Patient Information Booklet

Total Knee Replacement Surgery

PATIENTS NAME: ______________________________________

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1. INTRODUCTION

This booklet will provide you and your family with a basic understanding of Total Knee Replacement surgery.

It will provide you with the necessary information to:

- Prepare for your surgery
- Know what to expect during your hospital stay
- Help you prepare for your return home after surgery

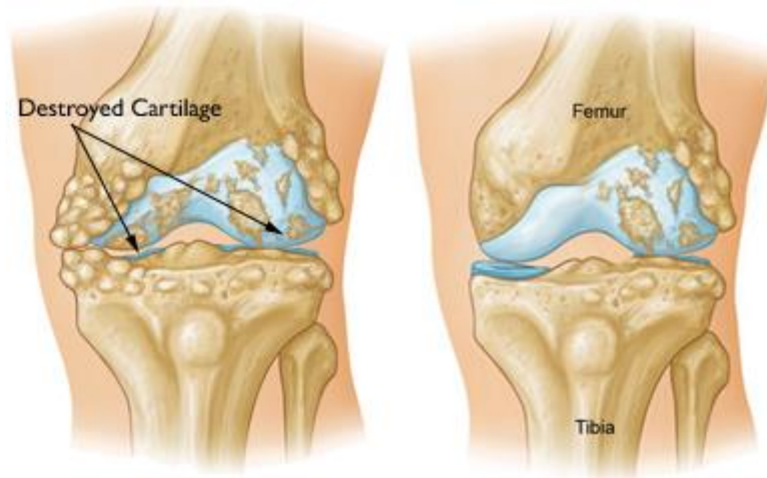
If there is anything you do not understand, please ask your surgeon, Joint Replacement Nurse, pre-operative nurse or physiotherapist.

The Healthy Knee

The knee is a complex hinge joint. The surfaces of the thigh (femur) and shin bone (tibia) are smooth and lubricated with joint fluid so they can roll, rotate and glide over each other easily. Cartilage covers the bones evenly, allowing smooth movement.

The knee joint is made stable with the support of the strong ligaments. The menisci are two half moon shaped pads that lie at the bone ends and help absorb shock in the joint. Muscles move the joint and help reduce the stress on it e.g. quadriceps and hamstring.

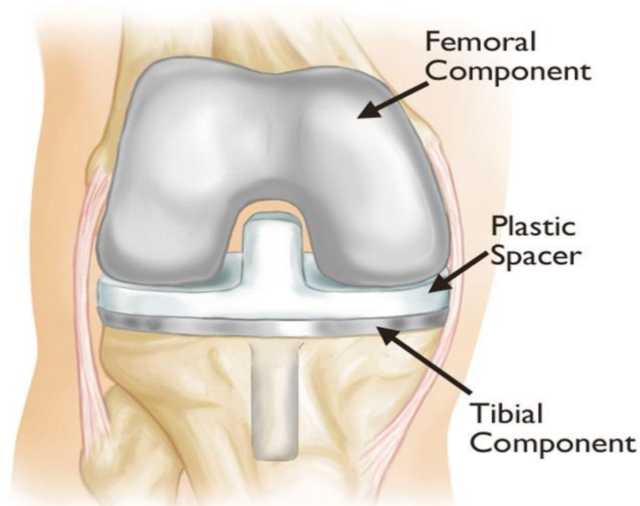
When the cartilage wears away, the result is osteoarthritis. This may lead to pain, stiffness and/or deformity resulting in difficulties with normal daily activities. A knee replacement may be recommended.



What is a Total Knee Replacement (TKR)?

A TKR involves resurfacing the ends of the femur, the tibia and in some cases the underside of the patella with manmade metal components, called prostheses. The knee prostheses are designed to simulate the human anatomy as close as possible.

The procedure is performed by a vertical incision about 10-18cms long at the front of the knee which exposes the inside of the joint. The ends of the thigh bone (femur) and the shin bone (tibia) are removed and sometimes the underside of the knee cap (patella) is removed. The artificial parts are fixed into place usually with cement. The new knee consists of a metal shell on the end of the femur, along with a metal and plastic cover on the tibia.

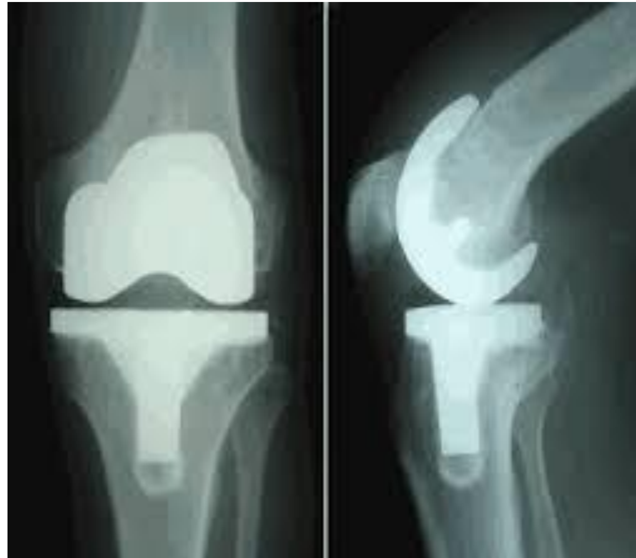


There are several different designs of knee replacements which can be fitted. Your consultant will decide the best option for you.

