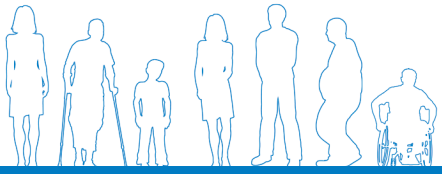
Royal National Orthopaedic Hospital NHS
NHS Trust



A Patient's guide to

Distal Femoral Replacement

This leaflet is designed to give you some information about your hospital stay and rehabilitation following a distal femoral replacement. It also aims to supplement the discussion you have with your health professionals. A distal femoral replacement is usually performed to remove a tumour, but can also be undertaken for general orthopaedic conditions. If you have any questions, please contact a member of the team.

Introduction to the team

Doctors:

Senior House Officer: This is the doctor you will see most often. They will come and see you once you have arrived in hospital, discuss the operation with you and answer any questions. They will ask you to sign a form giving your consent to the operation. After your operation, the doctor will monitor your progress and any medical problems.

Registrar: Senior to the House Officer

Consultant: This is the doctor under whose name you are admitted. The consultant is the most senior of the medical team and will oversee your care.

Nursing staff

Nurses are on the ward 24 hours a day and will be the team members with whom you have most contact. Their role is to provide you with both physical and emotional support in order for you to maintain maximum independence.

Clinical nurse specialists

A Macmillan nurse or specialist nurse may be supporting you if you have a diagnosis of cancer. They will act as your key worker and will support you from the time of your diagnosis to during and after your treatment.

Occupational therapist

The occupational therapist may see you after your operation to optimise your independence in everyday activities, such as bathing and getting in/out of a car. This may involve suggesting ways of doing things or using aids/equipment, and is aimed to ensure your safety and independence in preparation for going home.

Physiotherapist

The physiotherapist will see you regularly after your operation. They will teach you exercises to gain strength and control in your limb. They will refer you for further physiotherapy at your local hospital once you go home.

What is a distal femoral replacement?

A distal femoral replacement involves removing the lower part of the femur (thigh bone) where the tumour is, along with the knee joint, and replacing it with an implanted metal bone and knee. This operation will give appropriate safe clearance of the tumour from both the bone and the surrounding soft tissues. Your patella, or knee cap, will in most circumstances be preserved as this is separate from the joint.

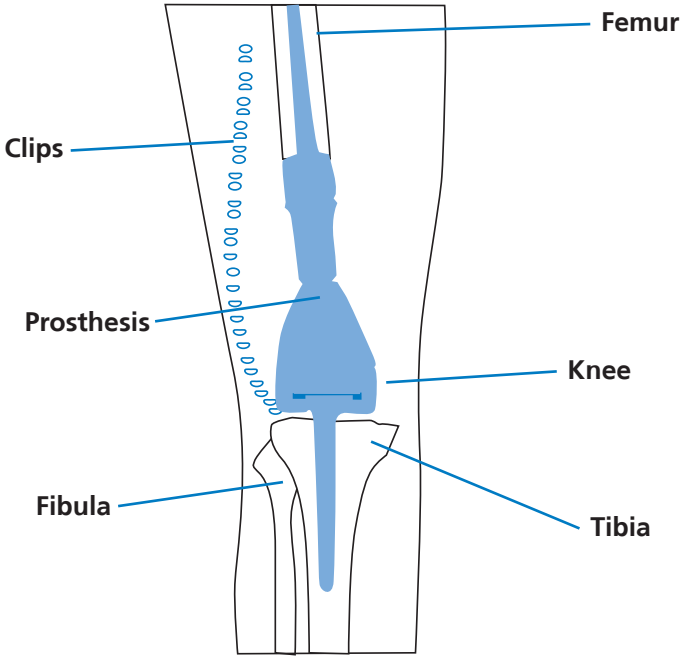
The implant, or prosthesis as it is called, is fixed into the centre of the remaining part of the femur above and into the centre of the tibia, below the knee, by a tapered metal or plastic spike, which is an integral part of the prosthesis.

The main metal used in the prosthesis is titanium alloy and is known for its strength. It may set off the alarms in security checks at the airport but an explanation of having had an operation is all that appears to be required. Your doctor can provide a letter if required.

The affected leg may feel warmer to the touch than the leg on the other side because the metal conducts your body heat. This is perfectly normal, providing there are no obvious signs of redness or inflammation.

