



Total Knee Replacement Surgery

Contents

Section one:	Before your operation	page 3
Section two:	Coming into hospital	page 5
Section three:	After your operation	page 6
Section four:	Going home from hospital	page 10
Section five:	Looking after your new knee	page 11
Section six:	Other important information	page 14

Introduction

We want you and your family/carer to understand as much as possible about the operation. By learning what to expect, you and your family will be better prepared for your hospital stay and recovery. This booklet should help you.

However, if after reading this booklet, you have any questions, please speak to a member of the nursing staff who will be pleased to help you.

Please do ask any questions at your next clinic appointment or contact the Helpline on **0114 226 6229**.

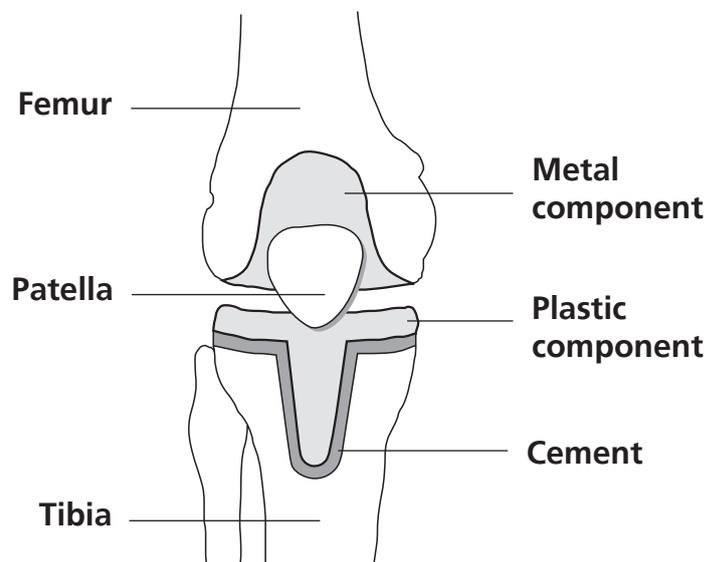
There is space at the back of the booklet in case you want to write your questions down.

What is a total knee replacement (or knee arthroplasty)?

The knee joint is a hinge joint.

The joint is made up by the ends of the thigh bone (Femur) and shin bone (Tibia) and the back of the knee cap (Patella). A total knee replacement is an operation to replace the worn knee joint.

During the operation, the worn surfaces of your knee joint are removed and replaced with smooth artificial surfaces.



What are the benefits of a total knee replacement operation?

A total knee replacement operation is usually carried out for severe arthritic conditions and has proved to be a very successful procedure. More than 90% of knee replacements last for more than 10 years.

The benefits are:

- 95% of patients have relief from pain
- Increased range of movement of the knee
- Increased activity and independence

What are the risks of a total knee replacement operation?

A total knee replacement is a major operation, as with any operation there are some risks. These include:

- Blood clots in the legs (Deep vein thrombosis) and in the lungs (Pulmonary embolus)
- Urinary infections
- Difficulty passing urine
- Chest infection
- Death

Complications **after** a total knee replacement include:

- Infection of the new knee
- Stiffness of the new knee joint
- Wound healing problems
- Skin blisters
- Poor pain relief
- Bleeding

Further information about the risks individual to you, will be given when you see your surgeon and discuss consent for the operation.

The team involved in your care takes every opportunity before the operation to ensure that you are as fit as possible. If we feel that you would benefit from some other medical treatment before your operation, then we will discuss this with you.

Are there any alternatives?

Before considering knee replacement surgery, your doctor may have suggested trying other measures to help relieve your symptoms. These include:

- Weight loss.
If you are overweight, losing weight will normally help to reduce pain from an arthritic joint.
- Drug treatments, such as simple or strong painkillers.
- A health supplement called Glucosamine, a tablet which is not a drug but evidence has suggested it does work.
- Physiotherapy and exercises
- Appliances to help you to walk more easily, such as a walking stick

Should I have a total knee replacement?

