

# **Knee replacement**

Information and advice for patients

# **Trauma & Orthopaedics**

Contents		
What is a knee replacement?	2	
Why do people need knee replacements?	2	
What are the benefits of having a knee replacement?	2	
What are the risks of having a knee replacement?	2	
Preparing for a knee replacement	3	
The Hip & Knee Club	3	
Physiotherapy	4	
Before coming into hospital	5	
Anaesthetic	5	
Your Operation	5	
After having a Knee replacement	5	
Pain relief after your operation	5	
X-ray	5	
Returning to ward	5	
Rehabilitation journey	6	
Day of surgery	6	
Inpatient therapy	6	
Going home	6	
Symptoms to report	9	
General enquiries	9	
Further Information	10	
External support following discharge from hospital	10	
Sources used for the information in this leaflet	10	

### What is a knee replacement?

A knee replacement is an operation to replace a damaged knee joint.

A total knee joint replacement involves replacing the lower end of your thigh bone (the femur) and the upper end of your lower leg (the tibia) with metal and plastic components. The back of the kneecap (the patella) may be resurfaced too. Some patients may only need a partial knee replacement and the surgeon will explain this in more detail if appropriate.

# Why do people need knee replacements?

The knee is an important weight-bearing joint that is prone to "wearing out". The joint surfaces are normally covered by a very strong elastic tissue called cartilage. Normally the cartilage is smooth and allows the joint to move freely and bear weight without pain.

As you get older the cartilage can wear away. This causes the two bones to rub against each other which can cause pain. Osteoarthritis can be a very painful disorder which may affect your mobility, or even stop you from sleeping.

# What are the benefits of having a knee replacement?

A knee replacement can reduce pain and improve movement, which can help improve activities including general mobility and sleeping.

### What are the risks of having a knee replacement?

### **Common risks**

#### Pain and stiffness

It is normal to experience some pain and stiffness in your knee after the operation. You will be given painkillers to help relieve this and the pain will improve in time. To avoid stiffness you will need to exercise your knee regularly as advised by the physiotherapist.

#### **Blood Clots**

A small number of people develop a blood clot in a vein in their leg, known as a Deep Vein Thrombosis/DVT.

Very rarely people develop a blood clot in the lungs known as a

Pulmonary Embolism (PE).

To reduce your risk of a blood clot, you will be given blood thinning injections or tablets. Remaining mobile and completing your exercises will reduce this risk.

#### Infection

In the rare case of developing an infection, it may be treated with antibiotics, but may require further intervention including:

- Washout the joint
- Replace the implant

To reduce the risk, you will be checked for signs of infection, including MRSA.

N.B. It is advisable to see a dentist prior to your operation to ensure you have no potential sources of infection in your mouth.

### What are the risks of not having a knee replacement?

If you choose to decline knee replacement surgery the arthritis in your knee will gradually worsen over time and lead to increasing pain and/or reduced mobility.

### Are there any alternatives?

Before opting for surgery you should try the following methods that may help reduce your pain and improve your mobility:

- Losing weight
- Avoiding strenuous exercises or work
- Using a stick or a crutch
- Medicines, such as an anti-inflammatory drugs or steroids
- Physiotherapy and gentle exercises
- Steroid injection into the joint

### Preparing for a knee replacement

### The Hip & Knee Club

Prior to your operation you will be invited to attend the Hip and Knee Club. This is where you will receive advice and information on the following:

- Exercises to strengthen your muscles
- Advice on what we expect from you and you can expect from us
- Advice on discharge planning
- The opportunity to watch videos of previous patient experience
- Contact numbers to answer future questions

# **Physiotherapy**

You should start doing the below exercises prior to your surgery. It is important to begin exercising your muscles as soon as possible and perform the exercises regularly in the weeks leading up to your operation.

### **Ankle Pumps**

- 1. This can be performed in a chair or bed.
- 2. Move your foot up and down as far as it will go.
- 3. This will help to improve your circulation.
- 4. Repeat x 10, 3 times a day





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### **Static Gluteals**

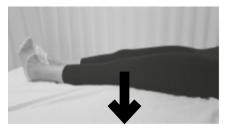
- 1. Sitting or lying, squeeze your buttocks
- 2. Hold this for 5-10 seconds
- 3. Relax
- 4. Repeat x 10, 3 times a day



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### **Static Quadriceps**

- 1. Sit or lie with your operated leg straight.
- 2. Tighten your thigh muscle and push your knee into the bed.
- 3. Hold this for 5-10 seconds
- 4. Relax
- 5. Repeat x 10, 3 times a day



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#### **Knee Flexion**

- 1. Sit on a chair.
- 2. Bend your knee back until you feel a stretch.
- 3. Hold for 5 to 10 seconds.
- 4. Relax.