Why Have a Total Knee Replacement?

- Relief of pain and stiffness
- Correct any deformity

- Improved movement and mobility
- Improved quality of life



2. BEFORE YOUR SURGERY

Once you are listed for a Total Knee Replacement there are a number of appointments you will need to attend before you will be considered for admission.

Ability Assessment Clinic

At this clinic you will be asked questions about how your knee arthritis affects the quality of your daily life. Information about the operation as well as your before and after care will be explained to you.

Joint Replacement School

www.orthopaedicsurgery.ie provides an online platform for patient education prior to joint replacement surgery.

You will have the opportunity to meet various members of the multidisciplinary team including a surgeon, an anaesthetist, the physiotherapist and the joint replacement nurse, who will explain their role in your care.

It is advisable to ask a family member or friend to look at this website with you, so that you fully understand the operation and the uncommon but occasional risks or complications that may occur.

Pre-Operative Assessment Clinic

Please bring all medication that you are taking (prescribed or otherwise) and any medical records that may be required to your Pre-operative assessment appointment.

During your pre-operative assessment, the pre-operative nurse will ask you about your general health. A record will be created for your chart with the following medical history information which you must provide;

1. **History of medical conditions**
2. **Active dental condition**
3. **Have you experienced any anaesthetic problems in the past?**
4. **List ALL medicines/ pills, prescribed / not prescribed**
5. **Are you using any inhalers, either regularly or infrequently?**
6. **Do you have any allergies?**
7. **Are you a smoker / non-smoker / e.cigarette?**
8. **Do you drink alcohol either occasionally, socially or daily?**
9. **Your level of activity pre op and your anticipated activity level after surgery?**

***IMPORTANT**

Information gathered from you is vital as it will help the pre-operative assessment team consider any medical problems, which may either affect the risks to you or determine the likelihood of complications from the anaesthetic or surgery.

The following investigations/tests will be carried out;

- **Blood tests**

- **Heart trace (ECG)**

- **X-rays**

- **MRSA bacterial screen**

- **Urine analysis**

Results of these investigations/tests may require you to be referred to the anaesthetist and possibly the doctor for further discussion.

At this appointment the Pre Op Assessment Nurse will also explain the following:

1. Fasting guidelines
2. Dental check
3. What to expect on your arrival at the hospital
4. Items you need to bring with you for your stay
5. How you will be brought to and from the theatre and back to your ward
6. Drips and drains you may have in place
7. MRSA screening and the importance of personal hygiene prior to surgery
8. Pain assessment tools and the most appropriate methods for treating your pain after your operation
9. Discuss your discharge plans

At the clinic you and your family will receive verbal and written information on education relating to health promotion, your planned surgery and instructions on how to look after your new joint. It is important to keep this information in a safe place and to bring it to all your appointments.

Non attendance for any of the appointments above will result in your operation being cancelled or put on hold.

You will now be scheduled for your surgery and you will receive notification of this date by post.

Expected length of hospital stay is 2-5 days.

Ensure your discharge plans are arranged prior to admission.

3. THE SURGERY, BEFORE, DURING AND AFTER.

You will be required to phone the hospital on the day of surgery to confirm your bed availability

Please ensure you remove any piercings and jewellry before you come to the hospital. They are not allowed in the operating theatre and home is the safest place for them.

Most people will come in to the hospital on the morning of surgery.

Strict hygiene protocols must be adhered to when coming to the hospital for surgery. You must shower the night before your surgery, and if required, once again before you arrive at the hospital. This will help prevent infection in your wound .

On arrival at the hospital present yourself to the admissions unit where you will be given your medical chart and directed to the Othopaedic Elective Ward.

The Ward

You will then be admitted by the nursing and medical team to the ward and an identification band will be placed on your wrist. The wrist band will state your name, date of birth and the name of your Consultant. You should check that all details on this wrist band are correct and advise the nurse if they are not.

On admission to the ward you should advise the medical team **AGAIN** of the following:

- A list of your medications and **BRING MEDICATION YOU ARE CURRENTLY TAKING**.
- Any medical records/test results etc you have.
- Any problems or previous issues with any operations which may have resulted in the operation not going ahead.
- A list of all your medical conditions as well as any allergies that you may have.

Question: Why is it necessary for me to give this information again if I have already given it at the Ability Assessment Clinic, Joint Replacement School and Pre-Operative Assessment Clinic?

Answer. It is necessary for you to repeat this information to the medical team as this can often cause the patient to remember an item or some information that may have been forgotten or is new since your last appointment, which may or may not affect your surgery. The medical team need all information.

Knee surgery requires the patient to wear stockings which help keep any swelling down. This is called a Compression Stocking and your leg will be measured for stockings to specifically fit your leg. One will be placed on the leg that will not be operated on before you go to theatre. The leg that will be operated on will be stained with antibacterial and sterilizing dye before the surgery and the other stocking will be placed on this leg after surgery. We generally use below knee stockings for this type of operation.

