



Total Knee Replacement

Patient Information

Booklet



Western Health
and Social Care Trust

Welcome to Altnagelvin Hospital



If you have received this information booklet then you are likely waiting for a total knee replacement.

This booklet will help you to understand what to expect from when you are placed on the waiting list for this operation to your rehabilitation and follow-up care after your operation.

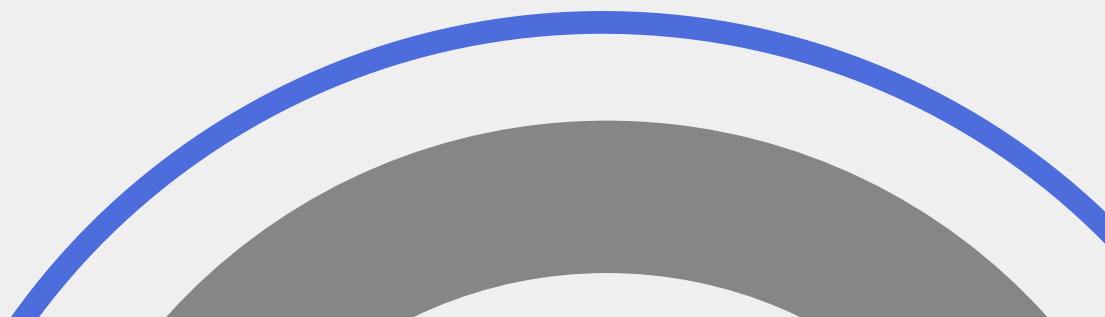
Waiting to have a knee replacement can be an anxious time for some, however learning more about what to expect can help to reduce the fear of the unknown.

It is extremely important that you and your family or friends who support you read through this booklet together.

Please bring this booklet with you when you attend any hospital appointments in relation to your knee operation, as it has helpful information that hospital staff may wish to discuss with you.

Table of contents

	Page
Placed on the waiting list	5
Before your Operation	
• Attendance at Pre-Operative assessment clinic	9
• The “Helper” role	11
• Preparation at home	13
• What to bring to hospital	15
Your Hospital Stay	
• Attending hospital for your operation	16
• Your Hospital Care	21
• Physiotherapy	23
• Managing your New Joint	28
After your Operation	
• Going Home from Hospital	29
• Follow-up Care	30
Risks of having a Knee replacement operation	31
Potential problems after your knee operation	34
Knee Replacement Helpline Contact Details	39



Your Knee Replacement Journey

Assessed at Consultant Led Clinic and placed on Waiting List for Operation

Attendance at Pre-Operative Assessment

Preparation at Home

Attending Hospital for your operation

Your Hospital Care

Going Home from Hospital

Follow-up care



Assessed by Surgeon and placed on waiting list for your Operation

Following your outpatient appointment at the Consultant Led Clinic, your name has been placed on the waiting list for orthopaedic surgery.

In an effort to treat you with the minimal waiting time, you should be aware that it may be necessary to transfer your care to another surgeon, or to an independent healthcare provider who is working with the Trust.

Staff continue to make the best use of constrained resources. Administrative and clerical staff such as consultant secretaries cannot change your waiting time and follow guidelines set down by HSCNI to manage waiting lists chronologically (in date order) based on the patients clinical priority as indicated by the consultant.

Waiting times

The waiting times are also on the WHSCT Trust website, if you scan the QR code on the right using your smart phone it will take you to the current waiting times or click [Here](#)

 Western Health
and Social Care Trust



It is important that you advise us that you no longer require to remain on the waiting list for surgery. This can be due to any of the following:

- You find you are no longer experiencing any signs or symptoms of your original problem.
- You have developed other health issues which mean you no longer can or wish to proceed with surgery.
- You have chosen to have your surgery carried out privately.
- You have simply decided not to proceed with surgery.

PLEASE CONTACT YOUR CONSULTANT'S SECRETARY
Altnagelvin Hospital telephone number: 028 7134 5171

Healthy Lifestyle

We aim to promote a healthy lifestyle before your operation to help reduce certain risk factors associated with operation and anaesthetic. We advise that if you smoke, you should seek advice regarding stopping smoking at your local pharmacy or GP. There are free services available in the community to help you stop smoking (Tel: 0800 9179388).

