

Patient Information Leaflet

Knee Joint Replacement



Appointments

Pre-operative assessment clinic	Date:	Time:
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Date of admission to hospital	Date:	Time:
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Operation date	Date:	Time:
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Follow-up clinic appointments	Date:	Time:
	Date:	Time:
	Date:	Time:
	Date:	Time:

Please bring this booklet with you when you come into hospital.

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Introduction

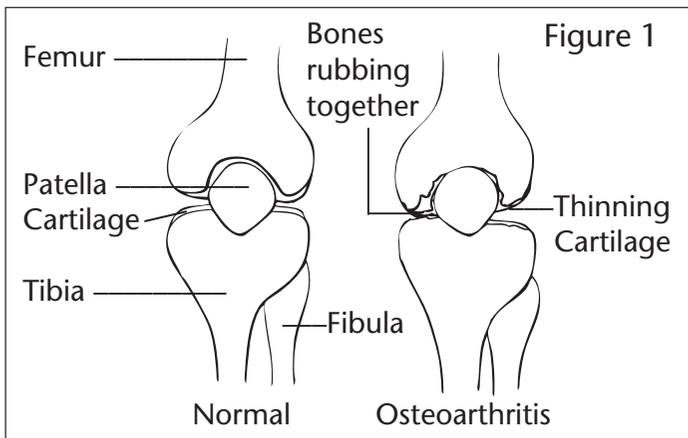
This booklet gives you and your family a basic knowledge of knee joint replacement, outlining things you should know both before and after the operation. **The aftercare may vary according to your surgeon's wishes.**

The success of your operation is a team effort including doctors, nurses, physiotherapists, occupational therapists, your family and most importantly you.

Why May I Benefit from a Knee Replacement?

There are several reasons why you may need a knee replacement. The most common is osteoarthritis; this simply means that the cartilage in your knee has worn out. This results in the bone ends losing their smooth surfaces and causing bone to grind against bone. This can cause pain and stiffness in the knee.

Rheumatoid arthritis or a previous injury to your knee can also cause your knee to become stiff and painful.



What is a Knee Replacement?

A knee replacement involves removing only the damaged surfaces of your knee (the end of your thigh bone, the femur, and the top of your shin bone, the tibia) and replacing them with metal and plastic pieces which fit together to mimic the natural movement of the knee. The kneecap may be left untouched or sometimes the under surface may be smoothed off allowing a plastic button to be fixed to the back of it. The components are usually held in place by special bone cement.

There are different types of knee joint replacement. The most suitable type for you will depend on the extent of arthritis affecting the bones.

- A uni-compartmental knee replacement is a partial knee replacement and is suitable if only one part of your knee is affected by arthritis.
- If more than one part of your knee is affected by arthritis you will need a total knee replacement which covers the whole surface of the knee (Figure 2). Your consultant will discuss which type of knee replacement is most suitable for you.

The aim of a knee replacement is to reduce the pain and stiffness in your knee and this should improve your ability to walk.

Figure 2



What Should You Do Once on the Waiting List for a Knee Replacement?

You should make sure you are as fit as possible before coming in for your operation. This will make it easier for you to recover after the operation and help you get home quickly. We will have you mobile as soon as possible after the operation to prevent complications. You will find this easier if you exercise before you come into the hospital. We suggest you stay as active as possible and start the exercises in this booklet straight away.

It is also important to eat healthily as this will help your body recover from the operation. If you drink alcohol or smoke, cutting back will help reduce the risk of any complications and help you recover more quickly.

In some hospitals you may have a health check at clinic before being listed for your operation. However if this is not the case and you have any concerns regarding your health you should discuss these with your GP. It is useful if you have your GP check your blood pressure and make sure you receive treatment for any skin problems as these may delay your operation. It will also be beneficial to attempt losing weight if you are overweight.

To prepare for going home after your operation it may be useful to discuss the following with family or friends. Things to consider are:

- Who will take you home from hospital
- Who will help out at home
- Any questions you have regarding the operation and recovery afterwards (write these down)
- Organising your home so things you need are easy to get to and anything you could trip over is cleared away

We aim to get you home as soon as you are safe to do so and have met your discharge criteria. This is to reduce the risk of post-operative complications such as hospital acquired infection.