Although your doctor may have suggested an operation, the final decision is yours and must be made after you have weighed the benefits of the operation against the risks. You may wish to discuss the operation with your GP or family/carer. All your questions should be answered before you decide to have the operation and you should ask any questions you have in order to make your decision easier.

If you have decided to have the operation and have any severe health problems an anaesthetist may be asked to review your suitability for anaesthetic before you have the operation.

If you wish to discuss your concerns with a member of staff after you have seen the surgeon, please telephone the:

Pre-operative Admission Clinic on: **0114 226 6235** or

Arthroplasty Nurse Specialist on: **0114 226 6229**.

Orthopaedic infection control policy

At the pre-operative assessment clinic you will have swabs taken to look for MRSA.

Methicillin Resistant Staphylococcus Aureus (MRSA) is a germ that can often be found on the skin or in the nose. If you have MRSA after your operation it can cause problems with wound healing.

If we find that you have MRSA we will ask your GP to treat you with antibacterial wash and ointment before your admission. Further swabs will be taken by your GP after you have had this treatment. It is important that if needed this is done before you have surgery. The swabs may also be repeated when you come into hospital and during your hospital stay.

If you want further information please ask at pre-operative assessment clinic.

Before your operation

Before you have your operation, there are a number of things you can do to improve the success of your knee replacement. These are discussed below.

This section also explains what happens at your pre-operative assessment appointment.

What should I do while waiting for my operation?

You should start to prepare for your operation as soon as your name is placed on the waiting list. It is important for you to try and keep as healthy and active as possible whilst you are waiting for your operation.

Things to think about are:

- **Diet/weight control**

The success of your operation may be affected by your weight and if you are worried about this, you should contact your GP/Practice Nurse.

- **Smoking**

It is advisable for you to stop smoking in order to reduce your risk of developing chest or breathing problems following your operation.

- **Exercise**

You should try to keep as mobile as possible and continue with your normal everyday activities to help your recovery.

- **Good dental hygiene**

Your teeth need to be in good condition, as infected teeth or gums may be a possible source of infection for your new knee. It is important that any dental decay is treated before your knee replacement. If you are worried about your teeth, you should visit your dentist.

What will happen at my pre-operative assessment appointment?

You will have been given a date for your pre-operative assessment appointment when you were put on the waiting list at your outpatient visit.

The purpose of this clinic attendance is to make sure that your Orthopaedic symptoms have not changed, and to assess your general health. At this appointment we can note and treat any problems, if necessary.

At this clinic, the Pre-Operative Assessment Nurse will discuss your stay in hospital and organise all the tests and care that you need to have in preparation for your operation.

The range of tests may include the following:

- Blood
- Urine
- MRSA
- Heart - by ECG (heart tracings)
- X-rays

You may need to come for a number of visits before you actually come into hospital for your operation. This will help us ensure that you are fit for surgery and all your tests are complete.

We will also discuss with you the plan for your admission to and discharge from hospital.

You will also need to see an Occupational Therapist (OT) at your appointment. They will ask you about your home and social circumstances in order to plan your discharge from hospital. Any aids or adaptations that you may need to help your recovery can be provided by Social Services. The OT will assess your needs and discuss this with you at the pre-operative assessment clinic.

When you go home after your surgery you will need someone to help you. If you do not have anybody, a home care assessor can discuss your needs with you. Not having any help arranged before your admission may delay your surgery. After your operation any arrangements made will be discussed with you to make sure they still meet your needs.

It is helpful if you think of how you are going to manage at home after your operation before you come to your pre-operative assessment clinic appointment.

Further details about your visit to the pre-operative assessment clinic will be sent to you with your appointment letter.

Before you come in for surgery you will be seen by a consultant or a senior member of his/her team who will examine you. You will also be given the opportunity to ask any questions you may have before you sign your consent form.

What should I do if my medical condition changes after my pre-operative assessment clinic?

