

Total Knee Replacement

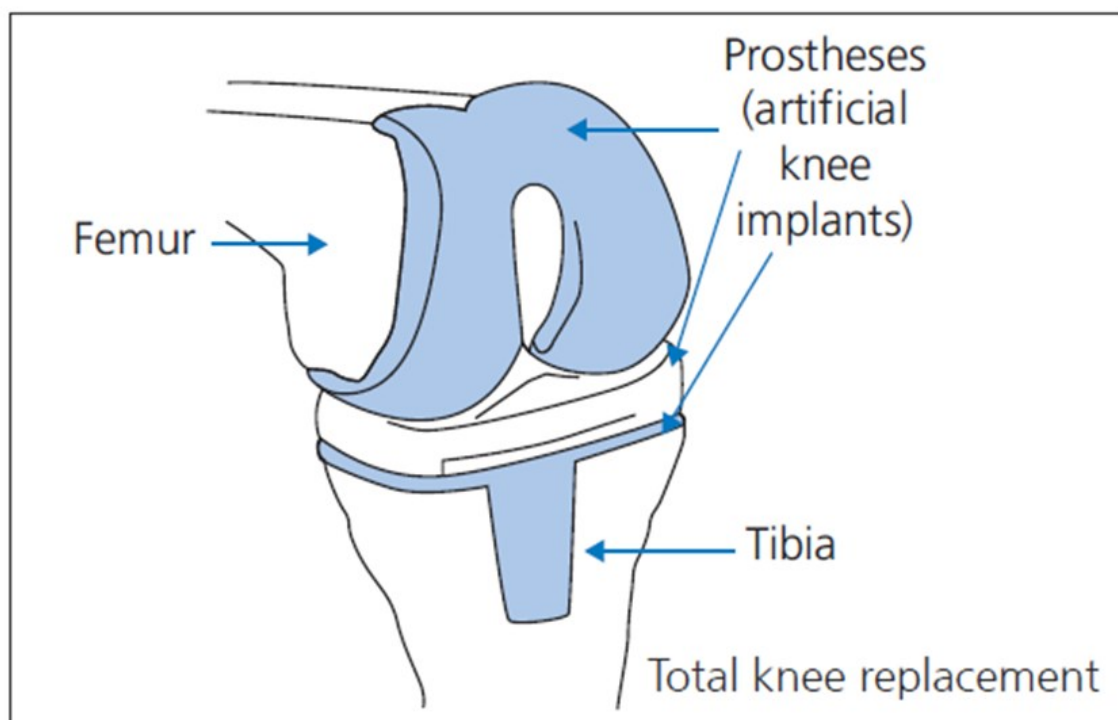
The Enhanced Recovery Programme

Welcome to our Enhanced Recovery Programme for total knee replacement surgery (TKR).

The aim of this programme is to help you recover quickly and safely from your surgery and allow you to get home three to four days after your knee replacement. We have written this booklet to provide information about your knee replacement and hospital journey to enable you and your family to take an active part in your recovery. Please read through this booklet and bring it with you when you come in to hospital as it contains useful information and exercises for you to follow.

Total Knee Replacement

A total knee replacement is a surgical operation to replace the damaged knee joint with an artificial one made from metal and plastic.



What is the Enhanced Recovery Programme?

This programme aims to optimise your hospital experience by improving pain relief, allowing you to mobilise earlier and ultimately enable you to go home sooner.

The enhanced recovery programme involves:

- Advice and information to allow you to prepare for your surgery
- Carbohydrate rich drinks before surgery to avoid long fasting times
- Tailored pain relief after your operation
- Early feeding after surgery
- Early walking after surgery

You will be given daily goals which you will be encouraged to achieve with the help of our doctors, nurses and other healthcare professionals. These goals will be adapted accordingly to individual needs. We will monitor your progress daily and support you in achieving these to allow you to have the smoothest recovery.

