

# Your Total Knee Replacement

This leaflet gives information about your total knee replacement, including the benefits, risks and any alternatives and what you can expect when you come to hospital.

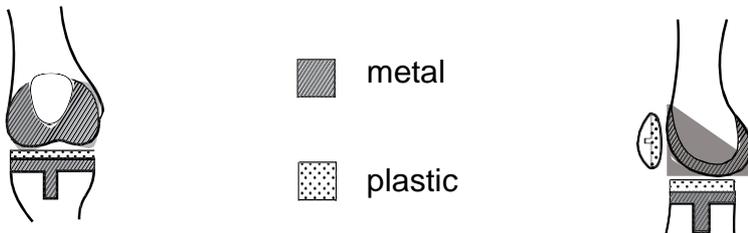
If you have any further questions, please speak to a doctor or nurse caring for you.

## What is a total knee replacement?

A total knee replacement (TKR) is an operation to replace a knee joint that has become damaged. The operation involves removing the worn knee surfaces and replacing them with an artificial joint called an implant

The implants are made of metal and a very strong plastic called polyethylene. They are fixed to the bone by cement or screws / pegs.

Several types of knee replacements are used at St George's:



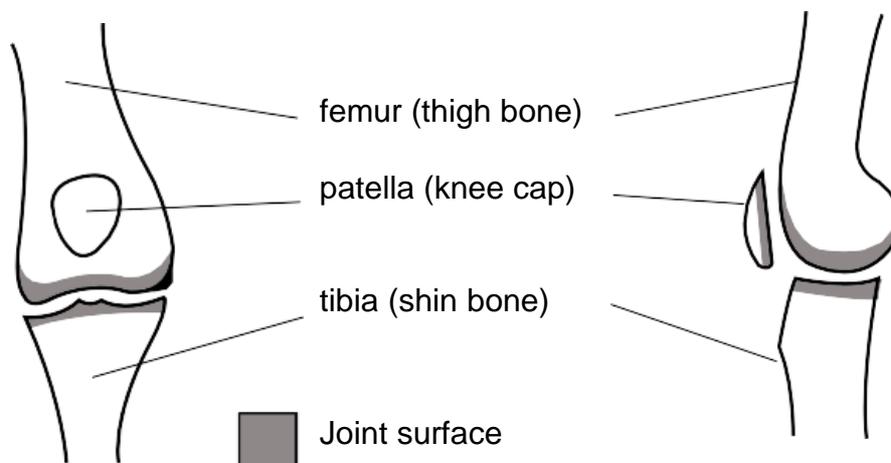
As seen from the front

As seen from the side

Revision knee surgery is where your existing implant has become damaged and is replaced with a new one.

## Why should I have a total knee replacement?

Your knee joint has become damaged. The soft tissue (cartilage) that protects the ends of the bones in your knee joint has become worn away and the bone ends have become rough. This causes pain, stiffness and difficulty moving.



As seen from the front

As seen from the side

When the bone surfaces that make up the knee joint become worn and roughened, movement becomes limited and painful. A total knee replacement involves removal of these surfaces and the positioning of metal and polyethylene (plastic) implants in their place. They are fixed to the bone by cement or screws / pegs.

Your new joint should move much more smoothly allowing you to lead a more active life, with less pain.

## What are the risks?

Total knee replacement is a common procedure and is generally safe, but there are some possible side effects and complications.

Possible side effects are:

- difficulty passing urine which might mean that you need a tube (catheter) to drain the urine from your bladder for a few days after surgery
- chest infection which might mean that you need a course of antibiotics
- anaesthetic complications which can happen during or after any big operation. These include bowel and heart problems and are usually caused by the stress of surgery making a pre-existing condition worse. The existing condition may or may not have been known about before your operation. The anaesthetist will see you before your operation and can explain these risks in more detail.

Possible complications are:

- infection of the wound or joint (antibiotics are given during and after the operation to help prevent this)
- pain
- bleeding, which can happen during or after the operation (a blood transfusion being needed in rare cases)
- blood clots in your legs, which could travel to the lungs and cause a pulmonary embolism
- Limitation in bending your knee due to scarring. In severe cases a manipulation of the knee joint under anaesthesia may be required.