If you drink more than 14 units of alcohol per week or are drinking alcohol daily, there are increased risk factors for surgery. Please ask your GP for advice or additionally, for further information on any of the above lifestyle issues, there are websites such as www.publichealth.hscni.net.

From the day you are put on the waiting list for your operation we recommend you begin a healthy lifestyle.

Diet Management

It is important that you make good lifestyle choices both before and after your operation. If you smoke cigarettes, cigars or a pipe, you should stop smoking for as long as possible before your operation and for at least 6 weeks after your operation to reduce the risk of complications, particularly infections.

Body Mass Index (BMI) is the most commonly used method to classify adult weight. It is defined as weight in kilograms divided by the square of height in metres (kg/m^2). A BMI of greater than 25 is overweight and greater than 30 is classed as obese.

A BMI of 40 or more is linked with significantly increasing risks after your operation, particularly infection and wound problems. If your BMI is 40 or more your operation may be postponed. If you are overweight or obese, try to start and keep healthy eating habits and seek support for weight loss measures. Maintaining a healthy weight will have long-term health benefits to you.

Exercising before your Operation

SCAN ME



Staying active is important if you're waiting for or recovering from an operation. If you're fit and have strong leg muscles, your operation has the best chance of success, and you'll likely recover quicker. Over time, exercise can also increase your mobility, help your balance and boost your mood. Please scan the QR link on the left for more information or click [Here](#)

It is generally very safe to exercise before your operation but lots of people find it difficult to take the first step. You might be nervous or not know what exercises to try before your operation.

**VERSUS
ARTHRITIS**

Versus Arthritis have created videos with safe exercises to follow to build yourself up while waiting on your surgery. Try to achieve the recommended 150 minutes of exercise a week for adults at a level that you can achieve. Please scan the QR link to access this information and videos or click [Here](#)



SCAN ME



SCAN ME



TORC have also created very useful videos for patients in Northern Ireland where you can get more information on preparing yourself for your operation, your hospital stay, recovery after Knee replacement and exercises for your Knee replacement. You can view these by scanning the QR Code on the left or click [Here](#)



You can try some of the useful Physiotherapy Therapy tips and exercises before your operation on pages 23-27 in this booklet to get you started.

If you struggle with the exercises on pages 23-27 and are concerned about starting new exercises before your operation you can contact your local GP to get information on community exercise groups in your area. These can support you to build up your confidence with exercise.

If you are unable to manage any exercise due to your pain you should liaise with your GP or Consultant. They may feel it is appropriate to refer you to your local Physiotherapy department to provide you with more support.

Please see the Infographic below from the UK Chief Medical Officer: Physical Activity Guidelines for adults and older adults:



Attendance at Pre-Operative Assessment clinic



When you have been assessed by a consultant and placed on a waiting list for your operation you will be contacted to attend Altnagelvin Hospital for a Pre-Operative assessment a number of months before your operation date.

- You are welcome to bring a relative or friend with you to the appointment.
- A Pre-Operative nurse will discuss your previous medical and surgical history with you.
- You will have blood tests, an ECG (cardiac tracing) and some other basic investigations completed.
- This may also include a urine sample and x-rays.
- Other healthcare staff such as Physiotherapists and Occupational Therapists may also take further details, carry out physical assessments and provide you with more information.
- The Pre-Operative Nurse will follow up results of tests/investigations performed 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 before your operation can go ahead.
- Ideally, you are called for admission for your operation within twelve weeks of your Pre-Operative assessment date unless further investigations are required.

Attendance at Pre-Operative Assessment clinic

- Occasionally the anaesthetist and your surgeon may decide to postpone or even cancel your operation date depending on your personal risk factors. If this occurs it will be discussed with you.
- It is very important that you have been to a dentist for a check-up appointment before or shortly after your Pre-Op Assessment appointment. This is to make sure there is no dental infection that could spread to your knee replacement. If this is not completed your knee operation is likely to be delayed.



We will also ask you to consent to your information being registered on the National Joint Registry. The National Joint Registry records, monitors, analyses and reports on the performance of all joint replacement surgery. This is done to improve service quality and to help research aiming to improve patient outcomes.

We require you to complete questionnaires regarding your pain, function and overall health before your surgery and at intervals (typically 3 months and 1 year) after your surgery so we can assess how our service is doing. These will be posted to you or be available online.

