

Knee Replacement Information – Preparing for Your Hospital Stay



Introduction

Your orthopaedic consultant has recommended a knee replacement. This booklet aims to provide you with all the information you will need about the operation and preparing for your hospital stay.

Please read it carefully and bring it with you to all your appointments and when you attend hospital for your operation. There is space at the back of the booklet to write down your questions.

Why do I need a knee replacement?

The majority of knee replacements are performed because of osteoarthritis of the knee.

What is osteoarthritis of the knee?

Osteoarthritis of the knee is a condition where the knee joint surface wears out. At its extreme stage bone is rubbing on bone. The condition causes pain, swelling, stiffness of the knee and difficulty walking. The knee may be deformed.

How is osteoarthritis of the knee diagnosed?

The condition is diagnosed on the basis of your symptoms, examination findings and the appearance of a simple X-ray of the knee. Typically, pain is felt in the knee. The pain can travel further down the leg below the knee. The pain is usually constant and typically worsens over a number of years but can deteriorate rapidly over a matter of months.

Sleep is frequently disturbed by pain when the condition is advanced. The knee joint is typically still and

movements of the knee are painful. You may have difficulty rising from low seats, crouching and climbing stairs. You may well walk with a limp. The X-ray shows narrowing of the joint space and sometimes deformity of the joint.

What causes osteoarthritis of the knee?

In the majority of cases no cause is identified although many people will be aware that other members of their family have had the condition. Other causes include rheumatoid arthritis, traumatic injury to the knee including previous ligament injury, cartilage injury or fractures. Some patients have had previous operations on the knee for ligament injury, cartilage injury or fractures.

What treatments are there for osteoarthritis of the knee?

Your doctor will initially recommend painkillers, anti-inflammatory tablets, exercise and occasionally a walking stick. You may gain some benefit from physiotherapy although the benefit typically is not lasting. If you have intrusive and disabling pain, knee replacement surgery will be considered.

When is it the right time to undergo a knee replacement?

Generally speaking, the time to consider a knee replacement is when painkillers are having little effect. Also when the pain and associated disability are significantly compromising your quality of life.

What is a knee replacement?

A knee replacement is major surgery and usually takes around one to one and a half hours: in addition the anaesthetic takes around thirty minutes.



A knee replacement involves removing the worn joint surfaces from

the top end of the shin bone and the bottom end of the thigh bone and sometimes the under surface of the knee cap. Metal and plastic components are cemented into the bone to fill the gap.

The operation is done through a straight skin incision over the front of the knee measuring approximately 20cm. Sometimes the incision is a bit longer.

What type of anaesthetic will I need?

The operation is performed under a general anaesthetic or a spinal anaesthetic with or without sedation. Supplementary local anaesthetic blocks to the major nerves to the knee and the tissues surrounding the knee to provide post-operative pain relief.

Some people wish to be asleep during the operation, other prefer to be awake. The consultant anaesthetist will consider your preference and advise which anaesthetic is the most appropriate taking into consideration your general health and own preferences.

Risks and benefits of the operation

Most surgeries go well, without any complications, and the majority of patients report remarkable relief of pain and improvement in mobility. Your surgeon will discuss the risks with you prior to the operation allowing sufficient time for you to consider them and make an informed decision about whether you are happy to proceed with surgery.

The vast majority of people undergoing a knee replacement are happy with the result with relief of pain and restoration of function.

The main risks include:

Infection

If a superficial infection in the skin tissues occurs, it will usually respond to the provision of antibiotics. The risk of deep infections occurring is less than 1 in 100 patients. Occasionally, however, a deep infection occurs and if this happens further surgery to remove the implanted knee replacement may be required and either replaced as a

one-stage procedure or a two-stage procedure. You may also require a prolonged course of antibiotics. Many precautions are taken to reduce the likelihood of infection including screening you for infections pre-operatively (skin and urine), giving you antibiotics at the time of the operation and performing your operation in specially adapted clean air operating theatres.

Blood clots

There is a risk of developing blood clots following a knee replacement. The risk is increased in individuals with a prior history of blood clots and those with some other medical illnesses. To reduce the risk you will need to mobilise, with the therapists, when medically fit, do the exercises as advised and drink plenty. We will provide you with blood thinning tablets or injections, which are continued for 14 days after the operation. The symptoms or signs of a blood clot include swelling of the leg, calf pain and/ or tenderness. It is very common for your leg to be swollen following a knee replacement, which does not necessarily mean you have a blood clot, but if you have any concerns medical advice should be sought.