If you have had any changes to your health after visiting the pre-operative assessment clinic please contact us as it is important that we know.

Pre-operative admission clinic: **0114 226 6235**

When will I know the date of my admission?

When your fitness has been confirmed you will receive written notification of a surgery date.

Though we try to keep this date, occasionally planned operations have to be cancelled due to increased numbers of emergency patients or Consultant staff needing to operate on urgent cases. Unfortunately, on these occasions, operations may need to be cancelled at short notice.

Coming into hospital

What will happen on the day of my admission?

Patients admitted on the day of their surgery will need to come to a clinic appointment the day before. The nurse will explain this to you and give you written information when you come to the pre-operative assessment visit.

The day you come in you will see various members of the Orthopaedic Team. They will go through the plans for your surgery and confirm with you the surgery you are having. They will also be able to answer any further questions you may have.

What will happen on the day of my operation?

On the day of your operation, you will not be allowed to have anything to eat for six hours before your operation and only allowed to drink clear fluids until two hours before your operation.

The ward staff will help you to take a bath or shower and put on a surgical gown. You will also have to remove all makeup, nail polish or jewellery except wedding rings (it is advisable to get someone to take valuables home). Spectacles and dentures can be removed in the Anaesthetic room if you wish.

(For more information about the reasons for this, please ask to see the leaflet entitled '**You and your anaesthetic**').

You will have your blood pressure, pulse and temperature checked and the nurse will ask you some questions. We may have already asked you some of these questions but we usually repeat them to check they are still correct. The doctor will also see you and mark the site of the operation on your skin with a pen.

A nurse will then check that you are ready and take you to the operating theatre.

Will I have an anaesthetic?

Yes. You may have either a general or a spinal anaesthetic. The Anaesthetist who will care for you throughout the operation will discuss both options with you.

How long will the operation be?

The operation usually takes between 1 - 2 hours, but the time away from the ward will be longer as you will spend time in the theatre recovery room.

After your operation

What will happen immediately after my operation?

After your operation, you will be taken to the recovery room we will monitor your condition. We will check your blood pressure, pulse, breathing rate and temperature and pay close attention to your wound and the circulation and sensation in your legs and feet.

When the recovery room staff are happy that your condition is stable we will take you back to your ward. As was explained to at your pre-operative assessment visit, if you need closer observation you may go the post operative surgical unit overnight.

The nursing staff on the ward will continue to monitor your condition and your blood pressure, pulse, breathing rate, temperature and legs will be checked regularly.

You may find you have been prescribed oxygen, which is given through a mask or tubes resting just inside your nose.

A drip will have been put into a vein in your arm to replace lost fluids until you are eating and drinking. If necessary, we also use this to give blood transfusions. You may also have tubes draining excess blood from your operation site into bottles. This helps lessen the amount of blood that may collect inside your knee. These will be removed the day after your operation. Sometimes the excess blood drained into the bottles can be given back to you through a special filter.

How will I feel?

You will have some pain but we will give pain relief to help with this. This medication and/or anaesthetic may make you feel sick. If needed, medication can be given to relieve this.

You will have a large dressing on your leg to protect the wound. On the first day after your operation we will cut this dressing and then cover it with another dressing. The whole dressing will then be totally changed on day two, then we will change them again before you leave hospital unless the wound is leaking. We will also give you a short course of antibiotics to cover the period immediately after surgery.

After your operation you are at risk of developing blood clots in your legs/lungs. To help prevent this happening we may give you a small injection into your abdomen each evening until you go home. This thins your blood and stops clots forming.

Because of your position in bed you may need help using a bedpan or changing position and the nursing staff will help you with this. They will also encourage you to breathe deeply, cough and do leg exercises to help your recovery.

When can I eat and drink again?

You may be allowed to have a drink about one hour after you return to the ward and then about two hours you will be allowed to have food if your condition allows.

Some people find that they have a poor appetite after surgery. If you need advice, speak to the ward staff who will be able to help you and who will, if necessary, refer you to a dietitian for further advice. The dietitian may be able to help you choose which foods are best for you to eat and drink to help you get better.