The Western HSC Trust may utilise the services of Belfast HSC Trust to send out the outcome score questionnaires on our behalf. To facilitate this, we may share the minimum amount of your personal data with them, to expedite you receiving this documentation.

For further information the Regional HSC Privacy Notice can be accessed via the Western Health & Social Care Trust website.

For further guidance on how we use information gathered as part of the Outcome Scores for Knee Replacements, you can contact our Arthroplasty Practitioner on the helpline contact details as on Page 39.

The Helper Role

How to Prepare for Going Home after Your Operation

The purpose of going through surgery is to improve your quality of life and allow you to do the things you enjoy more easily. It is important that you feel a part of this process. This means making sure that you are well prepared for your operation and returning home afterwards.

You are in charge of arranging your care for when you go home from hospital. Many people think that they will need additional nursing, occupational therapy or physiotherapy care when they go home, but in reality, this is not necessary. If you are able to look after yourself before your operation, you should be able to look after yourself after your operation with help from your friends or family. If you have been managing at home in pain before your operation, this level of pain should decrease gradually after your operation allowing you to manage at home with more ease. Resources (in the hospital) to provide assistance at home after your operation are so limited that providing help will only be considered in exceptional circumstances.

Therefore it is important you choose a “helper” to help you prepare for your operation and support you after your operation when you go home. A checklist of what they need to do is shown on the next page. They could be a friend, neighbour, partner or family member. They should be able to help you organise transport to the hospital on the day of your operation and home the next day after your operation. Many patients who are fit and well can now expect to go home the day after their operation.



Before you come to hospital, you should prepare for when you return home after your operation using the tips below;

- Move items you use regularly in the kitchen or other rooms to places they can be easily reached.
- Prepare meals before your operation and freeze them to make it easy to have dinners ready.
- Ask your “helper” to help with grocery shopping and cooking after your operation.
- Try to have your cleaning and laundry up to date before surgery.
- Move any tripping hazard such as rugs or mats.
- If you have stairs, a secure banister rail may be useful. In some cases, you may need to arrange for your bed to be moved downstairs for a period to help you recover at home after your operation.
- You should not normally require any additional equipment following surgery.

The Role of “The Helper”

- T** - Transport home (before lunchtime on day of discharge) and transport to and from any clinic appointments.
- H** - Helping you wash and get dressed, especially putting on lower half garments e.g. shoes, socks, underwear, trousers.
- E** - Encouraging you to do your home exercises and to walk regularly.
- H** - Home tasks such as making drinks, preparing meals and/or freezing food, shopping and cleaning.
- E** - Encouraging you to elevate the limb for at least 30-60minutes at least 3 times a day to reduce swelling.
- L** - Lifting your operated leg into/out of bed (but you may not need help with this).
- P** - Providing company if you are feeling low.
- E** - EnJoy tasks! Such as, delivery of GP letters, collection of prescriptions and contacting the hospital if there are any problems.
- R** - Reminding you to take regular pain relief.

Preparation at Home

Please follow and complete the 9 point Preparation check-list provided below to make sure you are ready for your operation:

1 Read all of the information in this booklet



2 Begin a healthy lifestyle from the day you are put on the waiting list for your operation (See pages 5-8).



3 Follow any instructions given about stopping certain medications in the days before your surgery. If you have been told by the Pre-Operative assessment team to stop some of your medication before your operation, please ensure you do stop taking it - this is for your safety. If you have not stopped taking your medication your operation cannot go ahead.

Please bring all your medications into hospital with you including tablets, capsules, inhalers, cream/ointments, eye drops, nasal drops, over-the counter medicines, herbal medicines and an up-to-date medication/prescription list.

If you usually take Warfarin, please bring in any records or booklets you have which give details of your usual doses. These will be returned to you when you are going home from hospital.

Please let the doctor or Pre-Operative assessment nurse know regarding any of the following:

- Any changes to your medications/prescription from your GP;
- You become unwell requiring antibiotics
- You are hospitalised between the time of the assessment and your operation
- You develop:
 - (a) leg ulcers
 - (b) wounds
 - (c) open sores
 - (d) discharging spots.

This is important as your operation may need to be postponed for your safety/recovery until the infection has cleared.