You will have permanent numbness of the skin on the outside of the scar. You will become less aware of this with time.

The death rate is less than 1% from all causes for an operation of this kind.

Other risks include fracture of the bone during or after the operation, nerve damage and loosening of the implant eventually leading to implant failure.

To minimise these risks, it is important that you follow all the instructions in this leaflet as well as any from your doctor, nurse or therapy team.

The *What do I need to do after I go home?* section below has more detailed information about risks and complications and how you can help to prevent them at home.

## Are there any alternatives?

Your consultant will give information about the pros and cons of having a total hip replacement. Other options e.g. partial hip replacement or managing your hip problems without surgery using pain relief and changes to activity may be discussed. The risks and benefits of the different options will be given so you can make an informed choice about your treatment.

## How can I prepare for my total knee replacement?

To make life easier after your operation, fill in the questionnaire given to you in pre-admission clinic so your care team can help you make any changes needed at home before coming into hospital. Maintain mobility and function as much as possible. The stronger you are pre-operation, the quicker you will recover post-operation.

### Bathing

You will either need a walk-in shower with non-slip mat and a stool to sit on or a board on your bath so that you can sit to wash.

### Domestic tasks

After surgery you will find heavy domestic tasks difficult, so fill your freezer with ready-made meals and arrange for someone to help with housework (e.g. vacuuming, shopping and laundry). Move items that you use a lot to near waist-height where you don't need to bend down to get them.

### Stairs

If you do not already have a handrail or banister on your stairs, you could think about getting one installed before your operation. Unfortunately, it is not possible for the hospital to install these.

### Rugs

You should remove or tape down any loose rugs or carpets before you come into hospital, to help stop trips or falls.

### Dressing

Please bring some day clothes in with you to hospital, so you can start to get used to getting dressed in your own clothes before you go home.

For more information on equipment and safely moving around your home please see the *instructions for daily activities* section below.

Before your operation, please also make sure you read and understand our leaflets about inpatient admission, fasting and you and your anaesthetic. You will be given these by one of the team caring for you, or please visit the St George's website: [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)

## Asking for your consent

It is important that you feel involved in decisions about your care. For some treatments, you will be asked to sign a consent form to say that you agree to have the treatment and understand what it involves. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask a nurse/doctor in charge of your care.

## What happens during my total knee replacement?

You will come to hospital in the morning of the day of your operation or the night before.

Your operation should take between one and two hours. Sometimes it can take longer if your operation is complicated.

Most knee replacement operations are done under spinal anaesthesia, but sometimes a general anaesthetic is needed. In either case, you will be sedated and will not know what is happening during the operation.

After the operation you will spend a few hours in the recovery unit recovering from your anaesthetic. You will then be moved to a ward.

## Will I feel any pain?

When you wake up you may feel some pain or discomfort. You can be given painkillers for this.

## What happens after my total knee replacement?

### The day of your operation

After your operation you will need to rest until your anaesthetic has worn off. You may not be able to feel your legs for a few hours. You may also feel slightly sick (nauseous) and can be given medicine for this. The nursing staff will keep checking your pulse, blood pressure and temperature during the first 24 hours.

You will have an oxygen mask on, which will usually be taken away the day after your operation. You will also have a drip to give you fluids until you can eat and drink properly again. You may have a urinary catheter, which drains urine from your bladder until you are able to use a bedpan or toilet.

After your operation you may have a blood transfusion to replace some of the blood lost during the operation.

You will have a large dressing covering your wound and you may also have a drain in your wound to take away any excess fluid.

While in bed you should take deep breaths to help keep your chest free of infection and you should do ankle and foot-pumping exercises to keep your blood moving.

A clot can occur in either of your legs following a knee replacement operation. To help prevent this you will wear special elastic stockings and receive injections while in hospital. The stockings should be washed regularly and taken off to wash your legs.

In bed and when sitting for long periods of time, you should change your position often, to help stop you getting pressure sores, especially on your bottom and heels. The nursing staff can talk to you more about this.

### The first day after your operation

You will be sitting out of bed with help from your nurse or physiotherapist.

Your drip and wound drain will be removed and your wound redressed.