Nerve or blood vessel injury

Very rarely damage can occur to one of the major arteries or nerves to your leg at the time of the operation. The risk is very small but is higher if you have a very deformed knee pre-operatively. If such an event were to occur this could be a limb threatening situation. In the event of blood vessel injury this may require vascular surgery but may result in the loss of the limb. In the event of nerve damage this could result in potentially lifelong disabling nerve pain and/or loss of movement of your ankle / foot requiring a splint.

Persistent pain

Some patients experience persistent pain following a knee replacement. There are many different causes for this and if this happens your doctor will search for the cause. Sometimes a cause for the persistent pain cannot be found and management of the pain with painkillers will be required. Knee stiffness Some patients do not regain full movement (straightening or bending) of the knee after a knee replacement. The risk is higher if your knee was stiff prior to the knee replacement. It is very important to work hard with physiotherapy for the

first few weeks after the knee replacement to regain movement of the knee. Stiffness of the knee can cause difficulty walking, rising from low chairs, climbing stairs and crouching. If the stiffness persists despite physiotherapy you may need a manipulation of the knee under another anaesthetic within the first 3 months or very occasionally further surgery beyond this period.

Death

The risk of death is small but generally considered to be 1 in 200. The risk is increased in older individuals and in the presence of other significant illnesses. Your preop health check should pick up the majority of health issues but some are not easily detected.

What is the success of the operation?

The vast majority of people undergoing a knee replacement are happy with the result, relief of pain and restoration of function. Patients who follow the pre and postoperative instructions detailed in this booklet recover more speedily and enjoy better long term outcomes.

When surveyed at 10 years, up to 80% of patients are happy with the outcome of their knee replacement.

Enhanced recovery

All knee replacement patients follow an enhanced recovery pathway which supports high quality care. Enhanced recovery programmes aim to deliver evidence-based care at the right time and ensure that you are actively involved in your own recovery process.

The main elements of enhanced recovery are: good quality pre-op education, improving and optimizing health prior to surgery, sharing information, good pain control, early mobilization and early introduction of diet and fluids.

Enhanced recovery programmes have been shown to reduce time in hospital and speed up recovery, reduce complications and increase patient satisfaction. We want you to feel involved in your care and understand what you can do to aid your recovery, so please do not hesitate to ask us if you are not sure of anything.

Before your operation

Pre-operative (pre-op) assessment
You will be required to attend hospital for pre-operative assessment before surgery to assess your general health and establish a discharge plan. Please bring with you a current prescription/list of your medications with doses and original names to your appointment. The nurses will need to know about any over the counter or herbal medication you are taking too. Please also bring a fresh urine specimen with you in a sterile container (available from GPs or local chemist). Please dress in loose fitting clothes.

If you have any allergies please be sure to inform the nursing staff about these e.g: LATEX will require changes to your theatre time management plan. Metal allergies such as NICKEL may require patch allergy skin testing prior to admission to ensure correct artificial knee component is used. You will see the nurse who will ask you questions about your general health and you will have the following tests/investigations:

- Height/weight/blood pressure
- Urine specimen

- Blood tests (these may vary depending on your medication)
- ECG (heart tracing)
- Knee/chest X-ray (depending on medical history and clinical examination)
- MRSA screening
- CPE screen if you have been admitted for an overnight stay into any hospital in the past 12 months

You may also be required to see the consultant anaesthetist at a separate clinic appointment before your operation.

You will receive a letter inviting you to attend the education group once your investigation results from preop have been reviewed.

Preparing for your operation

What is Enhanced Recovery? Evidence has found that patients can recover from their surgery faster than previously thought. This is due to improvements in medication, surgical and anaesthetic techniques. This means following surgery you will have a shorter hospital stay reducing the risks of complications and

infection following your surgical procedure.

The aim of the Enhanced Recovery Programme is to get you back to full health as quickly as possible. A large part of your recovery is down to your own motivation. The earlier you start to get up and mobilise, eat and drink normally the more likely you are to recover quickly and reduce the risk of developing complications.