If your operation is cancelled for any reason and you have stopped taking your medications in preparation for your operation please contact the Pre-Operative nurses for advice.

The Pre-Operative Assessment Clinic telephone number is:
028 7129 6228.

Preparation at Home

4 You should fast from midnight the night before your operation. This means no food, no sweets, and no chewing gum from midnight the night before your operation. Please continue to drink still water as required up until admission to hospital. You can have a cup of black tea or coffee before 7am. Once in the hospital we will limit you to a maximum of 150mls/hr of water up until you go for your surgery.

If you eat or drink after these times your operation may be cancelled for your safety. It is very important that you tell us if you have eaten or drunk anything after these cut-off times.



5 Prepare your house for going home after your operation and choose a "Helper" See previous the "Helper" section on pages 11-12 for this information.



6 Organise your own transport to and from the hospital See "Helper" info leaflet on page 11 for more information.



7 Dental Check before your operation See page 10 in the Pre-Operative assessment information.

Prepare what you need for your hospital stay:

8 In Ward 21 you will be encouraged to wear your own clothes from the day after your operation. This is to promote your dignity and help your recovery. Please bring regular medication and repeat prescription list.



9 Bring your "Perfect Bag" with you as shown in page 15

You need to bring the 'Perfect Bag' to hospital

Day Clothes

Bring loose fitting leisure clothing such as a Jumper, t-shirts, trousers, socks and shoes with a hard sole.

Personal Items

Bring items that you use daily such as reading glasses, hearing aids and false teeth.

Night Wear

Bring night wear for night time and slippers with a hard sole.

Toiletries & Medication

Bring toiletries such as tooth brush/paste and cleaning/hygiene products. Also bring in any current medication you are on.



Attending hospital for your Operation

Please contact Ward 21 the day before your operation on 028 7724 6961 to confirm the time that you should attend hospital.

You may be asked to attend the hospital on the morning of your operation or on the afternoon the day before your operation. If you have not previously signed a consent for surgery form, then your surgical team will discuss the operation beforehand with you and you will both sign the consent forms together. If you have already signed your consent form before being admitted to hospital, then the surgical team will check it with you before you go for your operation.

A mark will then be drawn on your leg. This is an arrow that points to the knee that you are going to have replaced in your operation.

You will be admitted by the nurse on the ward and the Anaesthetist who will talk you through the anaesthetic process and the management of pain following your operation. The anaesthetist will prescribe a 'pre-med' (pre-medication) before your procedure. This is the name for drugs that can be given before an anaesthetic. This will include drugs to prevent sickness, to reduce acid in the stomach, to help you relax and to reduce post-operative pain.

Elective Orthopaedic Unit

Ward 21

Please contact Ward 21 the day before your operation on 028 7724 6961 to confirm the time that you should attend hospital.



The Elective Orthopaedic Unit is Ward 21 in Altnagelvin Hospital. This 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 the risk of infection after having a new Knee replacement.

- Visiting times are 3 to 4pm and 7 to 8pm. Anything outside of these hours can be discussed with the nurse in charge.
- Flowers are not allowed on the ward.
- Clutter – patients are advised to bring in as little personal belongings as possible to allow for effective ward cleaning.
- Bring in loose fitting leisure wear.
- Only 2 visitors are allowed at a time and nobody under the age of 16.
- 028 7724 6961 is Ward 21's direct telephone line.

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 lounge where you may be asked to wait in at the end of your hospital stay.

Day of your Operation

You should fast from midnight the night before your operation. This means no food, no sweets, and no chewing gum from midnight the night before your operation. Please continue to drink still water as required up until admission to hospital. You can have a cup of black tea or coffee before 7am. Once in the hospital we will limit you to a maximum of 150mls/hr of water up until you go for your surgery.

If you eat or drink after these times your operation may be cancelled for your safety. It is very important that you tell us if you have eaten or drunk anything after these cut-off times.

It is very important to continue to take all your usual medication on the morning of your operation unless you are advised not to do so at your Pre-Operative assessment appointment. If you are in hospital the night before your operation the nursing staff will give you your usual tablets.

Pain relief medications will be prescribed for you on the morning of your operation to improve your pain after the operation.

Your operation is likely to last one to two hours and you will spend some time in the recovery ward after your operation before coming back to Ward 21. You can eat and drink as soon as you feel able after your operation.

