

## Orthopaedic Department

# Total Knee Replacement

An enhanced recovery programme has been developed by the team of specialists to enable patients to be discharged home as soon as you are safe.

The following is designed to help increase your understanding of the programme, enabling you and those around you to take an active part in your recovery.

Please feel free to ask your relatives or friends to read this booklet.

If you have not yet decided to undergo surgery, this booklet may help you make an informed decision with the guidance of your surgeon and GP.

If at any stage you do not understand something, please ask. This booklet does not replace talking to healthcare professionals and you are welcome to ask for information at all stages of your treatment.

Preoperative assessment happens before your surgery at Huddersfield.

The Joint School is run by the Physiotherapy Department at Calderdale Royal Hospital.

Operating theatres and elective Orthopaedic wards are at Calderdale Royal Hospital.

## Knee joint and its anatomy

The knee joint is the largest joint in the human body and is made up of 3 bones: the femur (thigh bone), the tibia (shin bone), and the patella (kneecap). The patella protects the knee and gives leverage to muscles. The ends of the three bones in the knee joint are covered with articular cartilage, a tough, elastic material that acts as "shock absorber" and allows the knee joint to move smoothly.

If damaged, the cartilage cannot repair itself.

## What is a Total Knee Replacement?

A Total Knee Replacement (TKR) operation involves replacing the worn / damaged surfaces of the thigh / shin bones and possibly the kneecap.

Your surgeon will tell you what type of prosthesis will be used.

In the UK, over 100,000 TKR's are done every year. 90% of artificial knees should last 10 years.

It can involve replacing the surface of the kneecap (patella), although many surgeons prefer to leave it in its natural state. When necessary, the rough underside is replaced with a smooth plastic dome.

The new parts are usually fixed with special bone cement, although some designs do not require this.

A polyethylene insert is positioned between the femoral and tibial components. Most inserts are fixed to the tibia, but some also have movement.

## Partial Knee Replacement

In some patients the entire joint is not affected, and they benefit from only having a part of the joint replaced. This is commonly the inner (medial) side but on occasions the outer (lateral) side or the joint between the kneecap and the groove are also replaced in isolation. This discussion will take place with you in the clinic with your consultant.

### Things to consider

It is important to think about your discharge whilst awaiting surgery, in order to prevent any delays in you going home.

Think about someone to come and stay if you may need help once you are at home.

If your toilet is upstairs a commode can be arranged if you feel you would not manage stairs.

Ask friends / family for help with shopping, cleaning or looking after pets if you may find this difficult.

Please ensure arrangements are in place for you to be cared for at home. Family or friends can help you, but you should plan this before your admission to hospital.

If you have no-one to help you at home, please speak to Gateway to care for advice but again ensure that this is done prior to your admission.

Calderdale 01422 393000

Kirklees 01484 414933

Ensure that no alterations are made to your house whilst you are an in-patient (e.g. new kitchens / bathrooms or any decorating work). We cannot delay discharge for these reasons and will ask you to find alternative accommodation if any such work is undertaken.

If your family or friends will be helping you after discharge, please ensure that they themselves avoid booking any holidays for the period when your surgery may be performed.

Have a phone by your bed, or carry a cordless phone in your pocket if you live alone.

Stock up the freezer with precooked food or microwave meals.

Place everyday items in easy reach cupboards (not too high or too low).

Ensure you wear loose fitting, comfortable clothes. You will be expected to get dressed on the day after your surgery. Shorts / skirts are ideal. We encourage all patients to get dressed as quickly as possible. Please ensure you wear good fitting footwear- tight shoes and tight slippers are not ideal. Please do not feel that you have to buy new footwear in preparation for your admission – it is much better to use what you are used to so long as they are in good condition.

### Orthopaedic Outpatient Department

When seen in clinic, the surgical team will explain the reasons for knee replacement and the risks of surgery. This will form part of a discussion during which you will be asked to consent for your surgery and sign a form detailing all the information discussed. You must bring your copy of this consent form on the day of your surgery unless you signed the e-consent while you were in the department.

You should provide a full list of medication you take and any history of past/present medical conditions and allergies

## **Risks and Complications**

### **Infection**

The incidence is between 1-2%. Steps are taken, which start at the pre- assessment, to minimise the risks.

Antibiotics are given before surgery starts. We measure and audit infection rates compared to national data.

We believe our low infection rates are not only due to good ward hygiene, bed management, staff hand washing and infection control measures, but also patient and visitor co-operation.

When infection is present around a knee replacement, it can result in failure and may require further surgery to remove the implant.