Pre-Operative Assessment

- A Pre-Operative appointment will be allocated to you
- You are welcome to bring a relative or friend with you
- A Pre-Operative nurse will review your previous medical and surgical history
- You will have blood tests and some basic investigations completed
- Information and leaflets will be provided on your upcoming surgery. You will have the opportunity to ask questions.
- A physiotherapist may also take further details, carry out physical assessment and provide further information.
- The Pre-Op Nurse will follow up results of tests/investigations and will contact you or your GP if there are any issues.
- An anaesthetist may be required to review the information gathered and may request further assessment or investigations.
- You should be called for admission within eight to twelve weeks of your Pre-Operative assessment date.
- Occasionally, the anaesthetist along with the orthopaedic surgeon may make the decision to suspend or even cancel your surgery depending on personal risk factors.

It is very important that you have been to a dentist for a check-up before or shortly after your Pre-Op Assessment appointment to make sure there are no infections.

Social Care

Following surgery most people are able to go home from hospital with family, friends and carers support. However if required, a social assessment will be carried out and support offered if the necessary criteria is met. Referral to Social Services can be made through your Nurse on admission.

How to improve your recovery before your operation

It is important you are as fit as possible before your operation. This will help you recover quicker from your surgery.

Measures to help improve your recovery include:

- Eating and drinking well in the months prior to surgery. This improves your skin condition and improves wound healing as well as preventing constipation
- Staying as physically active as possible. Walk and exercise within the limits of your pain, as often as you can, as this will make your rehabilitation after surgery easier.
- Maintain the correct weight for your height
- Cutting down or stopping smoking and alcohol as both impair wound healing and slow your recovery following surgery
- Tell us if you have any infection or treatment for infection.

Elective Orthopaedic Unit

The Elective Orthopaedic Unit is a ward in Altnagelvin Hospital. The ward is an orthopaedic ward used for admitting booked patients for hip and knee replacements and other orthopaedic surgery.

The ward has a strict protocol to help reduce infection due to the fact that most patients can be at risk of infection after having their new knee replacement.

- Visiting — 3 to 4pm and 7 to 8.30pm.
- Flowers are not allowed on the ward
- Clutter — patients are advised to bring in as little personal belongings as possible
- Bring in loose fitting leisure wear.

On admission you may have to wait on a bed becoming available. This is not unusual. You will be seen by a doctor and admitting nurse while waiting on a bed. There is also a discharge room where you may be asked to wait in at end of your hospital stay.

Day of surgery

You will be given four high energy drinks to take the evening before your surgery and a further two drinks at 6am on the day of surgery. These drinks help to limit the time you fast and allow your body to be better prepared for surgery.

You can drink water until 6am on the morning of your surgery. We encourage you to have a drink of water overnight if you are awake. You are not allowed to eat food or chewing gum on the morning of surgery.

Please ensure that you bring your usual medication in with you from home in the original boxes. Continue to take all your usual medication, including on the morning of surgery unless you are advised not to do so at your Pre-Operative visit. If you are in hospital the night before surgery nursing staff will administer your usual tablets.

Pain relief medications will be prescribed for you to take on the morning of surgery to improve your pain following the surgery. You can take this and your usual medications with a small drink of water.

Your surgery is likely to take one to two hours and you will spend some time in recovery area following your surgery before coming back to the ward. You can eat and drink as soon as you feel able following your surgery.

Anaesthetics

Most knee replacements are done by a spinal anaesthetic. In some cases a general anaesthetic is required.

A spinal anaesthetic involves an injection of local anaesthetic into your lower back. It temporarily numbs the nerves that supply the lower half of your body. It will ensure you are pain free throughout the procedure but are able to eat drink and mobilise sooner compared with a general anaesthetic. Your anaesthetist will discuss the anaesthetic plan in more detail with you before surgery. Light sedation is usually offered during the operation and you may experience a natural sleep.