Anaesthetic

Most Knee replacements are performed using 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 feeling to the lower half of your body. It will ensure you are pain free throughout your operation but that you are able to eat, drink and mobilise quicker after your operation compared with a general anaesthetic. Your anaesthetist will discuss the anaesthetic plan in more detail with you before your operation.

The anaesthetist will also give you sedation to make you relaxed and sleepy during your operation. You will usually hear nothing during your operation but if you do, you will be relaxed and this will not upset you. Also, a screen is always used so that you will not see any of the operation taking place.

Advantages of the Spinal Anaesthetic

- Less sickness and drowsiness
- Eating and drinking sooner after your operation
- Less risk of chest infections or breathing problems after your operation
- Less bleeding during the operation and reduces risk of clots after your operation
- 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
- Low blood pressure - this can be easily treated with fluids through a drip and/or drugs to raise your blood pressure
- Difficulty passing water during the time the spinal anaesthesia is working. This usually returns to normal once the spinal anaesthesia has worn off after your operation
- 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 after spinal anaesthetic (1 in 50,000).

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

Your Hospital Care

Types of Knee Replacement

The knee replacement consists of 3 parts. 2 metal parts cover the bottom end of your femur bone and the top part of your tibia bone. The third part of the knee replacement is made of a special type of hard wearing plastic and fits between the 2 metal parts.

The knee replacement may or may not require cement to be used. The choice is based upon surgeon preference and patient factors. Your knee cap is not usually replaced, again depending on surgeon preference and patient factors.

All of the knee replacement parts we use are tried and trusted with good medium to long-term results as proven by the National Joint Registry (NJR – see page 10).

If you are getting a partial knee replacement then, as with the total knee replacement operation, it comes in three parts. The only difference is that only the inner side or the outer side of the knee is replaced.



After your Surgery

- Immediately after your surgery you will be brought to the recovery ward for a short period of monitoring before you return to Ward 21.
- You will receive pain relief and medication to reduce bleeding into your new joint.
- If you had spinal anaesthetic your legs will be checked for movement and sensation which usually returns to normal in 3-4 hours.
- The day after your operation you will have blood tests and X-rays of your new Knee. These are checked by medical staff before you can go home.
- It is very important that you begin to mobilise as soon as possible. You will be seen by the physiotherapy team who will help you start walking with crutches or a frame and show you exercises to perform. This will be on the same day as your operation if possible.
- Prolonged lying in bed poses multiple risks. One week in bed can lead to 10 years of muscle ageing.
- The nursing staff will help you with going to the toilet and personal care.
- You will receive pain medication regularly but it is important that you tell the nursing staff if you have pain so your pain can be managed effectively.
- You should wear shoes that are supportive and non-slip.
- When showering, it is important to keep your wound dry.
- Your ankles may swell. We encourage moving your ankles up and down as often as possible.
- To help reduce swelling, elevate your operated leg when you are at rest above the height of your hip.
- Most patients will have foot pumps to help circulation until the anaesthetic has worn off.

If you are mobilising safely and there are no medical concerns, you may be able to return home on the day after your surgery. If you have stairs at home, the physiotherapist will teach you how to use the stairs with crutches before you go home.

Physiotherapy will be organised for you after you go home if you require it. This may be in a group class or on a one to one basis in an outpatient setting.

Please see next page for your physiotherapy exercises to begin with when in hospital and to continue when you go home.

Physiotherapy Exercises

It is important that you continue to exercise while waiting for your Knee surgery.

The exercises below should be carried out daily to help achieve your best knee range of movement and strength both before and after your operation.

After your operation you are likely to only recover the range of movement you had before your operation. Therefore it is very important to work on your range of movement before your operation.

The physiotherapist in hospital will assess you on Ward 21 and guide you with these exercises after your operation so you can complete them on your own at home.

It takes at least 12 weeks to build muscle strength with new exercises. Therefore, you should continue to carry out these exercises for at least 12 weeks after your operation to expect to get your best recovery.

You should continue the exercises as advised by your physiotherapist until the knee is fully straightening and bending easily.

Please note: these exercises may cause pain initially.