Will my relatives be able to visit on the day of my operation?

Yes. Visiting times are displayed on the ward entrance.
For more information see the visitors leaflet.

If you are having therapy your visitors may be asked to wait until you have finished your treatment.

What will happen during the rest of my stay?

After your operation, the Orthopaedic team will assess you and help you to regain your independence as quickly as possible. They will also make sure that you are able to manage at home once you leave hospital.

Please bring your day clothes into hospital with you.

You will be expected to get dressed after your surgery.

For the first six weeks after your operation you will need to use either crutches or a frame. The physiotherapist will see you and show you how to use them.

You may have some swelling and bruising after your operation, but this can be helped by keeping your leg elevated in between exercising. The physiotherapist may also use ice packs or cold therapy (Cryocuff).

If you plan to continue to use ice after you leave hospital we would advise you to have spoken to a member of staff before you leave, as ice can cause burns if used incorrectly.

Before you go home we will take an x-ray of your new knee joint.

Rehabilitation and Physiotherapy

Will I need physiotherapy?

Exercise is a vital and important part of your rehabilitation as it helps to ensure that you regain a good range of movement and strength in your knee. Your Physiotherapist will help you with this and give you specific exercises to do. How successful the therapy is, ultimately up to you as only you can get your knee working again.

The majority of patients will need to continue with physiotherapy as an outpatient after they leave hospital. We will discuss this with you before you go home.

When can I start physiotherapy?

You can usually start exercising your knee on the first day after your operation. However, it is important to make sure that you have taken painkillers before you start, as the exercises can be uncomfortable.

As well as regular exercise, some patients may need to use a Continuous Passive Motion machine (CPM), to help them bend their leg. If you find that bending your knee is a problem, you may need to have hydrotherapy.

Exercises

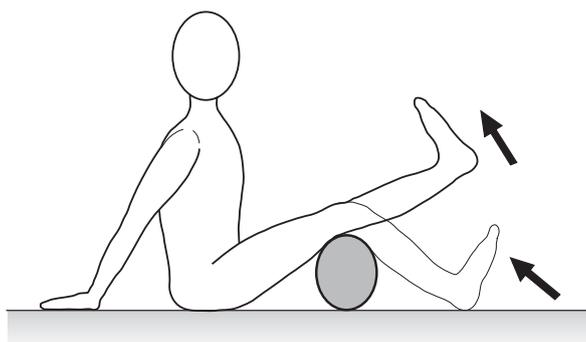
Below are some exercises, which you can begin before you come into hospital. This will help to prepare you for your operation, and to ensure that your knee is strong and as mobile as possible. These exercises are also used after your operation.

Only do these exercises within your own limits

The following exercises should be done three times a day.

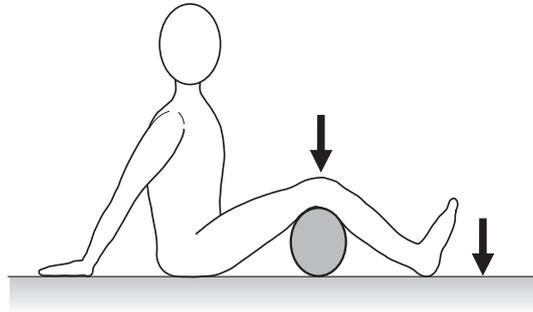
Sit on the bed

1. Keeping the legs straight, pull your toes up towards you and push the back of your knee into the bed. This tightens the muscles (Quadriceps) on the front of the thigh.
Hold for up to 10 seconds and then relax.
2. Put a small rolled up cushion or towel under your knee. Pull your foot up at the ankle and push your knee back into the cushion, lifting the heel up from the bed.
Hold for up to 10 seconds and then relax.