Advantages of Spinal vs General Anaesthetic

- Less sickness and drowsiness
- Eating and drinking sooner
- Less risk of chest infections or breathing problems
- Less bleeding during the surgery
- Good pain relief immediately following operation
- Lower requirement for strong pain relief
- Less risk of becoming confused after the operation, especially if you are an older patient

Like all medical treatments there are some possible side effects:

Common complications

- *Headache* - there are many causes of a headache after an operation but if it is severe and gets worse when you sit or stand then it could be caused by the spinal. An anaesthetist will assess you and manage your headache
- *Low blood pressure* - this can be easily treated with fluids in through the drip and or drugs to raise your blood pressure
- *Difficulty passing water* during the time the spinal is working. This usually returns to normal once the spinal has worn off. Sometimes a catheter is required for a short period of time
- *Pain during the injection* - if you feel pain in places other than where the needle is (legs or bottom) inform the anaesthetist and they will reposition the needle as it might be touching a nerve.

Rare complications

- *Nerve damage* - temporary loss of sensation, pins and needles and sometimes muscle weakness may last for a few days or even weeks but almost all of these make a full recovery. Permanent nerve damage is very rare (1 in 50 000 spinals).

Please advise nursing/medical staff if you have any of these symptoms.

After surgery

In the first 24 after surgery

- You will be transferred out of bed and encouraged to mobilise on the afternoon of your surgery.
- You will be encouraged to walk with the use of a walking aid
- The nursing staff will help you with going to the toilet and personal care.
- You may have a 'drip' in your arm to replace any fluids you lose during surgery. This will be taken away once you are drinking enough fluids.
- You will receive pain medication regularly but it is important that you inform nursing staff if you have pain so your pain can be managed effectively.
- You might have a drain in your knee. This is to remove blood that gathers in the joint after the surgery. We will remove this within twenty four hours.
- Your ankles may swell. We will put a strong elastic stocking on your leg within twenty four hours of surgery to help relieve the swelling and to help prevent blood clots.
- Some patients may need to have a urinary catheter if they are having difficulty passing urine.

Physiotherapy

- It is important that you take deep breaths and move your feet and ankles as soon as you return from the operating theatre, and continue with these until you go home.
- It is important to take your medicine as this will control your pain and make it easier for you to do your exercises. You will have ice applied to your knee to assist with control of pain and swelling.
- The physiotherapist will teach you exercises and supervise your progress. It is important that you take responsibility for doing your exercises every day.
- Physiotherapy starts the day of your surgery (tensing your thigh muscles and straight leg raising).
- Physio may use a CPM (continuous passive movement) machine after surgery this is to assist with knee bending. You will be supervised by the physiotherapist or nurse. The aim is for you to be able to bend your knee at a 90-degree angle before you go home.
- Your knee-bending exercises will start the day immediately after surgery.
- You will start to move about with a Zimmer frame and then progress on to crutches.
- When you sit on a chair, your leg will be supported on another chair intermittently throughout the day. It is important for the knee to be in a straightened position but also a bent position.
- If you have stairs at home, the physiotherapist will teach you how to use the stairs with crutches before you go home.
- You may expect to leave hospital about two - three days after your surgery.
- Physiotherapy will be organised for you on discharge should you require it. This will take the format of a class setting or on a one to one basis in an outpatient setting.

Recognised Complications

Clots

You should wear the elastic stockings supplied until you return to the outpatients' clinic in six to eight weeks after surgery. You will be shown how to give yourself injections on discharge. If you develop pain in your calf contact us immediately or attend your local A&E. You will receive an information leaflet about signs of a clot and prevention.

Swelling and Bruising

- You may have swelling and bruising around the knee or hip and down into the lower leg after your total joint replacement.
- Bruising could last for up to six to eight weeks and this is part of the normal healing process.
- Being on the blood thinner after surgery can contribute to this bruising too. However this medication is very important so please continue to use it as you are directed.
- Swelling of the leg and down into the foot can sometimes last for two to three months.