- Pain following a knee replacement remains for many weeks and is normal for everyone. Take your pain relief as advised before you exercise to allow you perform the exercises with more ease.
- Your knee may be warm, swollen or uncomfortable for some months after surgery, continue to use ice safely and regularly when at home.
- The physiotherapist will provide you with an Ice-Band after surgery and this should be used regularly at home.

Please start at the “Phase I” exercises and when you feel comfortable doing these exercises, move onto the “Phase II” exercises.



Phase I



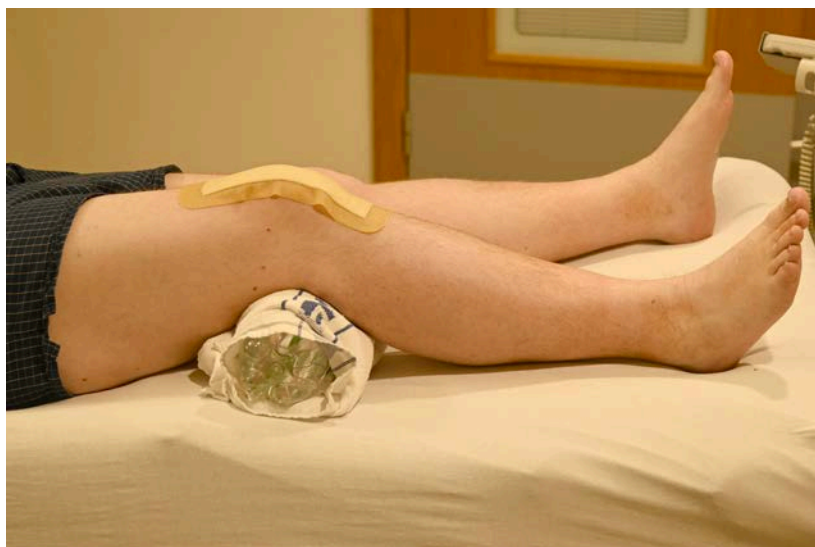
1. Lie on your bed with your leg straight out in front of you, tighten your thigh muscles and squash the back of your knee down against the bed.

Hold for 5 seconds and repeat 10 times.



2. Lie on your bed with your legs out straight. Bend your knee by sliding your heel towards you as far as you can and repeat 10 times. You could use a board, plastic sheet etc under your foot to make the leg slide easier.

3. Lie on your bed with a 2 litre bottle full of water wrapped in a towel under the knee. Keep the knee on the bottle and raise the heel off the bed. Straighten the knee completely - hold for 5 seconds and repeat 10 times.



Please move onto Phase II when you can safely complete the above exercises with minimal effort.

Phase II



Tighten the thigh muscles, keeping the knee straight, and lift the whole leg up approximately 6 inches off the bed.

Hold for 5 seconds and repeat 10 times.



Sit on a chair with space underneath it and your feet on the floor. Bend your knee as much as possible.



Then straighten your knee out as much as possible.

Repeat 10 times in each direction.

The next exercise is important during both phase I and phase II exercises to help achieve a straight leg after your knee operation.

Sit on a chair.

Place operated foot on chair in front and allow your leg to straighten in this position.

Hold for as long as you can tolerate and repeat regularly throughout the day.



Managing your new Joint

- Slowly build-up your level of movement by doing different things every day.
- It is important not to gain extra weight as it could reduce the lifespan 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.
- For other activities such as swimming, dancing, returning to work, you should check with your consultant at your review appointment.



Going home from Hospital

If you are fit and well you can expect to go home on the day after your operation. The best place for you to recover is at home with support from your family/friends and “Helper”.

Pain relief:

You will be given a supply of suitable pain relief to last until day 14 after your operation and laxatives to take home with you. You should also get a discharge letter for your GP which should be left into your GP practice as soon as possible after you go home.

Removal of skin clips:

Some surgeons use skin clips to close your knee replacement wound. If these have been used in your case then arrangements will be made to have them removed usually around ten to twelve days after your operation.

Prevention of clots:

You will be given blood thinning medication to help prevent clots forming after your operation. This is usually a tablet or a daily enoxaparin injection for 14 days. If you were on a blood thinning medication such as apixaban or warfarin before your operation, you will likely be restarted on these before going home.

Return to driving:

You cannot drive until you are no longer using crutches or a frame, which could be 4 weeks or longer. You must contact your insurers to make sure you are covered to drive following your operation and be able to perform an emergency stop safely.