If you feel nervous, the medical team may prescribe a relaxant for you to take before your surgery. This is given to you on the ward.

You will then be brought from the ward to the operating theatre. Some patients walk to the theatre with a nurse. If you have poor mobility wheel chair or trolley may be used.

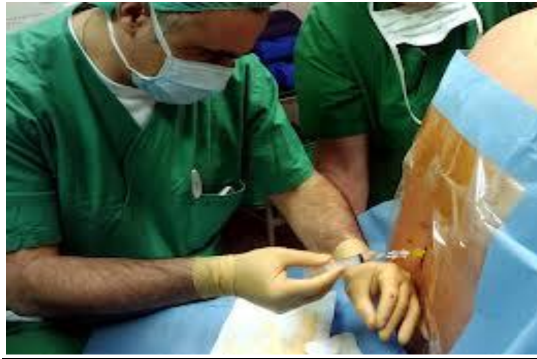
The Theatre

In theatre you will be met and checked in by the anaesthetist and surgical team. Your wrist band will be checked again against your notes and verbally confirmed with you.

The anaesthetist will then explain once again the form of anaesthetic you will be receiving. **It is time again for you to remind the anaesthetist of any prior issues you had with anaesthetics or operations which you would have discussed at the previous clinics. While it may seem like unnecessary repetition at this point, your health and safety is the most important factor and your team wants to care for you in the safest way possible. You should also remind one of the team of any fillings, crowns or dental implants you have or if you have any known drug allergies or allergies to plasters, iodine or latex.**

Epidural or Spinal Anaesthetic

If you are having a spinal anesthetic, a small needle is placed in your arm to allow a drip to be connected. You may then have to sit up or lie on your side so that the anesthetist can place an injection into your back. This is called a spinal/epidural injection and it will completely numb your legs for the operation so you won’t feel anything.



General Anaesthetic

If you are having a general anaesthetic, it will be given to you through the drip you already have in your arm. As a standard procedure, an oxygen mask will then be placed over your mouth and nose. You will be connected to monitors that observe your vital signs throughout the surgery.

Although you will be asked to go to the bathroom just prior to surgery, occasionally, a patient's bladder may either not be completely empty or start to fill during surgery. If necessary, a small flexible rubber tube called a "catheter" is inserted into your bladder by a doctor or nurse until your surgery is over.

All operating theatres are very bright and airy with nurses and doctors busily preparing for surgery. There are two big lamps above each patients trolley/bed. Once again, the nurses and doctors in the theatre will go through your documentation and check and crosscheck your name and what side you are being operated on. Patients who are having an epidural and not going to sleep will be given headphones to listen to music as there can be a lot of noise around you from equipment or instruments. Again, this is routine noise and perfectly normal in an operating theatre.

Sometimes the spinal anaesthetic can start to wear off and if this happens you can let the team know. When an anaesthetic starts to wear off, it does so very slowly and so you shouldn't be alarmed or worry that you will suddenly feel pain as this is not the case. The nurses will be communicating with you throughout your surgery and you will have plenty of time to let them know if you think it might be wearing off. Sometimes the anaesthetist may decide at this point to give you a general anaesthetic, this is done to prevent you from feeling pain and will give the surgeon further time to complete the operation. This is simply

administered through the drip already in your arm. There will be no new injections or insertions.

The surgical team will be wearing suits that look like ‘space suits’ This is to ensure that the environment is completely sterile and clean and prevent any germs or bacteria infecting you during surgery.

The Recovery Room

After the surgery, you will be brought to the recovery room where you will be closely monitored while you come around from your anaesthetic. Foot pumps are sometimes connected to your feet to help circulation and prevent clots in your leg, as you will still be unable to move or feel your legs. An X-ray of your knee may be taken.

Occasionally, patients are transferred to the intensive care unit or coronary care unit following surgery. If this happens, you should not be alarmed. The reason for this may simply be that is necessary to monitor you for a little longer and the monitors needed are located in these units. The majority of patients that are transferred to intensive care only spend 24 hours there, and then you will be transferred back to your bed on the ward where the nursing staff will monitor you.

4. RECOVERY AFTER YOUR TOTAL KNEE REPLACEMENT

Activities in the Hospital

Knee replacement is major surgery however, it is important that you start some activities immediately to offset the effects of the anaesthetic, help the healing, and keep blood clots from forming in your leg veins. Your doctor, nurses and physiotherapist can give you specific instructions on wound care, pain control, diet, and exercise.

Pain Management

Pain management is important in the early stages of your recovery. Although pain after surgery is quite variable and not entirely predictable, it can be controlled with pain medication. Generally you are given pain medication before the surgery which may seem strange; however, it helps kick start pain management. Nurses will then administer prescribed pain medication after your operation. If you feel that this medication is not sufficient, please ask a member of staff, as your medication can be changed or increased. The ideal situation is that your pain is controlled well enough to allow you to walk and do exercises with the physiotherapist.