Repeat this x 10, 3 times a day





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### Before coming into hospital

You need to ensure you have at least a few days worth of food at home for when you are discharged.

Please bring the following with you:

- Comfortable clothes to wear after surgery.
- Sensible shoes (trainers are recommended).
- Please don't bring backless slippers or flip flops as these are unsafe.
- All of your normal medications, creams, inhalers and drops in their original packaging.

### **Anaesthetic**

The majority of patients will have a spinal anaesthetic.

Other options can be discussed with your anaesthetist.

### **Your Operation**

You will be away from the ward for about 3 hours, but your operation does not take all this time; it is split between your anaesthetic, your operation and time spent in recovery.

ECG dots will be put on your chest to monitor your heart, a blood pressure cuff will be put around your arm and a pulse oximeter will be placed on your finger to monitor your oxygen levels and pulse. You will then have a cannula (needle with a plastic port) inserted into a vein on your hand to allow drugs or fluids to be given directly into your blood stream and your anaesthetic will then be administered. Once this has taken effect your operation will begin.

# After having a Knee replacement

Your leg will be bruised and swollen after surgery. As you become more mobile the swelling will decrease, but it can take up to 3 months for it to settle completely. Bruising will normally settle within a few weeks.

# Pain relief after your operation

You will be in pain after your operation but it should not be severe and we will try to ease it. You will be on regular and additional medications, please speak to the ward nurse and your doctors to understand what pain relief you are on. It is important that your pain is adequately managed to allow you to walk and do your exercises. Please ask for pain relief if you need it. If your pain is preventing you from doing this, then please speak to your Doctor.

# X-ray

Your knee will be x-rayed after surgery. This is just to check the position of the implants.

# **Returning to ward**

When you return to the ward after your surgery, you should start your exercises as soon as you can (refer to previous exercises).

The exercises will help to:

- Relieve pain
- Maintain muscle strength, joint movement and balance
- Prevent chest infections, constipation, pressure sores and blood clots

### **Rehabilitation journey**

You will be seen by a Therapist after your operation to support with your recovery and to enable you to return home. The information below outlines what you should expect.

# Day of surgery

- Take a few steps with a frame or crutches and aim to walk to the toilet. You will be supported to do this by a Nurse or Therapist
- Aim to sit in a chair
- Complete the exercises in this booklet and the ones you have been taught at Hip and Knee Club

# **Inpatient therapy**

The Therapists will support you to:

- Learn to walk with an appropriate aid (this is usually elbow crutches)
- Review your exercises
- Practice the stairs if required

Once you are able to do these tasks independently, then you will be discharged from the Inpatient Therapy Team. If you needed help with any of these tasks before your surgery, please discuss this with the Therapy Team.

You may be able to achieve these on the day of your surgery. If not, you will be reviewed by the Inpatient Therapy Team the morning after your surgery. The Inpatient Therapy team will continue to work with you until you achieve your goals for discharge.

It is important to start moving your knee and walking as soon as you can after your operation as this will help your recovery.

# Going home

You will be discharged home as soon as you have been discharged from the Inpatient Therapy Team and it is medically safe for you to go home. This is usually the day after your surgery.

### On discharge you will be given:

A reminder to book an appointment at your GP to have your sutures or clips removed.
These are removed at around day 14 by the nurse at your GP surgery. District nurses
will only come to do this at your house if you are bedbound, have a learning disability,
hearing or sight difficulties. You could book this appointment with your GP practice once
you know your surgery date.

- Information about your physiotherapy appointment
- A follow up appointment with the Consultant's team.

# **Outpatient Physiotherapy**

You will be referred to the Outpatient Physiotherapy Team to continue your rehabilitation after discharge from hospital.

In some cases, the Therapist may be able to let you know the exact time and date of your appointment, but this is not always the case.

If you are not given specific appointment then you will be contacted within the first 2 weeks with your appointment time. This is usually via text so please ensure your mobile phone number is correct on the hospital records.

If you do not receive an appointment within 2 weeks of your surgery date, please contact the Outpatient Physiotherapy Team to enquire about this on 0121 507 2664 (option 3, option 3).

# **Returning home after surgery**

**Washing** - for the first 2 weeks, you should wash at a sink. You can shower after removal of your stitches or clips. This is to decrease the likelihood of infection. If you feel you may need to sit down to do this, please ensure you have an appropriate seat in place prior to admission. You should not attempt to get into a bath until you feel comfortable to do so.