Return to hobbies/sports:

There is no published evidence that any sporting activity damages your new joint but you must allow the tissues and bone to heal first before you become involved in strenuous activity or sport. This usually takes at least 3 months.

Air travel:

Each airline has its own rules about flying after operations. Check with your airline before you fly. Although no fixed guidelines exist, we do not advise travelling on a long-haul flight (more than 3 hours) for the first 3 months after your operation.

Follow-up Care

You will usually be seen by your surgeon or another member of the surgical team within 12 weeks following your operation. This is to check on your progress and ensure there are no problems with your new knee.

You can contact our Helpline - the contact details are on **page 39** if you have concerns after your operation.

It is extremely important that you have been practising the exercises at home that were given to you by the physiotherapists while you were in hospital.

Once our team is satisfied with your progress you will be discharged.



Risks of your Knee Replacement Operation

It is important that you read and understand this section before agreeing to proceed with your knee replacement operation.

Leg Clots:

At the moment around one in every hundred patients is diagnosed with a clot after their knee replacement operation (see page 39 for more information).

Infection:

After having a knee replacement, serious infections are rare (less than 1%). If you smoke, are obese, or have diabetes, however, your risk of getting an infection is increased (see pages 34-35 for more information).

Blood Loss:

A small amount of patients will require a blood transfusion due to blood loss caused by the operation.

Fractures:

Fractures (breakage of the femur/tibia) very rarely happen during the operation (less than 1% of operations). If it happens it may require a different type of implant to fix it.

Dislocation:

It is very rare for your new knee to become dislocated (come out of joint) but this happens in less than 1 in 600 patients (see page 38 for more information).

Risks of your Knee Replacement Operation

Nerve Damage:

There are small nerves that supply the front of your knee and these are always cut. This means that most patients experience numbness on the outer side of the wound after the operation. Rarely, injury to the nerves at the back or side of the knee can occur. Another nerve that can be damaged is the ulnar nerve of the arm. This can happen as a result of the position of your arm during the operation but this is rare.

Delirium:

Delirium means the onset of confusion and can affect up to 1 in 10 of patients following operations. It generally settles completely over several days but for some patients it can last long-term and result in a loss of independent living. A risk assessment for developing this condition will be carried out at your Pre-Operative assessment appointment.

Patients at risk or who develop delirium will have interventions aimed to reduce their risk or reduce the severity and duration of this condition.

How serious is a knee replacement operation?

Having your knee replaced is a major operation and as with any major operation there is a small risk of dying. Patients who have heart disease, chest disease or a history of stroke can have an increased risk of developing complications during or after the operation in relation to these conditions.

Other Potential Side effects of your Operation

- Nausea (feeling sick)
- Loss of appetite
- Constipation
- Hiccoughs (hiccups)
- Chest infection
- Kidney or bladder infection
- Atrial Fibrillation/irregular heart beat
- Low mood/depression
- Tiredness

Potential problems after Knee Replacement

When to suspect a possible wound infection:

It is normal to have bruising and swelling in the whole leg after the procedure. These pictures are of normal expected bruising after your knee replacement operation. It can take a number of days for this bruising to fully develop.



Signs of potential infection:

- If your wound starts to leak fluid having been dry previously or continues to leak fluid beyond 7 days after your operation.
- If part or the entire wound becomes swollen, red, sore to touch or starts to open.
- If you get a sudden increase in pain around your knee and feel shivery and/or unwell.
- Occasionally pain that fails to settle following your operation or pain that develops some time later may be caused by infection and in these cases the wound can appear normal. This is one cause of pain that can occur after 1 year.

If you are concerned you may have a wound infection, especially in the first few weeks, you should contact us using the Helpline phone number on page 39.

You should not contact your GP or attend Accident and Emergency.

What happens if I get an infection of my new joint?

- Most infections occur in the first 6 weeks after the operation. If we suspect that you have a serious infection during the first 6 weeks, you will be readmitted to hospital and go back to theatre to have the wound opened and washed out.
- Unfortunately, after the washout you need to take antibiotics for 3 months and may have to stay in hospital for 6 weeks.
- If these measures are unable to clear the infection then further operations may have to be considered with more serious long term impacts.