Pre-operative Assessment Clinic

Before coming into hospital, we will ask you to attend the pre-operative assessment clinic.

At this clinic you will see a nurse and, or a doctor and you may see your consultant or their registrar. You may also see an occupational therapist if necessary.

We carry out full investigations to make sure that you are as fit as possible before your operation. This involves taking a record of your medical history and a list of your current medications. **(It is useful if you bring a list of these with you.)**

At the clinic we will:

- Measure your height and weight
- Check your blood pressure
- Take samples of your urine and blood for analysis
- Take an ECG (a tracing of your heart)

We will also take swabs of your nose, throat and groin. This is to make sure that you are clear of MRSA (methicillin resistant staphylococcus aureus) before coming into hospital.

The staff at the clinic will also discuss your operation with you. Please take this opportunity to ask any questions you may have regarding your operation and hospital stay. It may help if you write a list and bring it with you (there is space for questions at the back of this booklet).

What to Bring Into Hospital

You should bring any medication you are already taking in its original packaging.

You should expect to be in hospital for 2-4 days so bring enough comfortable daytime clothing and nightwear. You should bring sensible footwear: flat shoes or slippers that are easy to get on and off. Slippers should preferably have support around the heel. Your feet often swell up a little after the operation so make sure if you buy new slippers that they are big enough. You may find it helpful to bring in a long handled shoe horn.

Before the Operation

You will come into hospital either the day before or on the morning of your operation. We will give you advice on when to stop eating however normally you will have nothing to eat from midnight the night before your operation.

The anaesthetist may visit you before your operation, if they haven't already seen you. They will discuss the type of anaesthetic you will have. They may prescribe a pre-medication which the nursing staff will give you before you leave the ward.

Your operation will be carried out in a specialised operating theatre.

Immediately After the Operation

We will transfer you from the recovery room back to the ward in your bed. You are usually off the ward for roughly 3-6 hours. You may have a tube into a vein, "a drip", to replace lost fluids but this will be removed as soon as possible. We will encourage you to eat and drink once back on the ward. You may also have a face mask or a nasal cannula to give you oxygen. You will have a large padded dressing around your knee. The nursing staff will regularly monitor your blood pressure, pulse, temperature and oxygen levels.

We advise you to nominate 1 family member or friend to phone the ward to enquire how you are. Ask them to tell others about your progress rather than lots of different people calling the ward.

We will aim to get you up after you have recovered from the anaesthetic.

Pain Management

Some patients having a knee replacement operation have mild pain and others have more pain. Everyone is different but you should expect to have some pain. You must let the nursing staff know when you start to feel pain so that they can help you. It is harder to get the pain under control if you wait too long.

The anaesthetist and ward staff will discuss pain relief options with you and a pain management nurse may visit you after the operation.

We may inject nerve blocks or local anaesthetic into the new joint while you are in theatre. As these wear off you will tend to feel the pain increasing. It is very important that you let the nursing staff know when this happens so they can get you pain killers. Powerful pain-killing tablets (Opiates) are the most commonly used method of pain relief. Sometimes we use patient controlled analgesia (P.C.A.) however this is much less common.

Do not wait until you are **very** sore before asking for pain killers.

Pain Killing Tablets

A long acting tablet taken in the morning will release a powerful pain killer for twelve hours. The nursing staff will give you another one at bedtime to help with the pain throughout the night. You will also get regular paracetamol. Most people need more than this to control the pain however **you will not get the strong break through painkiller unless you ask for it.** It is very important to let the nurses know when you are sore so they can give you this to help you. Always think about how the pain is when you are moving and doing your exercises and not just sitting or lying still. The emphasis after the operation is to get you moving so your pain control is hugely important.

Before you go home we will take you off these pain killers and prescribe something that you can take regularly yourself.

Pain killers can cause constipation. If you are affected by this or think you are likely to be please let the nursing staff know so they can give you a gentle laxative to help.