Restless leg

- May occur after joint surgery, especially after knee replacements.
- Feeling of diffuse pain, calf pain, cramping or the sensation to move your leg around.
- Most experienced at night.
- Resolves as muscles and joints heal – eight to ten weeks after surgery.
- If you have restless leg before surgery it may be worse temporarily after surgery. Consult your GP to control the condition prior to joint replacement.

Treatment for restless leg:

- Anti-inflammatory medications.
- Walking.
- Exercising or moving your joint, especially at night.
- Stretching.

After you leave hospital

- You should wear shoes with a low heel and non-slip soles.
- When showering, it is important to keep your wound dry.
- If you have swollen ankles after your surgery, rest your legs up on a chair.
- You should wear the elastic stockings supplied until you return to the outpatients' clinic in six to twelve weeks after surgery. You should wear these at night and you may remove them for washing during the day. A second pair of stockings will be supplied.
- Your knee may be warm, swollen or uncomfortable for some months after surgery, continue to apply ice regularly throughout the day.
- You should continue exercises as prescribed by your physiotherapist until the knee is fully straightening and bending easily.
- The strength and use of your knee replacement will depend on you continuing to do your exercises.
- Do not drive until your review appointment or when you can do an emergency stop, not using any walking aids and have checked with your insurance company.

Physiotherapy Exercises

The following exercises should be done three times a day during the day for at least twelve weeks. The physiotherapist will guide you with these exercises after surgery so you can carry them out independently on discharge home. These exercises will help knee range of motion and strength and should be performed pre and post-operatively.

Please note: these exercises may worsen your pain initially.

Pain following a knee replacement remains for many weeks and is normal for everyone. Take pain killers as prescribed before you exercise to try and reduce the after-effects. Swelling can also persist, use ice regularly during the day. The physiotherapist will provide you with an Ice-Band after surgery and this should be used regularly at home.

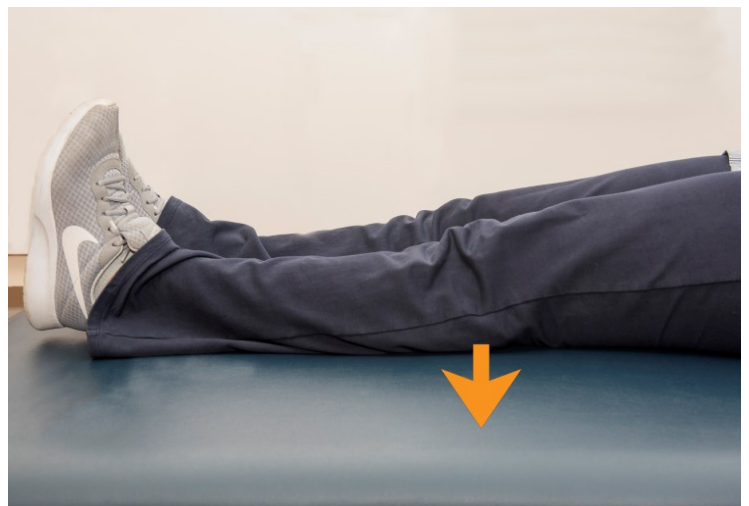


Sit on a bed with your legs straight out in front of you. Put a band around your foot. Bend your knee as far as possible. Hold for approximately ten seconds. Gently pull the band to bend your knee a little more. Hold for approximately ten seconds. Finish by straightening the knee down against the bed.

Repeat ten times.

Tighten your thigh muscle and pull your toes up towards you as you attempt to press the back of your knee downward towards the bed.

Hold five seconds and repeat ten times.





Lie on your back. Place a cushion under your knee and keep your other leg straight on the bed. Exercise your operated leg by pulling your foot and toes up, tightening your thigh muscle and straightening the knee (keep your knee on the cushion). Hold for approximately five seconds and slowly relax.

Repeat ten times.

Tighten your thigh muscle and pull your toes up towards you. Lift your leg straight up off the bed ensuring knee is kept straight throughout the movement.

Hold five seconds and repeat ten times.



Sit on a chair. Pull your toes up, tighten your thigh muscle and lift your leg off the floor to straighten your knee. Hold for approximately five seconds and slowly relax your leg.