How you can reduce your risk of infection:

- Smoking increases the risk of infection and you should stop smoking from the time of the Pre-Operative assessment until at least 6 weeks after your operation.
- You will not be allowed to smoke whilst in the hospital.
- If you are significantly overweight, your risk of wound problems and infection are increased. Lowering your weight prior to surgery can lower these risks
- If you suffer from diabetes it is important that your blood sugar is well controlled, poor blood sugar control can increase your chance of wound infection and other complications.
- Alcohol or other drug abuse can also increase the risk of wound problems. This should be addressed pre-operatively.
- It is important that you continue with your appropriate management of any skin conditions such as psoriasis to reduce your infection after your operation.
- There is the risk of infection spreading through the bloodstream to your joint replacement anytime in the future, so you need to be vigilant and act promptly if you suspect you have an infection (dental, urinary, chest etc).

Leg Clots

- At the moment around one in every hundred patients is diagnosed with a clot after their knee replacement operation.
- Leg swelling should decrease after a night's rest or after 30-60 mins of keeping your leg up on 2-3 pillows.
- You should lie flat as comfortable with your feet above the height of your heart and hip as per picture below.



If the swelling does not decrease after a night's rest or you wake up after a night's rest with an increase in leg swelling then you may have a clot and you should ring us via the Helpline details on page 39.

You should not contact your GP or go to A&E.

In this situation, we may then arrange for you to have a special scan done of your leg. A clot below the knee is usually not a serious complication.

When to suspect a serious clot in your lung at home (pulmonary embolism):

If you become suddenly;

- Short of breath at rest
- Develop new chest pain or upper back pain
- Begin to cough up blood.

If you develop these symptoms call 999 or go to your local A&E department urgently.



How to reduce your risk of getting a **Clot**

- Getting out of bed as soon as appropriate after your operation is now considered very important.
- Blood thinning medication is provided after your operation as discussed on **page 29**. At the moment there are no drugs that have been proven to reduce the small risk of death from a clot in the lung (pulmonary embolism).

You should also:

- Spend periods of time throughout the day with your operated leg elevated at rest.
- Take frequent deep breaths to make sure you fill your lungs properly. This will not harm your new knee and will help to ease the pain.
- Remain hydrated.
- Carry out foot and ankle movement exercises every hour.
- Take short walks regularly as able.

Pages 23-27 demonstrate some of the exercises that are important to perform following the operation.



Dislocation

It is very rare for your new knee to become dislocated (come out of joint) but this happens in less than 1 in 600 patients. If a dislocation does happen, it can usually be reduced without an operation and you will likely require a cast for approximately 8 weeks, after which it is very rare for the knee to dislocate again.

When to suspect your knee has become dislocated?

- Experience severe pain
- Have significant difficulty walking
- Notice a change in the shape of your leg

If you think your knee has dislocated, then ring our Helpline (see contact details on page 39).

Pain

- A very small number of patients experience more pain after their knee operation than they had before their operation.
- 1 in 5 patients are not satisfied with the results of their knee replacement operation.
- Some patients report no improvement in their pain levels after their knee replacement operation.
- This is often because they develop one of the complications mentioned in this section.
- Occasionally patients have pain after the operation with no clear cause.

Stiffness

- The movement in your knee will be recorded before your operation.
- Most patients will end up with the same movement in their knee as they did before their operation.
- Approximately 1 in every 100 patients will have significant stiffness in their knee which may require further intervention. Usually this requires readmission to hospital and the knee is bent (manipulated) under anaesthetic.
- Some patients after their operation describe a different type of stiffness, particularly after sitting for a period of time or first thing in the morning. This feeling usually goes away with walking a few steps but it may not fully resolve and is not serious.

Hip and Knee Replacement Helpline

If you have any concerns following your joint replacement surgery, please contact our Helpline below for advice.



Nessan McQuaid

*Arthroplasty Practitioner
Altnagelvin Hospital*

 028 7161 1282 (Mon-Fri 8am - 4pm)

Please leave a message on our answer machine or outside of these working hours please contact Ward 21 on **028 7724 6961** and ask for Nurse in Charge

We hope that this information booklet has been useful in providing you with an understanding of what to expect for your Knee replacement journey.

You can have the opportunity to discuss any aspect of the operation with your surgeon and anaesthetist before going ahead.