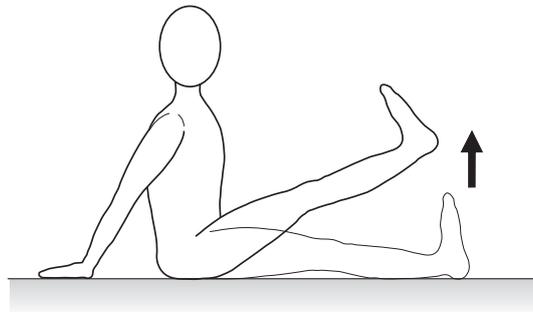
3. Keep the rolled up towel under your knee. Push the heel down into the bed, at the same time push the back of the knee onto the roll. Tighten the muscles on the front and back of the thigh.

Hold for up to 10 seconds and then relax.

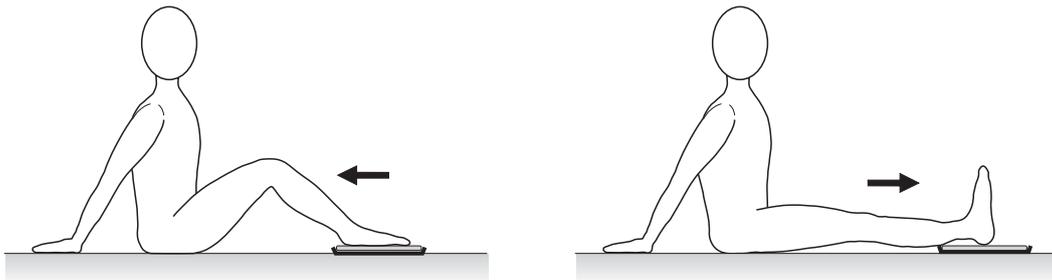


Please remember to **always remove the towel** after finishing your exercises.

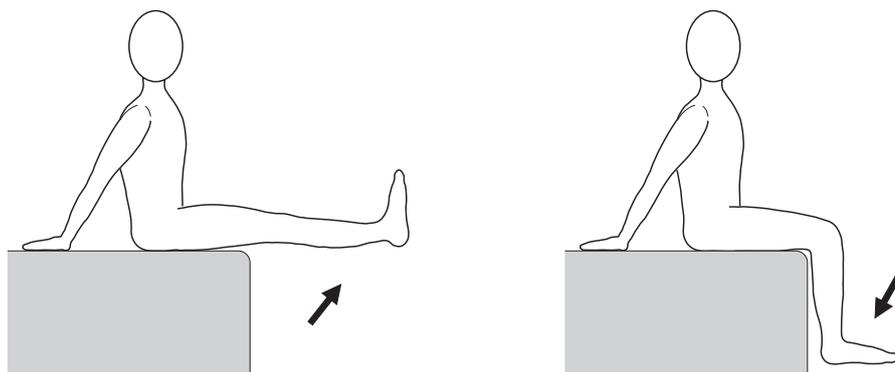
4. Follow the instructions for exercise 1 then lift the straight leg up from the bed. **Hold for 3 seconds** and then lower the leg down keeping the knee straight throughout the whole exercise.



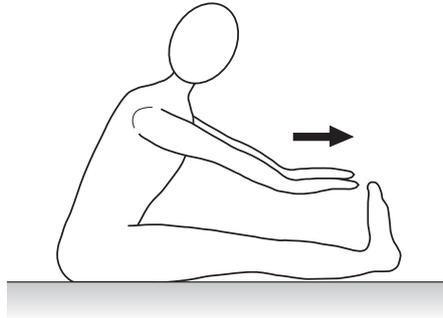
5. Place a tray and soft cloth under your heel. Slide the foot towards you, bending the knee within comfortable limits. Then slide the foot away, straightening the knee as much as possible.



6. Making sure that your feet are not touching the floor, sit over the edge of the bed or on a chair. Swing your foot gently up and down, straightening and bending your knee.



