- Pull in your stomach, tighten your buttocks and lift your bottom up off the bed.
- Hold for up to 5 seconds.

To make this exercise more difficult, place your arms across your chest, as shown in the picture.





### **Hip flexion and extension**

- Lie on your side.
- Bend your bottom leg.
- Lift your top leg slightly.
- Bend your top knee fully towards your chest.
- Straighten your knee and push your leg backwards.

Note: Try not to let your hips roll forwards or backwards. Repeat the above with the other leg.





### **Hip abduction**

- Lie on your side.
- Bend your bottom leg.
- Keep your hips and top leg in line with your body.
- Slowly lift your top leg up, keeping your knee straight.
- Slowly lower.

Note: Try not to let your hips roll forwards or backwards. Repeat the above with your other leg.





### **Knee flexion**

- Lie on your stomach.
- Place your arms in a comfortable position.
- Keeping your thigh on the bed, bend your knee as far as possible.
- Straighten your knee.

Repeat the above with your other leg.



## **Your notes**

## **Your notes**

## **Your notes**

## **Further information**

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: Oxford Prosthetic Service November 2024 Review: November 2027 Oxford University Hospitals NHS Foundation Trust www.ouh.nhs.uk/information



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