**Mobility** - You need to gradually build up the amount of walking you do. Aim to progress off the elbow crutches between four to six weeks after your surgery.

Stairs - Make sure you have at least one sturdy hand rail on your stairs

**Sleeping** - You may find it more comfortable to sleep on your back with a pillow between your legs. You may also find it more comfortable to get out of bed with your operated leg first and get back into bed with your un-operated leg first. The Therapist will show you how to get in and out of bed.

**Housework** - You can continue with light domestic tasks such as cooking and laundry. Consider placing items on worktops and easy to reach shelves.

**Shopping** - You should ensure you that have a sufficient amount of food at home for when you are discharged. You will be initially unable to carry heavy shopping bags.

**Compression stockings** - Some patients require compression stockings after surgery, please discuss your need for these with your consultant. If you do require these, please arrange for a friend or relative to support you every day or two to help you remove these and put them back on.

### DO NOT:

- Stand for long periods of time as you may find this tiring initially try to spread household tasks throughout the day and allow plenty of time to rest.
- Do any heavy housework e.g. vacuuming initially.

Remember, usually, if you can manage before surgery then you should be able to manage after your surgery.

### **Additional help**

Short term help with shopping is available via local voluntary services. Please refer to the numbers at the back of this booklet.

### Your wound

All wounds progress through several stages of healing. Depending upon treatment you may experience sensations such as tingling, numbness and itching. You may also feel a light pulling around the stitches or clips, or a hard lump forming. These are perfectly normal and are part of the healing process. It is also perfectly normal for your operated leg to swell for up to 12 months after surgery.

To prevent infection developing it is important to take good care of your wound, as instructed by your doctor or nurse. If you visit the dentist in the next few months you must tell them you have recently had joint replacement surgery.

### Managing pain

Once at home you should control any pain or discomfort by:

- Taking your pain medicine at least 30 minutes before doing the exercises given to you by your therapist.
- Applying ice packs to the knee regularly
- Gradually weaning yourself off any prescription medication for pain over a period of time depending on the severity of your pain.

If what you have been prescribed is not relieving your pain, or the pain is becoming worse, please see your GP.

# **Recovery at home**

The tissue and muscles around your new knee will take time to heal so it is important to continue doing your exercises daily and follow the advice below:

#### DO:

- Go for regular short walks
- Walk on level ground
- Continue using your crutches as advised by your physiotherapist
- Bend down to your feet
- Go up and down stairs
- Attend your physiotherapy appointment
- Perform the exercises taught to you by the physiotherapy team.
- Return to your usual daily activities as able

#### DO NOT:

- Return to your usual daily activities as able
- Kneel down

- Go for long walks but aim to gradually build up your walking distance and tolerance
- Drive until your doctor and insurance company say you can
- Go on long journeys

Most patients use both crutches for 4 weeks. When you are ready to use just one it should be used in the opposite hand. This means if you had your right knee replaced you should use one crutch in your left hand.

### **Symptoms to report**

If you experience any problems you should discuss them with your physiotherapist or your GP. In an emergency please go to your local A&E department.

# **General enquiries**

If you have any questions or concerns before your surgery you can contact the hospital on one of the following numbers:

### **Hospital Switchboard**

0121 554 3801

Ask to speak with the Pre-assessment booking team in Orthopaedics

The Inpatient Trauma and Orthopaedic Therapy Team can be contacted on 0121 507 2916

### **Hospital address**

Midland Metropolitan University Hospital Grove Lane Smethwick B66 2QT

### **Further Information**

### **External support following discharge from hospital**

The Services below are voluntary services that may be able to support you on discharged. If you feel you will need support, for example with shopping then please contact them to discuss how they may be able to help you.

### **Birmingham Residents**

Home from Hospital: 0121 472 4499

#### **Sandwell Residents**

Sapphire Service: 0121 507 3161 or 0121 796 9333

### **Versus Arthritis**

https://www.versusarthritis.org/ [Website accessed 29 January 2025]

#### **NHS Website**

https://www.nhs.uk/conditions/osteoarthritis/

[Website accessed 29 January 2025]

### Sandwell and West Birmingham NHS Trust

www.swbh.nhs.uk

[Website accessed 29 January 2025]

### Sources used for the information in this leaflet

- NHS Website (2023) Knee Replacement Available at: https://www.nhs.uk/conditions/knee-replacement/what-is-a-knee-replacement/ [Website accessed 29 January 2025]
- National Institute for Health and Care Excellence (2022) Osteoarthritis in over 16s: diagnosis and management [NG226]. Available at: https://www.nice.org.uk/guidance/ng226/ [Website accessed 29 January 2025]
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