Repeat ten times.



Sit on a chair with a towel or cardboard under one foot. Slide the foot under the chair as far as you can. Move your knee forward keeping the sole of your foot in contact with the floor. Hold for approximately ten seconds.
Repeat ten times.

Sit on a chair with one leg straight in front of you. Place your hand on your thigh just above the knee cap. Lean forward keeping your back straight. Straighten your knee, assisting the stretch with your hands. Hold for approximately fifteen seconds.
Repeat ten times.



Sitting on a chair, with the leg to be exercised supported on a chair as shown, let your leg straighten in this position. Hold for approximately fifteen seconds or longer (up to one minute).
Repeat ten times, regularly throughout the day.

Managing your new joint

- It may take 6 to 12 months to get the full benefit from your knee replacement.
- It is important to continue exercises as part of your daily plan.
- This helps the thigh and calf muscles to stay strong and improve how your knee moves.
- Slowly increase your level of movement by doing different things every day.
- It is important not to gain extra weight. This may reduce the life of your new knee joint.

In a short time your new joint will allow you to return to most activities including intercourse. In general, it is safe to resume intercourse approximately three months after surgery.

Walking

When you leave hospital you should be walking with a Zimmer frame or crutches. Put both crutches forward then step forward with your operated leg first and then bring your other leg through. Do not turn your leg inwards when walking.

Stairs and steps

Going up - use your good leg first, then your operated leg and then your crutches.

Going down - use your crutches, then operated leg first, then your good one.

Advice on equipment

- Crutches or Zimmer frame (or both) – when you feel safe on your crutches you can reduce to one after six weeks.
- For other activities such as driving, swimming, dancing, returning to work, you should check with your consultant at your review appointment.

General Advice

If you have any of the following problems after going home please contact Rhonda Moore, Arthroplasty Review Nurse on the number on the last page:

- If you have painful 'clicking' (painless clicking is common and usually doesn't mean anything).
- If severe pain or swelling returns and lasts more than a few days.
- If the strength and movement of your knee is reduced even after you have continued to do your exercises.
- If your wound is oozing, looks red or swollen, is hard or hot to touch or very painful.

Wound site: Care of your wound

- Keep your wound clean and dry
- Do not tamper with your dressing
- Take painkillers as prescribed
- Exercise toes as shown
- You may have been instructed to elevate your limb e.g. leg to reduce swelling
- Drink plenty of fluids
- Eat a well-balanced diet

Wound site: Sign of infection

- Increased discomfort/swelling/burning under your dressing
- Redness spreading on leg
- Pus coming through your dressing
- Feeling unwell/ flu like symptoms or sweating
- Offensive smell from wound.
- Pyrexia (High temperature)

If you have any of these signs or concerns regarding your wound contact us immediately on contact number on back page.

Avoid

Any activities which involve stop-start, twisting or impact stresses for example, running, tennis or a lot of bending with weight bearing, such as attempting to squat.

Advice at the airport

This depends on each individual airport. Your new knee joint may cause the alarm to sound, although it is unlikely. Tell the security officer that you have a new knee joint. He or she may pass a hand-held wand over your knee to confirm it contains metal. Joint replacements are very common around the world and security staff are aware of them.

Your review appointments

First review - should be six to eight weeks after you leave hospital with your consultant. Further follow up appointments will be with Sr Rhonda Moore, Arthroplasty Review Nurse. At these appointments you will be asked to fill out questionnaires which help the Orthopaedic Team to maintain a good service.

We will post your appointment out to your home address. If you do not receive an appointment, contact:

Orthopaedic Outpatients Department on: 028 71 345171 ext: 213022

If you have any concerns about your new knee that you would like to discuss please contact:

Rhonda Moore,

Arthroplasty Review Nurse: 028 7161 1282

**Outside of working hours please contact the
Elective Orthopaedic Unit
on 028 7161 1205 and ask for Nurse in Charge**