Some patients experience nausea or vomiting after an operation. If you feel sick let the nurse know. They can give you medication to help reduce this.

Recovering From Your Operation

At first you will be lying on your back and you may find moving around the bed awkward. Try bending your good leg up and push down through the bed with your foot and arms to lift your bottom off the bed. This helps prevent any sores developing. You should also keep your feet moving to help your circulation. People are often scared to move after their operation but there is no harm in starting the exercises shown in this book once you are able to move your legs.

The nursing staff will encourage you to be as independent as possible, whilst making sure of your safety. They will give you whatever help you need with washing and dressing etc following your operation, however they encourage you to do as much as possible on your own.

We will remove the padded bandage the day after your operation, and will usually replace it with a lighter dressing. We will check your wound dressing everyday and will only change it if necessary. If you have wound clips or stitches that need to be removed, the nursing staff will organise for a district nurse to do so when you are home.

We will encourage you to be as mobile as possible after your operation. Where possible the nursing staff or physiotherapists will aim to have you out of bed the same day as your operation. This helps you return to independence, and helps prevent complications after your operation.

One possible complication is a blood clot in the calf, known as a DVT (deep vein thrombosis). A DVT can move to the lungs, this is known as a pulmonary embolism (PE). We will give you medication and or other mechanical means such as stockings to help prevent blood clots. **However moving and walking as soon as possible after the operation is one of the best ways of preventing this.**

We will take an x-ray of your knee before you go home.

Some patients require a blood transfusion or iron tablets after their operation. We will discuss this with you if necessary.

Physiotherapy

The physiotherapist will visit you either the afternoon of your operation or the next morning. They will teach you exercises to increase the circulation in your legs and increase the movement and strength of your new knee. These are important because the muscles around your knee are often weak and tight. This is because the pain and stiffness of the arthritic knee stopped you from moving it normally. **It will help you if you start these exercises straight away unless we tell you otherwise.**

We aim to have you up walking on the same day as your operation or the next morning. The physiotherapist may also check your breathing and offer advice to help your lungs stay clear of infection.

After your operation the physiotherapist will continue with your exercises and practice walking. You will use a walking frame to walk initially and will progress onto walking sticks or elbow crutches as soon as you are ready. You will also practice going up and down stairs before going home.

At present we aim to get people home within 2-4 days of their operation but this varies and you may get home sooner or later than this.

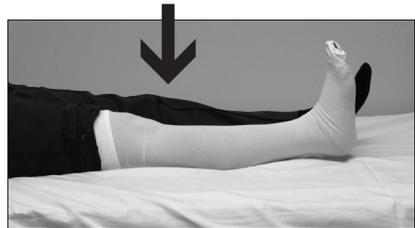
Exercises

Below are the exercises that the physiotherapist will do with you. **You should aim to do these 4 times a day while in the hospital.**

- 1. Ankle Pumps:** Pull your ankles backwards and forwards and circle them around. This increases the blood flow in your legs and decreases the chance of blood clots forming. Repeat 10 - 20 times.



- 2. Static Quads:** Point your toes to the ceiling. Press the back of your knee against the bed and tighten up the muscle in your thigh. Hold for 5 seconds then relax. Repeat 10 times.



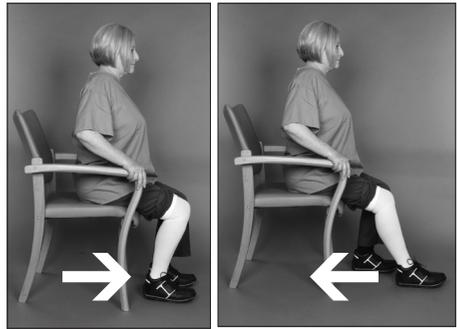
If your knee is not quite straight then do this exercise with a rolled up towel under your ankle.



- 3. Knee Flexion:** Bend your knee up and down. Do 2 sets of 10.



4. **Knee flexion while sitting:** Slide your foot backwards and forwards so that you are bending and straightening the knee. Do 2 sets of 10.



5. **Inner range Quads:** Place a roll underneath your knee. Point your toes to the ceiling, rest the back of the knee against the roll and lift your heel off the bed while straightening your knee. Hold for 3-5 seconds then relax. Repeat 10 times.



