


FAMILY NAME:		
Given name:		
Preferred name:		
Title:	Gender:	
NHS number:		
Hospital number:		
Date of birth:     __ / __ / ____		
<i>Complete above in full or affix patient label</i>		
Location:		
<b>Orthopaedic – Total Knee Replacement Consent Form</b>		

<b>Operation:</b>	<b>Total Knee Replacement</b>
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**PROCEDURE:** The knee is an important hinge joint and, as it is weight-bearing, is prone to wearing out. Arthritis is painful and disabling and you and your surgeon may have decided that a knee replacement may be your best option. A knee replacement is a surgical procedure, in which the damaged running surfaces of the knee are replaced with artificial parts which are secured to the bone.

You will be visited by your surgeon before the operation. If you have any questions make a note of them as this might be a good time to ask them. The surgeon will mark your leg with a marker pen. This is to make sure the correct leg is operated on.

The anaesthetist will see you before your operation. The anaesthetic given in theatres is likely to be a spinal anaesthetic. This means the area to be operated on is completely numb. Usually you will be offered sedation however occasionally this may not be possible because of other medical conditions you may have. Spinal anaesthetic has been used for joint replacements globally for decades, although remains a worry for many patients. There are many advantages of a spinal anaesthetic over a general anaesthetic. These include patient safety and significant continued pain relief after the surgery. Occasionally for medical reasons we use a general anaesthetic, where you are asleep. You will discuss this and the risks of the anaesthetic with the anaesthetist.

The actual surgery usually takes less than an hour although you will be in the theatre complex for longer to allow time for the anaesthetic and recovery. A tight inflatable band (a tourniquet) is often placed across the top of the thigh to limit the bleeding. Your skin will be cleaned with anti-septic solution and covered with sterile drapes. The surgeon will make an incision down the middle of the front of the knee. The knee capsule, the tough, gristle-like tissue around the knee, is then visible and is cut. This allows the kneecap (patella) to be pushed to one side. The surgeon can then trim the ends of the thigh bone (femur) and shin bone (tibia) using a special bone saw. Some surgeons also remove the underside of the knee cap.

Using measuring devices, the new artificial knee joints are fitted into position. The implant is made of metal with a polyethylene bearing which sits on the tibia. A polyethylene button is sometimes placed on the underside of the knee cap.

When satisfied with the position of the implants, the surgeon will close the wound. A drain may be used. This allows any collections of blood or fluid to drain out. The drain is removed painlessly on the ward within a day. The incision may be closed with clips that are removed twelve to fourteen days after the surgery or a suture that may not require removal.

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When you wake up you will have a padded bandage around the knee. If you have had a spinal anaesthetic, you will be pain free. This pain relief lasts several hours. If you have had a general anaesthetic you will feel sore around the knee, this is normal. You will be encouraged to start walking as soon as possible with the aid of the nurses and physiotherapists.

An X-ray and a blood test will be taken the next day. Most patients are in hospital a total of one or two nights.

You will need to work hard at your daily exercises to regain knee movement for many weeks after the operation or permanent stiffness can result. The first two to four weeks after surgery are difficult for the majority of patients. People that work are off work an average of ten weeks. Most drivers are able to return to driving at four to six weeks. At six weeks most patients are still woken with discomfort at night. It takes an average of three to nine months for a knee replacement to really settle. Although allowed, most patients find it permanently uncomfortable to kneel on a replaced knee. All patients experience numbness, to the side of the scar away from the opposite knee, which is permanent. This area of numbness shrinks with time and one becomes less aware of it.

**ALTERNATIVE PROCEDURES:**

There is no absolute requirement for you to have a knee replacement. It is usually a decision you make with your surgeon based on your quality of life. If your surgeon offers you a knee replacement the decision to proceed with the operation is yours alone and you may cancel the operation at any time before the anaesthetic if you wish. Total knee replacements are usually performed on patients suffering from severe arthritis (although there are other reasons). Most patients are above the age of 55yrs.

Alternative treatments for arthritic knee pain include:

- Lifestyle modification:
  - Weight Loss.
  - Avoiding or modifying strenuous exercises or work.
  - Physiotherapy and exercises.
- Medication: Pain killers and anti-inflammatory drugs e.g. ibuprofen.
- Alternative surgeries:
  - Partial or unicompartmental knee replacement
  - Leg realignment known as osteotomies
- Walking aids such as a stick or a crutch.

**RISKS:**

Knee replacement is a routinely done operation but is not minor surgery. In the UK 80 to 85% of patients are satisfied with their knee replacement, this means 15-20% are not satisfied. All surgical procedures have associated risks and complications.