Your urinary catheter will be removed when you are able to sit out of bed and have had a bowel action.

Your physiotherapist will tell you about your exercise programme and will see how well you move using a walking aid. You can take as much weight as possible on your operated leg unless told differently by your consultant or therapist. You should start moving your new knee joint straight away to help stop scarring and stiffness.

The *exercise* section below is there to help you.

### The second day after your operation

You will be able to dress yourself in your own clothes, sit out of bed and walk to the toilet with help from your care team.

### The third day after your operation

Starting at breakfast, you will be able to sit in your chair for all meals.

You will begin to increase the distance you can walk, with less and less help from your nurses and therapists.

You will be able to shower or wash with help from your nurses and to dress yourself in your own clothes.

### **The fourth day after your operation**

You will be able to walk around the ward on your own with walking aids and practise climbing stairs if you need to.

### **The fifth day after your operation**

You will be ready to go home.

### **You will need to leave your bed by 11am.**

*If you have had revision knee surgery, you may be given extra instructions to look after your knee, making progress slightly slower than the day-by-day plan above.*

### **Leaving hospital**

Unless you made different arrangements with the pre-admission nurse before you came in for your operation, you must arrange for a friend or relative with transport to collect you. Please make sure they come to collect you by 11am and follow the advice about getting in and out of a car in instructions for daily activities, below.

When you leave, the pharmacist will make sure you have medication and the discharge coordinator will give you any wound dressings needed.

Please make sure you take all your property with you. If any money or valuables are being stored, we will return them to you before you leave.

## **What do I need to do after I go home?**

You will need to rest, to elevate your legs and to continue to exercise regularly.

Follow the exercises the physiotherapist gives you to strengthen the muscles around your new knee joint and increase how far your knee can move - see below.

Continue to increase the amount you walk. If you progress onto one crutch or stick you should hold it in the **opposite** hand to your operated leg. Once you can walk without a limp you may stop using your walking aids unless you are told otherwise. Your walking aids should be returned to the therapy department at St George's Hospital.

### **Things to look out for**

#### **Knee and leg swelling**

Your knee will be swollen for approximately three months after your operation and it is common to have some swelling down to the ankle of your operated leg. This swelling may continue for several weeks and is nothing to worry about.

To relieve the swelling, have a rest on a bed during the day or try ice treatment:

Wrap an ice pack in a towel or pillowcase first to stop ice burns and leave the ice pack on your knee for 15 minutes at a time, every couple of hours during the day.

#### **Formation of a blood clot**

You should continue to wear elastic stockings at home for six weeks after your operation, to help prevent blood clots. Take them off for at least half an hour every day to wash and check your skin.

You will also need to continue with the injections for a further 14 days at home. The ward nursing staff will show you how to give your own injections and will watch you doing so

before you leave hospital. Please read and understand our *Low Molecular Weight Heparin* leaflet which will answer any questions about these injections.

If your leg becomes very swollen, red, hot and painful, you should speak to your GP who will tell you if you need any treatment.

### **Infection**

Joint infection is a rare complication following a knee replacement. Please contact your doctor if you notice any leaking fluid (discharge), increasing redness or bleeding from your wound. You should tell any doctor, dentist or hospital that you have a knee replacement if you see them for something else, as you might need antibiotics before treatment.

You should not have dental treatment for three months following your operation, unless it is an emergency.

## **Instructions for daily activities**

***You will need to think carefully about everything you do for at least six weeks after your operation (three months if you have had revision surgery). Use the following instructions to help you.***

### **Getting in to bed**

Stand with your back to the bed so you can feel the bed against the back of your legs.



Place both your walking aids into one hand and use your free hand to reach back for the bed.



Support your weight through your arm on the mattress as you lower yourself to a seated position.



Move your bottom back towards the centre of the bed.

You can use your good leg to lift the operated leg by crossing your ankles.

Gently lift both legs onto the bed.



### **Getting out of bed**

Move across to the edge of the bed by bending your good leg and push up on your foot to lift your bottom.

Shuffle your bottom around until you are sitting on the edge of the bed.

Once sitting, push up through your arms into a standing position.

### **Getting on to a chair**

Getting on and off a chair will be easier if it is a firm chair with armrests.