7. If your knee will not fully straighten, you may need to do the following stretching exercises to stretch out the hamstring muscles at the back of the thigh and knee:
- Keeping your legs as straight as you can, pull your feet towards you.
 - Lean forwards, stretch your arms forwards and slide your hands down your legs towards your feet. You should feel a stretch behind the back of your knee.



How long will I be in hospital?

You will be able to go home when the Orthopaedic Team feels that you can manage safely at home. This is usually after about four to six days but this can vary depending on your individual needs.

Going home from hospital

What will happen on the day I go home?

Once we are happy that you are well enough to go home we will arrange for your discharge from hospital. Generally, we try to make sure that you can go home before 10.30am. This is partly so that we are able to offer a bed to new patients coming in. However, please do not worry if you cannot get transport until the afternoon, as you will be able to wait in either our discharge lounge or the day room until you are picked up.

We will also give you the following to take home with you:

- Any information you will need
- A 14 day supply of your tablets and painkillers if you need them. Before the tablets we give you run out you should ask your General Practitioner (GP) for some more if you need them.
- An appointment for outpatient clinic so that the medical staff can assess your progress. Your appointment will usually be about six weeks after you go home.
- Other follow-up appointments with the Arthroplasty Nurse Specialists.
- A letter to take to your GP to tell him or her of any tablets you have been given to take home.
- A contact telephone number for the ward and the Arthroplasty Nurse Specialist so that if you have any worries or problems at all you will be able to talk to a member of staff.
- A small information card (about your joint). It is important that you take this to your GP or dentist if you have any other treatment, as you may need antibiotics because you have a new knee joint.

What do I do about any stitches?

If you have had stitches that need to be removed, we will arrange for either the District Nurse or the Practice Nurse to do this. The ward nurse will give you a letter for the district/ Practice Nurse and any dressing/s you need.

What will I need to do when I get home?

When you get home, you should take it easy for the first few days. Aim to rest on your bed for a couple of hours each afternoon. You may find yourself trying to do far more than you did on the wards and you should not be surprised if you find that you feel very tired. After a knee replacement operation the muscles and tissues around the joint do take some time to heal and during this time, you should follow the advice you have been given by the Orthopaedic Team during your stay in hospital.

Some swelling of the leg is normal, but if the swelling increases, or you have a pain in your calf, you should contact your GP, telephone the ward or contact the Arthroplasty Nurse Specialist on:

0114 226 6229

Protecting your new knee

General principles:

- Work hard at your exercises, as this will prevent stiffness, but do not force the knee. This means do not do any activity that makes it feel uncomfortable.
- Take small steps when you turn
- Avoid twisting your knee.
- Do not kneel down on the replacement knee until you have checked with your Consultant at your follow-up appointment.

How will I manage after my operation?

You will find some activities more difficult to do for a while after your operation. However, this will improve and there are a number of things that you can do to help this.

Sitting

Use a high chair with arms. You may also use an extra cushion temporarily. Hold the arms of the chair and ease yourself up and down gently to stand up or sit down.

Sleeping

It is important that your bed should be an adequate height. Your Occupational Therapist will tell you what this is and we will show you how to get on and off the bed correctly.

Please sleep in any position you feel comfortable in. **Do not** use a pillow to support under your knees.

Dressing

- Always get dressed whilst sitting down.
- Pull items on over your head rather than bending to put them on over your legs.

- Always wear slippers or shoes when you stand to adjust your clothing, this helps to stop you slipping.

Bathing

You can shower or wash by using a bath or shower board. Your Occupational Therapist will tell you about these and where to get them. However, in the three months after your operation you should not try to sit on the floor of the bath.

Your Occupational Therapist will also show you how to get in and out of the bath correctly.

Using the toilet

Your Occupational Therapist will decide if you need any equipment to help you get on and off the toilet safely.

In the kitchen

- Moving the kettle or a hot pan will be difficult when using two crutches. Your Occupational Therapist will show you how to move objects around the kitchen by sliding them along work surfaces. Before you go home we will check to see if you need any equipment to help you in the kitchen.
- Always use the work surface to move pots and pans
- Do not move around the kitchen by using only one crutch.
- Do not carry items when using your crutches.
- Have a high stool or chair in the kitchen positioned so that you can rest as much as possible whilst working in the kitchen.