The benefits of early mobilization are:

- Reduced risk of a chest infection.
- Less muscle wastage, so that movement and mobility are maintained.
- Decreased fatigue and tiredness.
- Reduced risk of developing a blood clot in your legs and lungs.

You will have a shorter hospital stay reducing the complication risks and infection following your surgical procedure.

Education Group

All patients undergoing hip or knee replacement surgery are required to attend an education group. The

education group gives you information about your operation, the enhanced recovery programme and how you can play an active part in your recovery.

The aim of this session is to prepare you for your operation and give you the opportunity to meet the orthopaedic team (nurses, occupational therapist and physiotherapist). You will be shown your exercises and walking aids and advised on what to expect when you come into hospital. You will not be offered an operation date until you have attended the education group.

An occupational therapist will assess you and discuss your home situation with you and how you will manage on discharge. Any equipment or adaptation needs will be identified at this point.

What to bring checklist:

Medication

You should bring all your usual medication into hospital with you in the original labelled container or packaging in the medication bag provided to you at the education

group. This will be locked away in a medicine locker.

Daywear

As part of the Enhanced Recovery Programme, you will be expected to wear your own comfortable clothes post-op.

Nightwear

Nightdress or pyjamas and lightweight dressing gown.

Suitable footwear

Well-fitting slippers, shoes or trainers (no backless shoes) and ensure footwear has rubber sole for grip.

Toiletries

Soap, flannel, toothbrush / paste, brush / comb, wet wipes, etc.

Entertainment

Magazines, books (do not forget your glasses). Radio with personal headphones. Any electrical item that needs to be plugged into a socket will have to be tested by one of our

engineers to ensure it is safe to use and not a fire hazard.

Aids/Equipment

If you have been given, or purchased, any aid/equipment including crutches by your therapists please bring these into hospital.

Booklet

Please bring this booklet with you when you are admitted for surgery, to use as a point of reference during your admission.

Snacks/Fruit

For example: ready to eat prunes / dried apricots to aid bowel movement.

Patient skin advice prior to joint replacement surgery

Once you have been seen in the pre-operative assessment clinic, should you experience any problems with your skin prior to admission, i.e. if you develop any rashes, grazes, cuts, open wounds, fungal infections, cough or cold, it could have an impact on your surgery taking place. Please contact

the pre-op nursing team for advice. (See contact telephone number at the end of this leaflet).

What you can do specifically to prepare for surgery

Exercise

Doing the exercises explained later in the booklet before you come in will not only prepare your body for post-op exercises and help with pain but will help you to regain movement quickly post-operatively. Also walking a short distance each day will help stamina.

Reducing infection

Please have a shower or bath the morning of surgery. If this is not possible or difficult then please shower/bathe the evening before then wear clean nightwear and have clean bed linen. You must contact the pre-op assessment teams if you have any signs of infection, no matter how small: skin breaks, wounds, chest or water infection, dental abscesses or fungal nail infections. Your operation will be cancelled if there are any signs of infection at the time of

surgery. Please remove any nail varnish or false nails and make up.

Oral hygiene

Following surgery, patients are two times more likely to develop a chest infection. Good oral hygiene before and after your operation can dramatically reduce this risk. Please bring your toiletries into hospital including toothbrush and toothpaste to maintain regular oral hygiene whilst in hospital. Please visit your dentist if you have any loose teeth, crowns or bad teeth.

It is advisable not to have any dental extractions or invasive dental work for 3 months prior to surgery and 3 months post op to reduce the risk of infection.

Carbohydrate drinks (pre-op)

You will be provided with 6 carbohydrate loading drinks to take prior to admission. You need to take 4 the night before surgery, and 2 on the day of surgery, both in the last hour you are allowed to drink. For example, if you are due in at 7am, you take them at 6am. If you are due in hospital at 11am, then take them at

10am. If you are diabetic, you will not be issued with these drinks.

Regulate your bowels

Many patients are already taking pain relief before their surgery. This can cause constipation.

It is important that your bowels are opening regularly and smoothly before your operation. To achieve this, you are encouraged to increase the fibre in your diet and eat a well-balanced diet. The pre-operative nurses will question you about your bowel habit and provide both verbal and written advice to aid with the management of constipation.

Maintain your skin integrity.