The knee provides excellent function, potentially bending to 120 degrees. It straightens fully and also has a slight rotating function to mimic normal knee movement. You can achieve this if you practise all the exercises recommended by your physiotherapist.

Young people who are still growing will have a prosthesis that incorporates a telescopic shaft, which can be extended as they grow. The majority will also have a small electromagnetic gearbox inside the prosthesis, which enables them to be lengthened in the Outpatients' Department. This will mean no more MRI scans as this can damage the growing prosthesis.



What are the risks of the operation?

There are risks associated with any surgery and these are listed below. The doctor will discuss the specific risks involved with your operation:

- Pain relating to the operation – this will be monitored and treated with pain killers
- Bleeding around the operation site – this can be managed by applying a pressure bandage
- Blood clot – this can be prevented by exercising and wearing special socks
- Nerve damage – this may recover or require an ankle brace
- Delayed healing or infection – this will be treated by antibiotics, or occasionally a small operation to wash out the area

What will happen when I come into hospital?

You will usually come into hospital the day before your operation. This is so that you can meet the doctor, anaesthetist and nursing team. We ask that you bring your medication with you and any other information that is relevant. The doctor will give you information about the operation and ask you to sign a consent form. Feel free to ask any questions and make sure that you are fully informed. The anaesthetist will ensure that you are well enough to receive an anaesthetic, and will talk to you about pain relief after the operation. Some people like to have a sedative tablet shortly before the operation to make them feel drowsy. This is entirely your choice.

What will happen on the day of my operation?

You will be asked to stop eating from midnight on the day of the operation. You can, however, drink water or clear fluids up to two hours before the operation. If your operation is scheduled for the afternoon, you will be offered a light early breakfast. You will be given an approximate time of the operation, though this can vary.

When ready, porters will take you to the operating theatre in your bed. You will meet the anaesthetist again, who will give you the anaesthetic through an injection into your hand. When you wake up, you will be in the recovery room, where you will be monitored until you are well enough to return to the ward. You may spend the first night on the high dependency unit and return to your ward the next day.

When you wake up, you will have an oxygen mask over your mouth and nose, and this will remain until you no longer require it. You will either have an epidural or a morphine pump (Patient Controlled Analgesia (PCA)), administering your pain relief. This will be monitored closely by the nurses to ensure it is effectively controlling your pain. If you have an epidural, your lower limbs may feel heavy and sometimes numb. This wears off once the epidural is discontinued. You may also experience drowsiness and nausea, particularly if receiving morphine, and may find it difficult to pass urine; if this is the case you will be given a urinary catheter (a small drainage tube inserted into the bladder).

It is usual to have a tube draining excess fluid from the operation site. This will remain for one to two days, or longer if necessary. You will also have a drip delivering fluid into your bloodstream. This will remain until you are drinking adequate amounts.

Precautions will be taken to prevent the development of a blood clot in your legs. This means that you will be asked to wear special socks and foot pumps, and may receive daily injections. The foot pumps and injections will only be given while in hospital, but the socks should be worn at all times for six weeks. You will be given an extra pair of socks so that you have a spare pair to wash.

What will happen after my operation?

Nursing:

- Some of the above-mentioned attachments will be taken away
- When your epidural or PCA is discontinued, you will be given painkilling tablets or medicine
- You will have bandaging on your leg, and this will remain for one to two days before being reduced to a smaller dressing
- The wound drain will be removed approximately two days after the operation
- You will have staples to close the wound and these will be removed after approximately two weeks; your ward nurses will arrange for this to be done locally via your GP surgery

- You will be able to shower a few days after your operation with assistance from the nursing staff
- You will be encouraged to move your legs and feet to help reduce the risk of a blood clot

Physiotherapy:

- The physiotherapist will see you on the first day after your operation and will start gentle exercises with you
- The exercises will help you to start bending your knee and using your muscles again
- It is important that you practise your exercises regularly as advised by your physiotherapist to ensure good mobility and strength in your knee
- You should continue doing these exercises after your discharge

Most patients will start to get out of bed on the first or second day after the operation. You will usually use elbow crutches or a frame to help you walk.

You will be allowed to put your full weight through your operated leg (unless you are told otherwise by the team). During the next couple of days you will gradually increase your mobility until you are able to be independent. Before your discharge, your physiotherapist will practise climbing the stairs with you should you need to do this at home. It is advisable for you to have a pair of sturdy slippers or shoes for safety, and loose comfortable clothes.