Driving

If you are the driver **do not** drive until you have been seen by the surgeon or Arthroplasty Nurse Specialist at your follow-up appointment at the Orthopaedic clinic. You **must**:

- Tell your insurance company about your surgery, as your new knee is a permanent change in your health status, although the change should not affect your premiums.

Getting in and out of the car

Before you go home after your surgery the Occupational Therapist will help you to practice getting in and out of the car.

Check with your Occupational Therapist that you understand these instructions correctly before you try to use them.

If you are going to be a passenger in a car, make sure that you know how to get in and out of it safely by following these instructions:

Step 1 Move the passenger and driver's seats back and recline them slightly.

Step 2 Make sure that the car is parked away from the kerb and is on the level. You need enough room to stand on the road between the car and the kerb. This gives you the height from the ground that you need to sit in the car without risking damage to your knee. (You can make the seat higher and more level by using an extra cushion).

- Step 3** Using your walking aid, position yourself facing away from the car with the back of your legs against the door's sill. Give your walking aid to your driver.
- Step 4** Reach for the back of the seat with your left hand and the cushion of the seat with your right hand.
- Step 5** Put your operated leg out in front of you, and lower yourself onto the edge of the seat. It will help if you lean back slightly.
- Step 6** Using the leg that hasn't been operated on and your hands; push yourself backwards towards the driver's seat.
- Step 7** Carefully move your legs around into the car. It will help if you bend your operated leg as much as you can.
- Step 8** Make sure you are in a comfortable position before the driver starts the car.

To get out of the car, do these steps in reverse.

Sexual activity

You can resume sexual activity when you feel comfortable enough to do so. However, when you do resume your sexual activity, avoid positions that put weight or pressure on your operated leg. If you want more information about this, please speak to the Arthroplasty Nurse Specialist or ask your Consultant.

Climbing stairs

Your Physiotherapist will show you how to climb up and down stairs safely, using the stair rail with one hand and both crutches in the other hand.

- **Going downstairs**

Put your crutch and your operated leg onto the step below, and then bring the other leg down to join it.

- **Going upstairs**

Place your un-operated leg onto the step above, and then bring your other leg and crutch up to join it.



Remember

Use one step at a time and use the handrail and crutch.

One way to remember which leg goes first is to think ...

Good go ↑ up ↑

Bad go ↓ down ↓

General advice

- Do not kneel until we have told you it is safe to do so
- Try to avoid rolling your leg inwards
- Avoid standing for long periods. When standing, keep your weight evenly distributed.
- Do not stand on one leg, particularly the operated one.
- Kneeling for long periods should be avoided.
- Do not sit crossed-legged.
- To avoid over-loading your knee, try to keep your weight down.
- Go for short walks for exercise and to increase your tolerance.

Please remember to return all aids, which have been loaned to you, when you no longer need them.

We wish you a safe and speedy recovery

Useful telephone numbers

Pre-operative admission clinic	0114 226 6235
Arthroplasty Nurse Specialist	0114 226 6229
Ward Huntsman 3	0114 271 4100

Should you have any concerns about your care whilst you are in hospital please discuss these with the nurse looking after you, or with the senior nurse.

If the senior nurse is unavailable, please ask the staff to contact the Matron, or Lead Nurse.

Alternatively, if you wish to discuss your concerns with one of our patient advice and liaison officer, please ask a member of nursing staff to contact them for you.

Other important information

Research studies

The Department of Orthopaedics undertakes research. No patient is entered for a clinical trial, or included in non-clinical research, without their informed consent being obtained. Your doctor will provide you with information about current research that you may be suitable to enter. You will be given full written explanation about the purpose of the research, time to consider whether you wish to be included or not and your written consent will be obtained. If you do not wish to participate in research your care will not be affected in any way.