Transfer weight evenly onto both feet, and adjust your balance.



Place both your walking aids into one hand and use your free hand to hold onto the armrest as shown:



### Getting up from a chair

Move your bottom to the edge of the chair and place both feet on the floor.



Hold your walking aids in one hand and push up using the armrest as shown.



### Toilets

Getting on and off the toilet is the same as getting on and off a chair



## Showering

If you have a step in or level access shower you can start having showers as soon as you can stand for long enough. Make sure your wound is covered with a dressing until your stitches have dissolved or been removed and the wound has healed.

If the dressing gets wet, replace it after showering.

You should use a non-slip mat. If you cannot stand very well you can be given a shower seat or stool before you come into hospital. Your care team can also provide information about having rails fitted in your shower.

It is a good idea to have your first shower with someone nearby in case of a fall.

## Bathing

You may find it difficult to get into a bath for some weeks after your operation. If this is the case, you can use a bath board and non-slip mat. If you do not have a shower over your bath a strip wash will be necessary.

### Transferring in and out of the bath using a bath board

Secure the bath board towards the end of the bath.



Stand with your back to the bath in line with the bath board.



Sit on the edge of the bath board.



Slide your bottom backwards to the centre of the board.



Turn your upper body to face the end of the bath.  
Lift your legs into the bath as shown.



For getting out of the bath, repeat the process in reverse.

### Going upstairs

Place your walking aids in one hand and hold the rail with your other hand.



- a. The good leg goes first
- b. The operated leg goes second
- c. The walking stick or crutches go last.

### Going downstairs

Place your walking aids in one hand and hold the rail with the other hand.



- a. The walking stick or crutches go first
- b. The operated leg goes second
- c. The good leg goes last.

### **Car travel**

You should sit in the front passenger seat. It is easier if the car is parked slightly away from the pavement and you get in and out from the road rather than a high kerb.

### **Getting into the car**

Slide the front passenger seat back as far as it will go so that there is plenty of legroom. Put the seat back in a reclined position.

You may like to raise the seat with a cushion and placing a large plastic bag on the seat may make it easier to move onto the seat – remove the plastic bag once seated.



Put your bottom in first – never step straight into the car.

Leaning back, swing one leg in at a time. You may need to support your operated leg with your hands if you have difficulty lifting it.

If you have a handle above the car door, use it to help you get in and out.

Repeat this procedure in reverse for getting out of the car.

### **Driving**

Follow your consultant's advice about driving. You should normally not drive for six weeks or until you are confident that you can perform an emergency stop without discomfort. Contact your insurance company to inform them of your operation.

### **Gardening**

You may be able to garden with hanging baskets or raised borders. You should avoid kneeling for the first six weeks. After this you may wish to use a padded mat to kneel on for comfort.

### **Sports**

You can go swimming after six weeks.

Please discuss any other leisure activities with your consultant to check for any extra precautions.

### **Sexual activities**

You may resume as soon as you feel fit enough.

## Exercises to do while in hospital and at home

For the first few days after surgery, some patients benefit from taking painkillers 30 minutes before doing exercises.

The number of times you do each exercise is a guide. Gradually increase the number as your strength improves.

### Exercises to do when sitting up in bed or lying flat on your bed

Bed exercises are designed to improve circulation, reduce swelling and encourage active movement in your operated leg.

You can start to do these exercises straight away after your operation.

#### Ankle pumps

Move your feet briskly up and down.

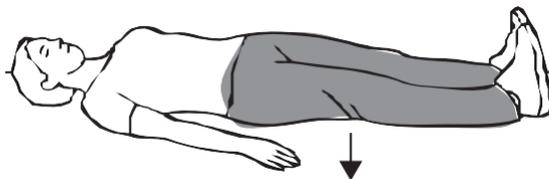
Repeat 10 to 15 times every hour.



#### Static quads

Tighten your thigh muscles by pushing the back of your knee into the bed, straightening your knee as much as possible.

Hold for a count of five, then relax.



Repeat ten times every hour.

#### Heel slides

Slide your heel towards your bottom, so your hip and knee bends.

Then straighten your leg.