### **Deep venous thrombosis (DVT)**

This is a clot in the leg. To help avoid this, you will be encouraged to mobilise early and regularly.

You should try to remain well hydrated and you will be given anticoagulant (blood thinning) drugs for 14 days after surgery.

### **Pulmonary embolism (PE)**

This is a blood clot in the lungs which can come from a DVT, or arise spontaneously in the chest.

This is managed by anticoagulant drugs for 6 months.

### **Bleeding or swelling due to bleeding (haematoma)**

If it does happen the blood thinning medication may be stopped.

### **Nerve Injury**

It is rare to get a serious nerve injury in straightforward cases. However patients who have a significant knock knee deformity undergoing TKR there are at a higher risk of injury to the nerve supplying the muscles in the front of the foot. This will be discussed by your surgeon at the time of consenting for the procedure.

It is common for the skin sensation to be altered on one side of the surgical scar.

### **Persistent pain**

Artificial joints replace the weight bearing surfaces and not the soft tissues of the knee. If your muscles / tendons ached before surgery, they may do so after.

### **Longevity**

Long term, knee replacements may wear and become loose. The younger the age at which you have surgery, the more common this occurs.

If that happens you will need to undergo further surgery.

### **Death**

Small risk of death (<1%); heart attack, stroke and chest infection.

## Enhanced recovery Joint school

An essential part of the enhanced recovery programme is “Joint school”, where you have the opportunity to meet other patients having similar surgery.

It is run by the physiotherapy department at Calderdale Royal Hospital who will provide information of how to exercise / rehabilitate your muscles.

The Therapy Team will explain what will happen in hospital and what you can do prior to your admission to aid your discharge home. They will also explain the rehabilitation you will receive after you leave hospital.

It may seem odd to you to start planning your discharge before your operation has taken place, but a lot of information has to be collated and processed in order to ensure your smooth discharge home.

## Health advice

- Try to give up smoking – or at least cut down.
- Cut down on alcohol.
- Maintain a correct weight for your height.
- Make sure your skin is unbroken and free from sores / ulcers. This will reduce the risk of infection.
- Check for foot problems or visit a chiropodist if unable.
- Make sure teeth and gums are free from infection
- Walk and exercise within the limits of your pain.
- If you have any signs of infection or any sores, ulcers, blisters or wounds please contact the pre- assessment team or your consultants secretary to allow this to be reviewed prior to your surgery.

## Pre-assessment Clinic

This is run by the Anaesthetic Department to assess your fitness for surgery and provide the best anaesthetic, tailored to your needs.

To minimise risks, the pre-assessment nurse will ask you to fill in a health questionnaire. Those with health problems may need to see an anaesthetist. Chronic health issues that could be optimised further will be identified.

You will be asked to bring details of any medications you are taking (an up to date prescription is ideal) and contact numbers for your next of kin.

During this clinic you may have blood tests, an ECG (heart trace) MRSA screening and you may require an x-ray. Other tests will be on an individual basis.

The commonest form of anaesthetic for knee replacement is a spinal anaesthetic. This is done, just before surgery, by the anaesthetist in a room adjoining theatre.

## Pharmacy information

Please bring your usual medication and its packaging with you into hospital. Please do not bring a home made dossett box.

Please make sure you have plenty of your usual medicines at home before you come into hospital.

Some herbal remedies have side effects and some can increase your risk of bleeding which could delay your surgery. Please stop taking herbal remedies at least one week before your operation.

## **This is important for the following:**

- Echinacea
- Ephedra
- Kava
- St John's wort
- Ginkgo Bilbao
- Ginseng
- Valerian
- Garlic (safe in cooking)

## **The day of surgery**

### **Admissions Department**

Please ensure personal property is kept to a minimum- there is very limited space on the wards.

Please try to avoid bringing in large suitcases- it is better to use carrier bags instead - it is also a good idea to bring in an extra supply of carrier bags as you will more than likely go home with more that you brought in!

The Admissions unit is on the third floor at Calderdale Royal Hospital this is accessed via lift 3 (as are the operating theatres and ward 8B).

You will be given a time at which to arrive and a time from which you should not drink /eat.

The admissions nurse will check your documentation is present and go through things again with you.

You will also be given an estimated date of discharge. We aim to discharge you home as soon as you are safe, usually between 24 -72 hours after your operation.

Please note that some surgeons operate an all-day theatre list. This may mean that you arrive in the morning, but your operation may not be until after lunch.

You will be informed of where you are on the operating list on the day of your surgery.