**COMMON: (2-5%)**

**Blood clots:** A DVT (deep vein thrombosis) is a blood clot in a vein. These may present as a red, painful and swollen leg. The risks of a DVT are greater after any surgery and especially lower limb surgery. A DVT can travel through the blood vessels to the lungs causing a pulmonary embolism or PE. This is a serious condition which affects your breathing. The hospital doctors will give you two weeks of medication to reduce the risk of DVTs from forming unless you are already on blood thinning medication. When you are in hospital and in bed we use foot or calf compression pumps to keep blood circulating around the leg. Walking and getting moving is one of the best ways to prevent blood clots from forming.

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**Bleeding:** This is usually minor and can be stopped during the operation. However, large amounts of bleeding may need a blood transfusion and/or a return to theatre to stop the bleeding and remove the collection of blood. Many patients suffer significant bruising down the leg following surgery.

**Pain:** The knee will be sore after the operation. If you are in pain, it's important to tell staff so that medicines can be given. Pain will improve with time. Persisting pain can be a long-term problem.

**Prosthesis wear and loosening:** Modern operating techniques and implants mean that most knee replacements last over 15 years. However in some cases it may be significantly less. The reason is often unknown. Younger patients wear their knee out faster. Implants can wear from use. The reason for loosening may also be unknown. Sometimes it is secondary to infection. This may require removal of the implant and revision (redo) surgery.

**Knee stiffness:** This may occur after the operation, especially if the knee is stiff before the surgery. Manipulation of the joint under general anaesthetic may be necessary. It is very important to get the knee moving after the operation despite it being swollen and uncomfortable initially. The average bend (flexion) after a knee replacement is less than a normal knee with an average of 115 degrees flexion after surgery.

**Altered leg length:** The leg which has been operated upon may feel longer, particularly if arthritis affects the opposite knee as well. This difference is usually less than one centimetre.

**Urinary retention:** This complication particularly affects gentlemen with prostate enlargement. Many patients struggle to pass urine after surgery. Occasionally this requires a temporary catheter (tube) to be passed into the bladder. Rarely patients continue to struggle passing urine and need to be discharged with a urinary catheter.

**Post-operative delirium:** Some patients become confused after surgery. This is usually short term but rarely can persist. This complication is more frequent in patients with pre-existing dementia. It is also associated with; older age, diabetes, kidney disease, blood transfusions, and sedation.

### **LESS COMMON: (1-2%)**

**Infection:** Infection of the knee replacement is a serious complication and may require the surgery to be redone. We take many precautions to avoid infection. You will be given antibiotics just before and after the operation and the procedure will also be performed in a theatre used only for clean surgery with sterile equipment. Please follow the advice you are given in pre-assessment clinic regarding showering before the operation, changing bed linen and nightwear. Foot hygiene before the surgery is also important. Despite precautions there are still infections. The wound site may become red, hot and painful. There may also be a discharge of fluid or pus. This is often treated with antibiotics, but an operation to washout the joint may be necessary. In rare cases, the implants may need to be removed and replaced at a later date. The infection can sometimes lead to sepsis (blood infection) and strong antibiotics are required.

### **RARE: (<1%)**

**Altered wound healing:** The scar may become red, thickened and painful (keloid scar) especially in Afro-Caribbean people.

**Tendon damage:** The tendon from the kneecap to the shin bone (patellar tendon) may be injured during or after the operation. This is a serious complication as the tendon frequently requires an operation to repair which has variable results.

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**Nerve Damage:** Efforts are made to prevent this however damage to the nerves behind the knee is a risk. This may cause temporary or permanent altered sensation and muscle power to the leg, ankle, and foot.

**Bone Damage:** Bone may break when the implant (metal replacement) is put in. This may require fixation, either at time of surgery or at a later date.

**Blood vessel damage:** The vessels behind the knee may rarely be damaged. This may require further surgery by vascular surgeons.

**Pulmonary Embolism (PE):** A PE is usually a consequence of a DVT. It is a blood clot that travels to and lodges in the lungs and can make breathing very difficult. A PE can be fatal.

**Amputation:** Very rarely amputation as a result of complications is necessary. This may be done as a result of damage to major blood vessels or severe infection.

**Death:** This rare complication can occur from any of the above complications. The risk is increased by underlying medical conditions and advancing age.

**Confirmation of consent:**

I have read and understand the procedure, risks and complications. I have asked any questions and raised any immediate concerns I might have. I understand another surgeon other than my consultant may perform the operation (although they will have adequate training/ supervision).

**I understand** that I will have the opportunity to discuss the details of anaesthesia with an anaesthetist before the procedure

**I understand** that any procedure in addition to those described on this form will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

Signature:.....

Print name:.....

Date:.....

2<sup>nd</sup> Confirmation (to be signed on the day of surgery if above signed before)

Signature:..... Date:.....

Name of Surgeon:.....Position:.....

Signature:.....