Other Medications

Following surgery you will receive a number of doses of antibiotics to help prevent infection. You will also receive anticoagulants (blood-thinners) to help prevent blood clots from forming in the veins of your thigh and calf. The anticoagulant is administered via a small injection in your stomach whilst you are in hospital and then on discharge you will be given a prescription for blood thinners (usually aspirin), to be taken for one month.

If you suffer from constipation, please inform the staff and they will ensure to give you some laxatives while in hospital and prescribe them for you on discharge

Wound care

Depending on your surgeon, sometimes a drain may be placed at the wound site. This allows any collections of blood or fluid to drain out from the operated joint. The drain is inserted in theatre and removed either the evening of surgery or the following morning on the ward. When you wake up, you will have a padded bandage around the knee; this is removed the following morning with just a strip dressing remaining. Your dressing will be checked and reviewed regularly and you will have a fresh dressing applied before you go home.

Appropriate Clothing

Following knee replacement, all patients are encouraged to dress in their everyday clothes as soon as is practical, usually once you start mobilizing. We believe that this promotes a feeling of well being and independence among our patients, encouraging them along a path of recovery and rehabilitation. Loose, comfortable clothing is advised. Physiotherapy and the nursing staff will need to be able to access the knee joint for treatment purposes so please ensure that loose trousers or tracksuits bottoms are worn. We recommend comfortable Velcro or slip on shoes with a back and a flat heel. Trainers or runners are also ideal.

5. PHYSIOTHERAPY

It is important to begin your physiotherapy as soon as you are safe to do so. You will be seen by the physiotherapist the evening of your operation or the following morning. Unless advised otherwise, you will be allowed to put as much weight as tolerated onto the operated leg and will use a walking aid as appropriate.

Goals of Physiotherapy

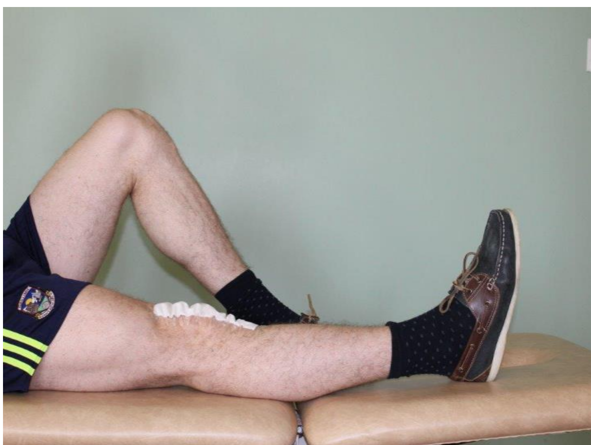
Your treatment will focus on achieving the following goals:

- Get in and out of bed independently
- Bend your knee approximately 90˚ or show good progress in bending your knee
- Extend (straighten) your knee fully
- Straight leg raise
- Walk with crutches/aid on a level surface
- If applicable use the stairs safely
- Do the prescribed home exercises

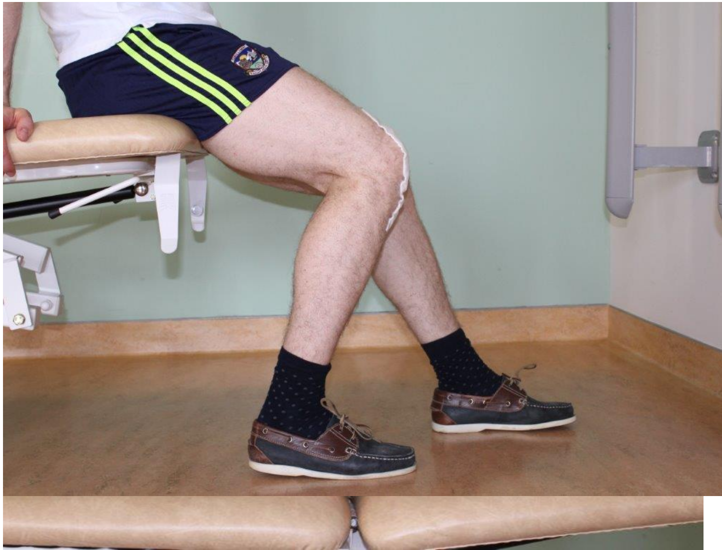
Exercises

It is important that you do the exercises in this section, as they are essential in achieving a good outcome after your knee replacement. We recommend you start these exercises before your operation. These exercises will be reviewed in the hospital after your operation but the responsibility to perform them is yours.