Most patients walk the short distance to theatre anaesthetic room.

Modern anaesthesia is safe and serious complications uncommon. The anaesthetist will stay with you throughout the operation. He/she will place a line in your hand / arm. You may go to sleep but most patients receive a spinal anaesthetic which numbs you from the waist down. You may be given sedation also but often patients are awake with this type of anaesthetic. The anaesthetist will discuss this with you. A spinal anaesthetic lowers your blood pressure so there is less risk of bleeding and need for blood transfusion. It is also associated with a lower risk of blood clots.

Surgery takes about 1.5 hours.

You will spend some time in the recovery area in theatres before transfer to the ward. Your pain will be managed with painkillers. You will have fluids through a drip in your arm but can take fluids by mouth as soon after surgery as you wish. You will also have oxygen, by a mask but this is discontinued when no longer necessary.

### **Ward 8B**

This is the Orthopaedic ward.

There are some side rooms for patients who need barrier nursing, but most patients are in single sex, 4 bed bays.

The nurses will regularly monitor your observations such as pulse, blood pressure, temperature and respiration rate to ensure that you are recovering sufficiently from your surgery. The frequency will depend on your clinical condition. Please note that nursing staff use hand held electronic devices (which at a glance look like a mobile phone) to record this information - please be assured that they are not accessing their personal devices/phones whilst on duty.

You should move your feet and knees to promote blood flow in your muscles and prevent blood clots.

When medically stable and the effects of your anaesthetic have worn off you will be assisted out of bed by nursing and/or physiotherapy staff and may sit in a chair at your bedside. We aim to do this a couple of hours after your operation depending on your clinical condition. You may be given cryo-cuff therapy (ice therapy) to help the swelling of the knee go down. You will be asked to fully straighten (extend) and bend (flex) the knee. You will practice straight leg raising.

First, you will use a zimmer frame to mobilise and reinforce your exercises for rehabilitation.

It is anticipated that you should pass urine between 6-12 hours after the operation; if this is not possible a urinary catheter may have to be inserted into your bladder to drain urine. This is removed once the bladder is empty (intermittent catheterisation).

Family and friends are welcome to visit, but for individual patient comfort please restrict visitors to 2 per bed at any one time. Most people want only their nearest relatives to visit on the day of surgery.

Please inform your family and friends that they will be asked to leave the ward area to enable personal care to be undertaken (e.g. therapy care or X-Ray examinations). The wards operate an open visiting policy between 10.00 - 20.00.

No flowers are permitted on the ward.

Please be respectful of other patients on the ward, as it is important that they receive adequate rest time.

### **Day one after surgery**

You will be given a dose of blood thinning medicine and painkillers as required.

You will have your bloods checked and be taken to the radiology department for a check x-ray.

You will be encouraged to mobilise with to the wash room and toilet. A member of the therapy team will advise how you will manage at home and establish if any other equipment /help will be needed.

The nurses will continue to monitor your observations but your dressings will not be disturbed unless necessary.

The team will have a good idea by now of your abilities and will discuss discharge plans with you.

### **Day two after surgery**

You will be given a dose of blood thinning medication and pain killers as required.

The nursing team will monitor your observations, your wound and dressing and change it if necessary.

You should be able to move around the ward and you will be encouraged to continue your exercises by yourself during the day.

### **Day three after surgery (potential day of discharge)**

You will be given a dose of blood thinning medication and pain killers as required.

Before discharge, you will practice stairs with guidance from the physiotherapy team on the technique most applicable to your home environment.

We aim to discharge patients before midday. Please make arrangements where possible for someone to come and collect you.

Before going home you will be advised when to wean off your walking aids.

Please complete a family and friends card and if you wish to leave any additional online comments this can be done via the patient opinion website.

## Transport home

You will be able to travel as a passenger in a car.

Please make every effort to provide your own transport home. Please note that relatives or friends must pick you up from the ward.

The nursing staff will advise you on pain control and continued use of blood thinning medication.

Supplies will be given to you prior to discharge.

## Follow up appointments

Your follow-up Orthopaedic Out-Patient appointment will be sent to you via post or text.

Please remember that you should not attempt to drive yourself until after this appointment and then only if the surgeon has given you permission to do so.

## Elective Orthopaedic Rehabilitation Team is for Hip and Knee replacement patients who:

Live in Calderdale / Huddersfield or have a Calderdale / Huddersfield GP.

Please be aware that the process for rehabilitation may differ between Calderdale and Huddersfield.

A therapist may visit to check your wound and identify any issues you have.