Your skin should ideally be free from any breaks. To aid with this please avoid activities that could cause any concerns such as gardening. Animal scratches and insect bites can also be potential sources of infection which could postpone your surgery. If you suffer from long term skin issues such as eczema or psoriasis ensure you use your creams as directed by your GP/dermatologist to keep your skin condition at its best.

Planning for your return home after surgery

It is very important that your home situation is suitable for you following your surgery.

Preparation of your home environment will be discussed at the education group and with the occupational therapist at the one to one session at the group.

Ensuring that you eat well in the days / weeks before your operation should help you to recover more quickly. Have your house ready for your arrival back home. Rearrange items that are frequently used to easy accessible heights avoiding very low or very high storage. Remove loose rugs.

Make sure there is room to walk from room to room without obstacles getting in your way and remove any clutter.

How long will I be in hospital?

You will normally be admitted to hospital on the day of surgery and will be discharged when medically fit and have met all your therapy goals. Usually between 1 to 3 days.

Will my knee be painful afterwards?

It is normal for the knee to be painful post-operatively, but the pain improves on a daily basis. Strong painkillers are prescribed after the operation.

How much time will I need to take off work?

Generally speaking, you will need 2-3 months off work following the operation to allow you to recuperate.

Information about your hospital stay

Smoking

Smoking is not allowed anywhere on the hospital ground: this include the use of electronic cigarettes. Smoking is also actively discouraged before and immediately after your surgery. You may find it helpful to discuss giving up smoking with your doctor or practice nurse prior to admission, or with our smoking cessation officer.

Dietary Requirements

You will have a wide choice of meals to select from. If you have any

special dietary requirements, please inform the nursing staff on admission.

Mobile Phones

Mobile phones may be used whilst you are in hospital, but please show some consideration for the other patients around you whilst using your phone.

Visiting

- Open visiting times are in operation. We ask that mealtimes are avoided.
- Visitors are limited to 2 persons per bed
- To assist in the prevention of infection control we require all visitors to use the hand hygiene station at the entrance of the ward when entering and exiting.
- Visitors are asked not to sit on the bed; there are visitor's chairs available.
- You will be following an active rehabilitation programme, which will involve one to one activities during these times.
- You are asked to limit the number of phone calls to the ward. If you could nominate one relative, please to cascade the information.

Reducing the risk of infection

Manchester Hospitals maintain the highest standards in relation to infection control. All patients who come into hospital are at greater risk of acquiring infection than the general population. This is partly because of their general health and partly because any kind of treatment can make them temporarily more vulnerable. The use of antibiotics, which may be necessary, and are lifesaving, also makes patients more vulnerable to resistant bacteria. Orthopaedic surgery infection rates are measured in accordance with a national surveillance programme and results are reported and reviewed on a quarterly basis.

It is not possible to avoid infection completely – but the staff at Manchester Orthopaedic Centre work extremely hard to ensure that the environment is safe for patients and visitors.

You should avoid touching any wounds or dressings that may have been applied as part of your care. Good basic hygiene is also important. Members of staff who are required to touch your skin should wash their hands before and after examination (using soap and water or hand gel).

All our protocols demand this essential procedure and we would welcome you to ask us if we have washed our hands.

It is important that your visitors are aware of your vulnerability to infection and that they should contact the ward for advice on visiting if they are suffering from an infection, cold, vomiting or diarrhoea, to reduce the risk of transmission to vulnerable patients.

Useful Numbers

Trafford
Ward 12 Admissions: 0161 746 2414
Ward 12 Inpatients: 0161 746 2110
Orthopaedic Senior Nurse: 0793 257 0978
Orthopaedic Occupational Therapist: 0161 746 2717
Orthopaedic Physiotherapist: 0161 746 2053
Pre-op Assessment clinic: Trafford: 0161 746 2781
Orthopaedic Pathway Co-ordinator: 0161 746 2759 or Bleep 138 via switchboard for any pre-operative concerns

Wythenshawe
F4 inpatients: 0161 291 4887
Enhance Recovery Nurse: 0161 291 4887
Orthopaedic Occupational Therapist: 0161 291 6596 (Ward A5) 0161 291 2110
Orthopaedic Physiotherapist: (inpatients) 0161 291 6596 (Ward A5) (outpatients) 0161 291 2178/2179
Pre-Op Assessment Clinic: 0161 291 2054
MRI
In patient ward: 0161 276 8688
Orthopaedic Occupational Therapist: 0161 701 0267
Orthopaedic Physiotherapist: 0161 701 0267
Pre-Op Assessment Clinic: 0161 276 3624

Useful Exercises

- The following exercises should be started before your operation as this will help strengthen your muscles in preparation for your post op rehabilitation.
- You should re-start your exercises immediately after surgery: the therapy team will guide you through this process making any adaptations as needed.
- You should continue your exercises on discharge.
- We recommend that you do the following exercises four times a day, repeating each exercise ten times. If you find the exercises difficult, you may need to build up to ten repetitions gradually.