1. Ankle Pumps



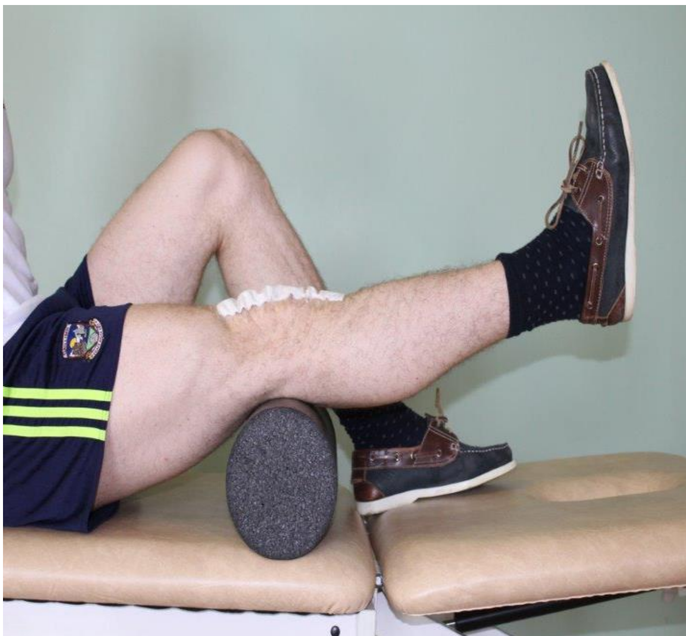
Bend your foot up and down. Repeat x 20



Bend your ankle up and push the knee firmly into the bed, feel the thigh muscles tighten.

Hold 5-10 seconds

Repeat 10 times



Place a 2 litre bottle or rolled up towel under the operated knee

Bend your ankle up, tighten your thigh muscles and straighten the knee (keep the knee on the bottle)

Lying on your back with your operated leg straight and your other leg bent

Bend up the foot of the operated leg, straighten the knee and lift it 20cms off the bed

Hold 5-10 seconds. Repeat 10 times

Sitting

Bend your operated knee as much as possible.

Hold 10 seconds, repeat 10 times

Lying on your back

Bend your knee as much as possible

Repeat 10 times

Ice/Cryotherapy

Ice will be used during your hospital stay and should be used at home to help reduce the pain and swelling in your knee, for 20 minutes every 2 hours. Never place ice directly onto your skin as this may cause a burn. Always put a towel between the ice and your skin.

There may be temporary or permanent altered sensation around the operated knee. Please be mindful that you may not be able to feel hot or cold in that region and therefore you may not feel a burn occur. Always be cautious when using hot or cold in this area.

Stairs Technique

When going up stairs:

- If a handrail is available always use this

- Stand close to the stairs. Hold onto the handrail with one hand and your crutch/crutches with the other hand

- The unaffected leg should step up first

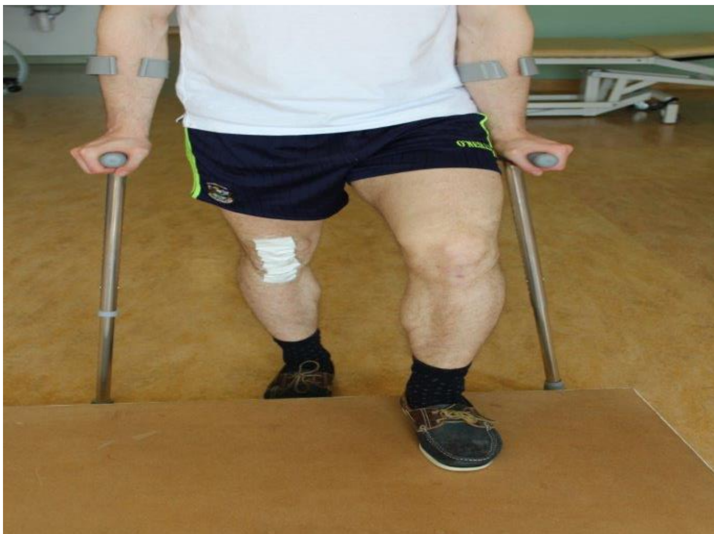
- Then bring the affected leg up to the same step and then bring your crutches or sticks up

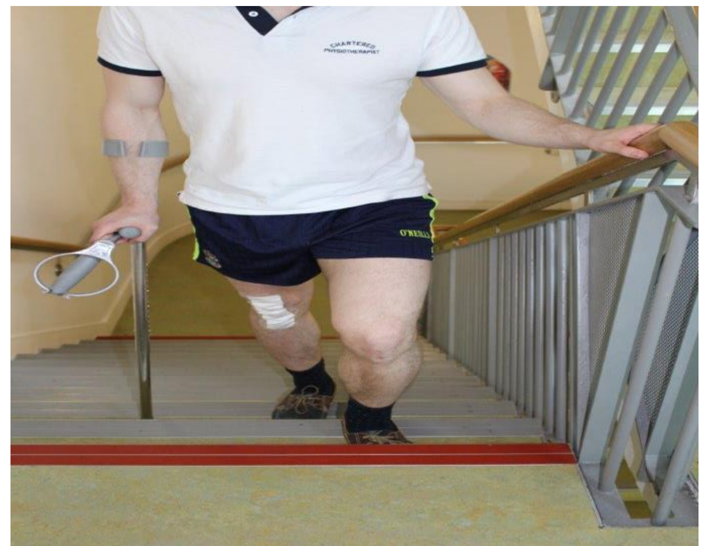
- Always go one step at a time

When going downstairs:

- To go down stairs, reverse the process.

- Put your crutches or sticks on the lower step.