## Common patient concerns

### Medications

You will be discharged with a supply of tablets (this will usually be your own medications, blood thinning medication (taken for 2 weeks), and painkillers) from the hospital.

Your GP will receive a copy of your discharge letter.

If you need to get a repeat prescription for your tablets you should do so before they run out.

You will most likely be given a tablet, but may require injections in some circumstances to try to prevent clots from developing in your legs. You will need to take this tablet for 14 days after your operation.

The ward nursing staff will discuss your medications with you on discharge so if you are worried or concerned please say so.

Please ensure you bring in all of the medications that you usually take.

### Wound

It is common to have swelling around your wound and down your leg. This will decrease over a few weeks.

Bruising may appear after a few days and can be variable in amount and colour.

Your practice / district nurse or the elective orthopaedic rehabilitation team will check your wound after discharge.

Some wounds have dissolvable sutures, others may have sutures / clips that will be removed between ten to fourteen days after surgery.

Dressings are left in place unless otherwise informed by consultant or nurse.



### **More complex wound issues could be :**

- Wound leaking
- Becoming increasingly painful
- Any out of the ordinary concerns

### **Swelling and bruising**

The amount of swelling and bruising varies from patient to patient. Bruising is common and variable in degree. Rest periods on the bed with your legs elevated are important to reduce the swelling, but moving around and exercises are equally important to encourage a muscle pumping action to move the circulation efficiently around your leg.

Rather than asking your G.P about concerns with your wound dressing, please ring one of the contact numbers below as soon as possible for advice and review.

**Between 9am - 4pm Monday – Friday ring the Orthopaedic outpatient treatment clinic**

**Huddersfield 01484 342559**

**After 4pm and at weekends or bank holidays please contact the Calderdale Orthopaedic ward**

**Ward 8B - 01422 223801**

### **Other useful numbers:**

**Elective Orthopaedic Rehab Team 01422 306723 Monday – Friday 9am – 4.30pm**

**Pharmacy CRH 01422 224355**

**Pharmacy HRI 01484 342131**

### **Constipation**

It is quite normal that you may not have a bowel movement for the first 2-4 days after the operation. It is important to have plenty of fibre in your diet. Fresh fruit and vegetables will help to maintain normal bowel activity. Drink plenty of water but not more than 3 litres per day.

### **Weaning off sticks**

When weaning from two sticks to one, practice indoors before outside where the ground is more unpredictable.

Don't try to hobble around without using anything as this will encourage limping. You will know when you feel ready to reduce the amount of support you need because you will have less pain and feel more strength around the knee.

### **Washing and bathing**

You may find it helpful to have a chair at your bathroom sink so you can rest during washing. It may be possible for you to stand in the bath and shower if you have been taught how to do this. Please observe any advice given from nursing staff with regards to wound/wound dressings.

### **Work**

Everyone needs time off after an operation; however getting back to work is part of your recovery. People whose work involves a lot of heavy lifting, walking or standing up for long periods of time will



not be able to return as quickly as those who have jobs that are less physically demanding. In most cases it is usually safe to return to light work or an office job 8 weeks after your surgery.

If your job involves heavy duties you may need to be off work up to 12 weeks.

If your employer has an occupational health department they can give you further advice.

A 6 week sick note can be given from the ward.

## Driving

You should inform your insurance company of your operation. Some companies will not insure drivers for a number of weeks following surgery so it's important to check. Normal advice is to avoid driving for the first 6-8 weeks and only essential passenger journeys for the first 3 weeks. Before returning to driving you should be free from the sedative effects of any pain relief medication. You should judge yourself to be in safe control of your car- including an emergency stop.

If you have concerns then please discuss this at your review clinic appointment.

## Day to day

Give yourself a goal to achieve every day.

Before getting out of bed, do your exercises. This will loosen up your leg and help reduce the amount of stiffness you have first thing.

The muscles around the knee improve for up to 12 months after joint replacement.

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**If you have any comments about this leaflet or the service you have received you can contact :**

Orthopaedic Matron  
Calderdale Royal Hospital  
Telephone: 01422 357171  
[www.cht.nhs.uk](http://www.cht.nhs.uk)

**If you would like this information in another format or language contact the above.**

Potřebujete-li tyto informace v jiném formátu nebo jazyce,  
obratte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych  
informacji w innym formacie lub wersji językowej,  
prosimy skontaktować się z nami, korzystając z ww.  
danych kontaktowych

ਬ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਚੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,  
ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਮਾਫ਼ੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو  
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم  
المذكور أعلاه"