6. **Through Range Quads:** While sitting and your leg out straight pull your toes back and straighten your knee. Hold for 3-5 seconds then relax. Repeat 10 times.



7. **Stretch:** In sitting or lying. Rest your ankle on a stool or a rolled up towel. Stay in this position for 5-10 minutes to stretch the back of your knee.



8. **Hamstrings:** While standing, hold onto a steady object (e.g. the back of a chair). Bend your knee so you are bringing your heel up towards your bottom. Hold for 3-5 seconds then relax. Repeat 10 times.



Although the physiotherapist will be there to teach and guide you it is important that you do your exercises independently and have regular walks on the ward once the physiotherapist says you are safe to do so. It is ultimately your effort that will get your knee working properly again. If you find you are struggling to do the exercises or walking because of pain **please** let a member of staff know – we cannot help unless you tell us!

There are some things we look for before you are discharged from physiotherapy and these are what you should aim for:

- Your knee bends to about a right angle
- You can fully straighten your knee
- You are able to lift your leg off the bed keeping it straight

Getting In and Out of Bed

Whilst in hospital the therapy and nursing staff will show you how to get in and out of bed safely. You will practice from whatever side of the bed you get in at home.

Standing Up and Sitting Down

Standing up

To stand always make sure that you place your hands on the bed or chair. Your operated leg should be out in front of you before standing up. Push through your hands and stand up taking most of your weight through your un-operated leg (Figure 3). Do not hold or pull on an object such as a walking frame as these can easily move or tip causing you to fall backwards.

Sitting down

Always make sure you can feel what you are going to sit on at the back of your legs before sitting. Place your hands back onto the chair or bed and sit down slowly sliding your operated leg out in front of you (Figure 4 on next page).

Figure 3



Figure 4



Walking

We will aim to have you walking the day of your operation or the next morning. Initially you will walk with a frame and progress onto walking sticks or elbow crutches as soon as you are able (Figure 5).

Figure 5



To walk, move the walking aid forward. Step forward with your operated leg. Take some weight through your arms as you step forward with your un-operated leg. When turning, make sure that you take small steps. **Do not twist** on your operated leg.

Going Up and Down Stairs

If a handrail is available then always use it as well as one stick or crutch. Your physiotherapist will teach you how to carry your other stick or crutch up the stairs as you will need it when you get to the top.

Going up stairs (Figure 6)

1. Place your un-operated leg up onto the step
2. Lift you operated leg onto the same step
3. Bring the stick or crutch up onto the same step

Figure 6



Going down the stairs (Figure 7)

1. Place your stick or crutch down onto the step below
2. Step down with your operated leg
3. Bring your un-operated leg down onto the same step

Figure 7



Occupational Therapy

You may see an occupational therapist (OT) while you are in the hospital. The OT can look at activities that you do every day at home, e.g. dressing and going to the toilet. They can give you advice on how to make activities easier and if necessary may provide you with aids to help you with these activities. If you do not see an OT and feel you need advice or aids to help you at home, please let a member of staff know as soon as possible. This will allow the OT time to see you and to order equipment and arrange to have it in place in your home if you need this.

Information for When You go Home

You will normally go home 2-4 days after your operation. You should arrange for family or friends to take you home by car. Please note if hospital transport is necessary we will have discussed this at your pre-assessment appointment.

Homecare

Homecare is available if you do not have anyone to help at home but only if it is absolutely necessary. They can assist with personal hygiene, shopping and cooking but may not assist with cleaning. Please think about this in advance and discuss with the nursing staff so there is adequate time to organise.

Please note there may be a charge for this service.

Wound

For a while after you go home, your wound may appear red, warm to touch or the wound may feel itchy. You may have swelling which can affect your whole leg. You may also have a change in sensation around your wound. In most cases these are normal after your operation.

If you notice a marked change and the area around your wound becomes much redder and is very hot and swollen, or if you develop any discharge from your wound it is important that you get this checked for signs of infection **as soon as possible**. We advise that you see a member of your consultant's team. You can either contact them directly or contact the ward where you had your operation and they can direct you to the appropriate person.