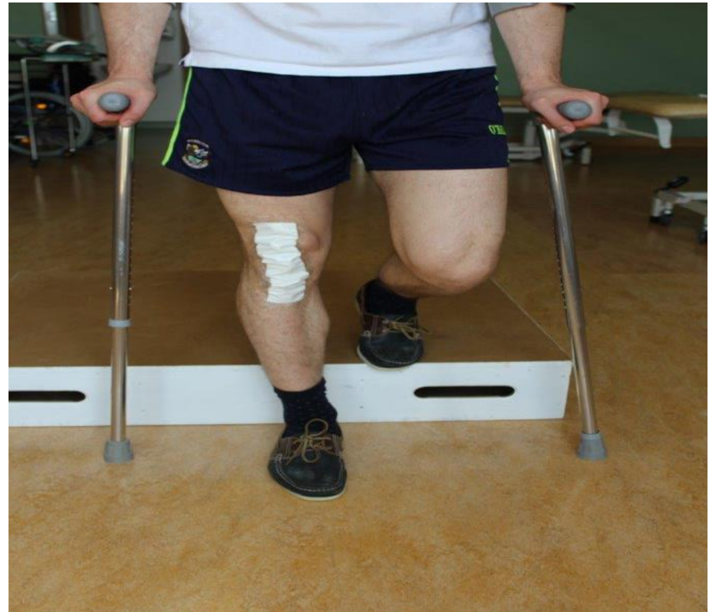




- Next, bring the affected leg down to that step.

- Finally step down with the unaffected leg.

- Always go one step at a time.



This will be practiced before discharge home as necessary.

6. GOING HOME

Home Environment

The following tips can make returning home easier and should be considered and planned before have your surgery.

- If you have only solid fuel heating you will need help with that. It may be an idea to talk to your public health nurse at this stage to see if you can apply for home help after the surgery.

- In the kitchen (and in other rooms as well), place items you use frequently within reach so you do not have to reach up or bend down.

- To help avoid falls, all rugs should be removed from the floor and rooms should be kept free of unnecessary debris and clutter.
- Enthusiastic pets should be kept away until you have healed
- Rearrange furniture so you can get about on a walker or crutches. You may want to temporarily change rooms.
- Securely fasten electrical cords around the perimeter of the room.

Wound care at home.

- Keep the skin clean and dry. The dressing applied in the hospital is waterproof and should be changed only as necessary. Ask for instructions on how to change the dressing prior to discharge if you are not sure.

- Your clips will be removed by your GP usually between 10/14 days post op. On discharge you will receive a discharge letter for your GP which you must bring to this appointment along with a clip remover, and a change of dressing. If there are any concerns at this stage, or any stage regarding the wound or any concerns please do not hesitate to contact the Joint Replacement Nurse.

- Slight swelling is normal for the first 3 to 6 months after surgery. Elevate your leg slightly and apply an ice pack for 15 to 20 minutes at a time, a few times a day.

- **Calf pain, chest pain, and shortness of breath are signs of a possible blood clot. Notify your doctor or make your way to the nearest A&E immediately if you notice any of these symptoms.**

- X-rays will be taken normally at your 6/8 week post operative appointment with the Joint Replacement Nurse to ensure that the joint is healing properly.

Medication *IMPORTANT

Take all medications as directed. You will probably be given a blood thinner to prevent life-threatening clots from forming in the veins of your calf and thigh. If a blood clot forms and then breaks free, it could travel to your lungs, resulting in a pulmonary embolism, a potentially fatal condition.

Because you have an artificial joint, it is especially important to prevent any bacterial infections from settling in your joint implant. You should take antibiotics whenever there is the possibility of a bacterial infection, such as when you have dental work. Be sure to notify your dentist that you have a joint implant and let your doctor know if your dentist schedules an extraction, periodontal work, dental implant, or root canal procedure. Likewise if you are having other surgical procedure or injections let the surgeon/doctor know that you have a knee replacement so they can plan to give you antibiotics as necessary.

Diet and Nutrition

By the time you leave the hospital, you should be eating your normal diet. Your doctor may recommend that you take iron or vitamin supplements. After surgery your body goes through a lot to rebuild and recover. In addition to the healing from the actual procedure, your body also needs to repair tissue and replace fluids. This extra activity causes your metabolism to increase and therefore your body will require additional essential calories and nutrients. Try to limit your intake of coffee and alcohol. You should watch your weight to avoid putting more stress on the joint. Do not smoke; if you have stopped do not restart. As previously stated, constipation is common following surgery as the gut slows down as a result of the spinal/epidural and also with the use of strong analgesia. It is very important to inform the staff if normal bowel function has not returned prior to discharge. You may need a laxative to be prescribed on discharge; alternatively, you can purchase this over the counter at your local pharmacy. At home a high fibre and high fluid intake is necessary to ensure regular bowel function.

Resuming Normal Activities

Once you get home, you should stay active. While you can expect some good days and some bad days, you should notice a gradual improvement over time. Generally, the following guidelines will apply:

Weight Bearing: Routine Total Knee Replacements allow you to place your full weight onto the operated leg. If your procedure requires altered weight bearing you will be advised of this after your operation.