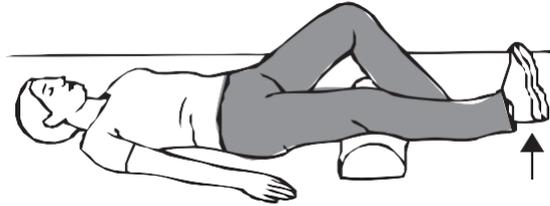
Repeat ten times, three times a day.

### **Inner range quads**

Place a rolled towel under your operated knee.

Straighten your knee by lifting your heel off the bed, keeping your thigh on the towel.

Hold for a count of five, then lower slowly.



Repeat ten times, three times a day.

Remove the towel from under your knee once you have finished this exercise.

### **Knee hangs**

Place a rolled towel under the ankle of your operated leg.

Allow your knee to fully straighten.

Let your leg rest in this position for five to ten minutes.

This will give your knee a good stretch.



Repeat every hour.

### **Exercises to do whilst in a chair**

Chair exercises will help to increase movement and strength in your operated leg. You can start these exercises as soon as you are sitting out of bed. Carry on doing these exercises at home for as long as you find them useful.

### **Heel slides**

Rest your foot on the floor.

Slide your heel backward towards the chair as far as comfortable.

Hold for a count of five, then relax.

Repeat ten times, three times a day.



### **Knee extension**

Pull your toes up towards you.

Lift your lower leg off the floor by straightening your knee.

Hold for a count of five, then lower slowly.

Repeat ten times, three times a day.



### **More advanced exercises**

Standing exercises help get strength back in the muscles around your knee. This will help with walking and other daily activities. You will be taught these exercises before leaving hospital, and should carry on doing them at home for at least three months after your operation.

### **Sit to stand**

Sit in a firm chair, preferably with armrests.

Stand up and then sit down slowly on the chair.

You can use your arms if you need to.

As you get stronger you may be able to cross your arms and let your legs do all the work.

Repeat ten times, three times a day



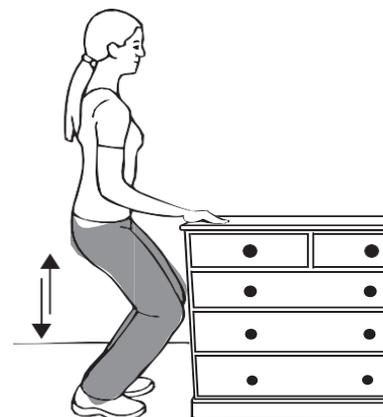
### **Mini squats**

Stand holding onto something secure, for example, a kitchen work surface.

Do a small squat, bending both knees about 30 degrees.

Straighten so your knees are fully straight.

Repeat ten times, three times a day.



### **Hamstring curls**

Stand holding onto something secure.

Bend your operated knee as far back as you can.

Hold for a count of five, then lower slowly.

Repeat ten times, three times a day.



## Marching on the spot

Stand holding onto something secure.

March on the spot, raising your knees as high as possible.

Repeat ten times, three times a day.



## Will I have a follow-up appointment?

Any clips or stitches in your wound will be removed between 10 and 14 days after your operation. The discharge coordinator on the ward can arrange for a district nurse to do this or the practice nurse at your GP surgery can do it for you.

We will send you an outpatient appointment for a routine check up to your home address within six weeks.

## Useful sources of information

### Arthritis care

Helpline: 0808 800 4050

<https://www.arthritiscare.org.uk>

### National osteoporosis society

Tel: 0845 450 0230

Web: [www.nos.org.uk](http://www.nos.org.uk)

Email: [info@nos.org.uk](mailto:info@nos.org.uk)

### Age UK

Tel: 0800 169 6565

Web: [www.ageuk.org.uk](http://www.ageuk.org.uk)

## Contact us

If you have any questions or concerns about your total knee replacement, please contact any member of the team. Gunning ward can be contacted on 020 8725 3218/3219 and Holdsworth ward on 020 8725 3216/3388; the physiotherapy and occupational therapy team can be contacted on 020 8725 0985 (Monday to Friday 8.30am to 4.30pm). Out of hours please call 111 or leave a voicemail on 020 8725 0985.

**For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)**

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## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

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