Pain

It is important that you continue to take regular painkillers once you are home (The ward will have given you some home with you).

Remember painkillers can make you constipated so please drink plenty of fluids and have fibre in your diet.

Painkillers are important to control your pain to allow you to continue to do your exercises. If your painkillers are not controlling your pain then please speak to your GP.

Swelling

When you go home it is important that you have regular rest and raise your leg (higher than your hip if possible). You may also find that an icepack on your knee now and again will help. If you notice that your operated leg is swelling please rest more between your exercises. This is not unusual.

Please note if your calf is hot, swollen and painful to touch then contact your GP urgently. If you suddenly become very breathless and do not normally suffer from breathing difficulties then you should get advice from your GP urgently.

TED Stockings

If you are given these you can stop wearing them 6 weeks after your operation.

Exercises

Continue to do the exercises you were shown in hospital 2-4 times every day. Knee movement and the strength in your leg will gradually improve over time.

Walking

Try not to sit for long periods. Go for short walks regularly and keep using your walking aids as instructed by your physiotherapist. Build up your walking distance gradually

from short distances around the house to getting out and about. After 6 weeks you can gradually start to wean yourself off the walking aids. If you start to use 1 stick use it on the opposite side from your new knee.

Kneeling

Most people find it extremely difficult to kneel on their operated knee and it is probably best to avoid this. However it is acceptable to kneel for short periods if need be. We would advise you to use a cushion to kneel on.

Housework

Try to spread your housework evenly over the week. Do not stand for long periods at a time. Try to adapt activities e.g. prepare vegetables or iron sitting down.

Physiotherapy

Not everyone needs routine physiotherapy follow up. However your physiotherapist can arrange this if appropriate.

Driving

You should avoid driving for 6 weeks after your operation. This allows some healing to take place and the leg muscles to become stronger. Plan your first drive. Only return to driving when able to comfortably and safely change gear and carry out an emergency stop. Avoid any long journeys at this stage. We advise you to tell your insurance company that you have had a knee replacement.

Flying

There is no universal agreement on this however we advise you to avoid short-haul flights for 6 weeks after your operation and long haul flights for a minimum of 3 months. If you are flying

remember to do some circulatory exercises and if possible get up and move around. At 6 months after your operation the risks associated with sitting for long periods will be back to what they were before the operation.

Return to activity and work

You should avoid high Impact sports such as jogging, skiing, squash and high impact aerobics. If there is a certain sporting activity you usually do please ask for advice.

You should avoid activities such as bowling, golf and dancing for 6 weeks. After this reintroduce such activities gradually. Use how your knee feels as a guide. If something feels uncomfortable, stop and try again the following week.

Gentle exercise such as swimming can be helpful. You must however wait until your wound is completely healed and should avoid breaststroke for 6 weeks after your operation.

Returning to work depends on how physically demanding your job is. Your consultant will advise you about this.

Follow-Up

In some hospitals the orthopaedic outcomes team or arthroplasty service will carry out your routine follow up on behalf of your consultant. In other hospitals your consultant or their registrar will see you in clinic.

Your follow up appointment will be 6-12 weeks after your operation. This will depend on your Consultant's instructions. The purpose of the appointment is to monitor your progress and to offer advice, reassurance and information on any aspects of your surgery and recovery. You may have an x-ray carried out at this time and we will ask you to complete some questionnaires at your follow-up clinic to help us monitor your progress.

Visiting Times

Visiting times vary in different hospitals. Please ask for the visiting times on your ward.

Visitors do not need to stay for the full time. They can pop in and out any time during these periods. There should be no more than 2 visitors at a time.

Please note that visiting times can be very long and you may have to undergo treatment or go for x-ray during these times. We apologise for this but it is simply not possible to see everyone out with these times.

Finally

This booklet can give you some information and advice but please ask any member of the team who cares for you in hospital about anything you are unsure of.

Once you are at home if you have any questions then please speak with your GP or if out of hours contact NHS 24 on: 111.

Useful Telephone Numbers

Notes

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