Sex: Sexual Intercourse can be enjoyed as normal after surgery, but avoid positions that put excessive force or movement through your knee. Ask your doctor, nurse or occupational therapist if you need more information.

Showering and Bathing: It's easiest to use a walk-in shower at first. You'll need a waterproof dressing. It's best practice to shower only, for the first 6 weeks after your operation. Dry the wound by patting it with a clean towel. Speak to your nurse if you require more advice.

Kitchen Activities:

You may work in your kitchen on your discharge as long as you have made some adaptations to care for your knee.

- Re-organize your kitchen so that the most frequently used items accessible prior to your admission.
- You may also ask family or friend to help you with your daily shopping, meal preparation and cleaning tasks.
- Place commonly used items on top of the counter to avoid bending or over reaching to high cupboards
- Be careful walking around the kitchen when using your walking aid.

Driving:

You may begin driving a car in 6 to 8 weeks, provided you are no longer taking morphine based pain medication. Do not begin driving until your doctor, nurse or physiotherapist says you can, and always check with your insurance provider.

While there is no right or wrong way to get in/out of a car, the following steps might make it easier and more comfortable.

Getting In a Car

1. Back up to your car seat.

2. Place your involved leg forward.

3. Reach back and find something to hold onto with your hand—a dashboard, seatback. Slowly lower yourself onto the seat.

4. Move back into the car seat. Ask for help from a driver or family, to lift your involved leg as you bring your legs into the car.

Getting Out of a Car

1. Slide closer to the driver's seat. Ask for help to lift your involved leg out of the car.

2. Move to the edge of the seat, and place your feet on the street (on the street, not the curb). Place your involved leg forward.

3. As described in "Getting In a Car," hold onto something with your hand. Push with your arms and use your uninvolved leg to stand.

4. Do not reach for your walking device until your balance is secure.

Return to Work

Depending on the type of activities you perform, it may be as long as 3 to 6 months before you can return to work. Do not plan to return to work too early after discharge. Seek the advice of your consultant or nurse specialist at your review appointment.

Sports

After 6 weeks, you can return to certain sports. Often you will be advised to use an exercise bike on discharge from hospital, walking and swimming are also excellent, but sports that require jogging and jumping may require further time to recover or may not be appropriate. e.g. football, squash, tennis, athletics. Discuss with your consultant or nurse at your 6 week review when you can resume sport activities.

COMPLICATIONS

Below are some complications that can develop and we urge you to read these. Bear in mind that most people do well after a knee replacement and have little or no complications. If you have any questions please write them down and consult with your nurse or doctor and they will answer any queries you may have before your surgery.

Very Common *(Over 10%)*

Pain

The knee will be sore after the operation. If you are in pain, it is important to tell staff so that medication can be given. As your recovery progresses, the pain should subside. Rarely, pain will be chronic problem and may be due to other complications listed below, or, for no obvious reason.

Blood Clots

A DVT (deep vein thrombosis) is a blood clot in a vein. This risk is significantly increased if you are overweight or a smoker, have poor general health or have had a previous history of a clot, or are inactive after discharge.

You are advised to wear your anti-embolic stockings for six weeks after the surgery to prevent these clots. You will also receive oral preventative medication which you must take as directed while you are in hospital and also after you are discharged.

Problems passing urine

Some surgeons will put a tube called a catheter into your bladder after the surgery. In about **5 %** of cases, patients need to be catheterized i.e. have the tube placed on the ward after surgery when they cannot pass urine. The vast majority of these patients are male and most

have had a history of urinary problems. If you are a male and you are having problems like getting up a lot at night to urinate, or having difficulty trying to start urinating you may have a problem with your prostate and you should inform your surgeon or your general practitioner of this in advance of your surgery.

Bleeding

This is usually small and can be stopped during the operation. However, large amounts of bleeding may require a blood transfusion or iron tablets. Approximately 2% of patients having knee surgery require a blood transfusion whilst in hospital. Rarely, the bleeding may form a blood clot or excessive bruising within the knee which may become painful and require an operation to remove it.

Knee Stiffness

This may occur after the operation, especially if the knee is stiff prior to surgery. Manipulation of the joint under anaesthetic may be necessary 1-4 months after surgery.

Wound Infection

Deep infection of the joint (sepsis) is probably one of the most serious surgical complications that can occur. Despite all of the efforts made to prevent it and use of peri-operative prophylactic antibiotics, rates of deep infection in joint replacement surgeries still are reported at about 1-2 per 100 patients.

In some cases, this may necessitate additional surgery to "wash out" the joint, or possibly even remove all artificial components and treat with antibiotics for several months until re-implantation can be considered after clearing the infection. Infection is an increased risk for patients who are obese, smoke, have problems with their immune system, are on immunosuppressive drugs (such as transplant patients or some patients with autoimmune diseases), diabetics, or patients who have had previous surgeries in the same location.

An infection that involves the bone itself is termed osteomyelitis. This usually only develops in chronic infections that have been present for a long time. Many cases of osteomyelitis, can be treated with antibiotics, but sometimes surgical intervention is required if this fails.