Occupational therapy

You will not routinely be seen by an occupational therapist. If you have any related concerns, please speak to one of the nurses to refer you to an occupational therapist. The occupational therapist can provide advice about managing daily living activities such as personal care and domestic tasks. Where appropriate, they can advise you on the use of adaptive equipment. If you require additional help, the nursing staff will refer you to social services.

What do I need to achieve before I can be discharged home?

Before you go home, there are certain milestones we would like you to achieve. There are obviously times where these may be different depending on individual circumstances. The usual length of stay in hospital is approximately five to seven days.

You should be:

- Bending your knee to 90°, for example, able to sit in a chair with your foot placed on the floor under your knee
- Walking safely with crutches (or whatever walking aid you and your physiotherapist have decided is best for you); you will probably need to use these for six to 12 weeks depending on the speed of your recovery
- Able to climb stairs (if needed for your home or social circumstances)
- Independent with an exercise programme at home
- Comfortable with your medication
- Able to manage personal care tasks independently, including bathing/showering
- Able to manage school/domestic tasks as appropriate

How can I help myself?

There are lots of things you can do to aid your recovery:

- Eat and drink well
- Carry out exercises regularly
- Ask for pain killers if needed
- Stop smoking or try to reduce the number of cigarettes you smoke
- Think about your home environment and make arrangements so that it will be ready for you when you leave hospital
- Make arrangements for someone to collect you from hospital and take you home

How will I be followed up after my discharge?

Clinic review

Before you go home, the doctors will tell you when they wish to review you in clinic. The most common time is approximately six weeks after the operation although this can be different for individual patients. If it is possible to make you a clinic appointment before you go home, the nurses will inform you of the date, time and venue (it may be either at Stanmore or Bolsover Street, so please check the location). If this is not possible, an appointment will be sent to you at home. Make sure you check which way you are going to receive your appointment before you go home as it is essential you are monitored after your discharge.

The nurses will also arrange for any necessary nursing appointments (for example staple removal) to be done either by your district nurse or the nurse at your GP's surgery. If you are starting chemotherapy, you will need to liaise with your clinical nurse specialist.

The physiotherapist will refer you to your local Physiotherapy Department (or the RNOH if that is more convenient for you) for ongoing physiotherapy. In most cases, your local physiotherapist will contact you at home to give you an appointment. If you require chemotherapy immediately after your discharge, we will also refer you to the physiotherapist at your chemotherapy hospital.

If you require further treatment for your cancer, this will be coordinated by your clinical nurse specialist. She will keep you informed and liaise between the different treatment centres.

Following your initial check-up, you will continue to be reviewed by your doctor for many years. This is to check your leg for tumour recurrence and check the prosthesis for loosening and infection. You will undergo X-rays of your leg as well as a physical examination. As always, should you have any concerns in-between these appointments, please contact your clinical nurse specialist.

Please note that you need to take care if you have any acute infections such as dental infections or tonsillitis in the future – you will need antibiotic cover to protect your prosthesis.

What can I expect to be doing after discharge?

Each patient is treated as an individual. The surgery differs with each patient and therefore a definite outcome cannot be predicted. However, these are some average goals to expect:

Mobility and function:

- Be walking with no stick or crutch (this may take up to a year)
- Be bending your knee more than 90°, although you will not achieve a full knee bend; you could potentially bend to a maximum of 120°
- Have good muscle strength in your leg (it may not quite equal your opposite leg)
- Be able to climb stairs normally (when you have gained adequate strength and movement)

Returning to activity:

- Independent in your day-to-day activities
- Able to return to work, school, college etc (except in some very exceptional jobs); when you are able to do this will depend on your recovery and you may want to discuss this with the team
- Able to start taking part in sports and hobbies except high impact/contact sports/ones that involve excessive twisting or impact, for example trampolining. This is to protect your prosthesis. Most sports cannot be considered until six months after your operation and it is advisable to discuss your specific requirements with your consultant

- Able to return to driving within a few months, once you have achieved adequate range of movement and strength, for example, carry out an emergency stop with confidence. Your insurance company may need to be informed; please check with them before driving again

Information and support

Macmillan Cancer Support
www.macmillan.org.uk
Macmillan Cancerline: 0808 808 00 00
Textphone: 0808 808 0121

Teen info on cancer (tic)
www.click4tic.org.uk

The London Sarcoma Service
www.londonsarcoma.org

If you have any comments about this leaflet or would like it translated into another language/large print, please contact the Clinical Governance Department on 020 8909 5439/5717.

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