Ankle Pump

- Lying on a firm mattress move feet up and down.
- Repeat 10 times hourly.



Heel Slide – in bed

- Slide heel towards bottom bending your knee through as full a range as possible and then straighten it.
- Repeat 10 times or more frequently if you can.



Quad Sets

- Lying on your back on firm mattress.
- Tighten knee muscles of operated leg. (This can be done by straightening your knee as much as possible and then pushing the back of your knee into the bed)
- Hold for six seconds – relax.
- Repeat 10 times, three times a day.



Inner Range Squads

- Place a rolled towel under your knee.
- Straighten your knee by lifting your heel off the bed, keeping your thigh on the towel.
- Hold for a count of five seconds then relax.
- Repeat 10 times, three times daily.



Straight Leg Raise

- Lying or half-lying as shown on a firm mattress.
- Keep your nonoperated leg, hip and knee bent with your foot flat on the bed.
- Tighten your thigh muscles (as you do for the quads set exercise) and then lift the leg up keeping you knee straight, about 12"-15" off the mattress.
- Hold for the count of six and then slowly lower the leg to the bed.
- Repeat 10 times, three times daily.



Knee Hangs

- It is very important that your knee fully extends.
- To help achieve this, place a rolled up towel underneath the ankle of your operated leg and allow the knee to fully straighten.
- Let your leg rest in this position for a few minutes to give the knee a good stretch, repeat frequently.



Heel Slides

- With your foot resting on the floor, slide your foot towards you, bending the knee, aim to get to 90 degrees.
- Hold for 10 seconds and then relax your leg and slide it forwards.
- Repeat 10 times, three times daily



Knee Extension

- Pull your toes up.
- Tighten the thigh muscle and straighten your knee.
- Aim to get the knee fully straight.
- Hold for approximately five seconds and slowly relax your leg.
- Repeat 10 times, three times daily.

No Smoking Policy

Please protect our patients, visitors and staff by adhering to our no smoking policy. Smoking is not permitted in any of our hospital buildings or grounds, except in the dedicated smoking shelters in the grounds of our Hospital site.

For advice and support on how to give up smoking, go to www.nhs.uk/smokefree.

Translation and Interpretation Service

It is our policy that family, relatives or friends cannot interpret for patients. Should you require an interpreter ask a member of staff to arrange it for you.

تنص سياستنا على عدم السماح لافراد عائلة المرضى او اقاربهم او اصدقائهم بالترجمة لهم. اذا احتجت الى مترجم فيرجى ان تطلب ذلك من احد العاملين ليرتب لك ذلك.

بماری یہ پالیسی ہے کہ خاندان، رشتہ دار اور دوست مریضوں کے لئے ترجمہ نہیں کر سکتے۔ اگر آپ کو مترجم کی ضرورت ہے تو عملے کے کسی رکن سے کہیں کہ وہ آپ کے لئے اس کا بندوبست کر دے۔

ইহা আমাদের নীতি যে, একজন রোগীর জন্য তার পরিবারের সদস্য, আত্মীয় বা কোন বন্ধু অনুবাদক হতে পারবেন না। আপনার একজন অনুবাদকের প্রয়োজন হলে তা একজন কর্মচারীকে জানান অনুবাদকের ব্যবস্থা করার জন্য।

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Waa nidaamkeena in goys, qaraaboamasaaxiiboaysanu tarjumikarinbukaanka. Haddiiaad u baahatotarjumaankacodsoxubinka mid ah shaqaalahainaykuusameeyaan.

我们的方针是，家属，亲戚和朋友不能为病人做口译。如果您需要口译员，请叫员工给您安排。



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TIG XX/XX

Produced XX XXX

Review Date XX XXX

(SF Taylor CM14169)