Today there is increasing awareness about MRSA, or methicillin-resistant staphylococcus aureus. If a patient has ever had MRSA, they will be kept in private rooms and isolated from other patients because of the potential risk that they may still harbour the resistant bacteria and could pass it to other patients. All patients are screened prior to surgery to ensure they are clear of MRSA. MRSA in healthy patients generally does not cause problems but it can spread into the new joint replacement.

Less Common (1-2%)

Cellulitis

Cellulitis is a superficial infection that occurs in the skin, usually a patch of red, warm, tender skin over the surgical site. This is not usually a serious problem and in most cases resolves quickly with treatment; however, surgeons take it seriously because it can sometimes spread to deeper tissues or into the joint if left untreated. Most cases of cellulitis are treated with oral antibiotics.

Other Wound Problems

Patients can sometimes develop a variety of minor, superficial skin and wound problems. Tape blisters are common in patients with sensitive skin or thin skin (such as elderly patients or patients who have been on steroids). These usually heal well without any specific intervention once the dressings are removed.

Pressure sores, also known as decubitus ulcers, can occur if a patient is not getting up enough, and are most commonly found on the back of the heel or buttocks. The principal treatment is to remove pressure from the affected skin area, by mobilizing, placing gel pads, rolled towels under the heel, and other similar measures.

Suture abscesses or "spitting sutures" are also common and usually harmless, but a patient may notice a tiny bit of exposed suture several weeks after the surgery. This is usually nothing to be concerned about and dissolves on its own.

If you get any redness around your scar at any time after your knee replacement you should IMMEDIATELY contact your surgeons team. If unable to do so, please make your way to the Accident and Emergency Department in Tullamore. Further tests may be required before you are started on antibiotics and these tests should be done in the hospital.

Rare: (<1%)

Pulmonary Embolism

A Pulmonary Embolism is the spread of a blood clot to the lungs and can affect your breathing. This risk is very rare approx 1 in 2000, however it is significantly increased if you are overweight, a smoker or have poor general health. This can be fatal.

Nerve Damage

Efforts are made to prevent this; however damage to the small nerves of the knee is a risk. This may cause temporary or permanent altered sensation around the knee. There may also be damage to the Peroneal Nerve, this may cause temporary or permanent weakness or altered sensation to the lower leg. Changed sensation to the outer half of the knee may be normal after knee replacement surgery.

Bone Damage

With most joint replacements, there always exists the possibility of fracturing the bone while placing the implants.This can vary from an incidental finding on x-rays to a serious problem that requires additional surgery or fixation, although when it occurs, most patients are simply treated with limited weight bearing until the fracture has healed. Some patients may not fully fracture until later, as they place weight on a weakened area of bone. It is a greater concern in frailer/ older patients, patients chronically on steroids (prednisone), or in complex revision surgeries.

Blood Vessel Damage

The vessels at the back of the knee may very rarely become damaged during surgery and may require further surgery.

Death

This very rare complication may occur after any major surgery and from any of the above.

Component Loosening

Over a long enough period of time, all implants will eventually loosen from the bone. Cemented components will generally loosen before non-cemented (porous-coated) components. Joints that contain polyethylene (plastic) bearing surfaces are also particularly prone to osteolysis, or reabsorption of the bone. Component loosening is also affected by a number of other factors such as: patient activity level, weight, and types of activities (e.g., impact activities such as running are more likely to loosen the components). Usually loosening is a slow, gradual process that leads to slowly progressive pain over months or years. A bone scan is used to detect the process before it is visible on x-rays, and in most cases, revision surgeries can be planned well before the time that loosening becomes debilitating.

Component Wear

A related longevity problem is wear of the bearing surfaces. Over time, the surfaces of the artificial joints simply wear out, similar to the brake pads in a car. Ceramic and metal bearings very rarely wear out and usually require decades before significant wear occurs, but polyethylene (plastic) bearings may wear out in the years after surgery. This usually manifests as pain in the affected joint, and often there is associated osteolysis (or re-absorption of the bone around the prosthesis) and loosening because of the wear particles.

Follow up

Despite the above potential complications, the vast majority of patients do well after a knee replacement. If you feel that any complications are developing after your knee replacement, please do not hesitate to inform a member of staff. If you are at home and feel you have a problem please contact the Joint replacement Nurse, your GP or present yourself to the Accident and Emergency Department in Tullamore.

If you wish to discuss any issues pertaining to your joint replacement, you can arrange to be seen in our clinics. To arrange this, please contact the Joint Replacement Nurse or your consultant's secretary.

QUESTIONS YOU MAY HAVE

10.Patient/Surgeon Agreement, Understanding of Booklet /Understanding and Explanation of Questions Raised

Patient Addressograph:

I __________________________ have read this booklet and understand the contents. The questions I have regarding this procedure have been discussed with me. I am happy to proceed with my total/revision knee replacement procedure.

Signed ______________________________

Surgeon ________________________________

Anaesthetist ________________________________

Date: ______________________________