

Revision (Redo) Total Knee Surgery

It is important to understand the options and risk and complications of surgery:

Revision knee surgery is complex and major surgery. Before moving to the option of surgery it is important to have tried and considered the other non-surgical possible options. In some circumstances such as infection of a knee replacement, surgery may be required to save your life (sepsis).

Revision total knee replacement surgery is performed when a first-time replacement is failing and requires removal and replacement.

There are many reasons for this to take place. The most common reasons include loosening of the implant from the bone due to wear of the plastic liner. It can also become loose due to fracture or infection. We do extensive work up including CT, MRI, SPECT/Bone Scans and blood test to determine the reasons for loosening.

Other reasons for revision include the implants not being in an ideal position and causing instability or pain. This is much more difficult to determine, and we will discuss any such cases as part of our multi-disciplinary team revision knee meeting (MDT).

For joint replacements that are infected we will normally do this revision surgery in a staged fashion, removing the metal work first and cleaning the joint to eliminate any trace of infection and then treat you with antibiotics targeted at the organism found to be responsible for an extended period (approx. 6 weeks-3 months). The second stage is to re-implant a new knee replacement.

In rare cases even if infection is not suspected, we always take samples to send to the lab. If any of these show an unexpected organism, we would then treat you with extended antibiotics.

In even rarer circumstances, if we opened the knee and found unexpected evidence of infection, we would do your surgery in 2 stages to be as safe as possible.

The national joint registry shows that the revision (redo) rate for partial knee replacements are higher than that for total knee replacements over a 7-10 year period. (Approx. 3% vs 6%).

Other alternatives include:

- stopping strenuous exercises or work
- Losing weight
- Physiotherapy and gentle exercises,
- Medicines, such as anti-inflammatory
- Using a stick or a crutch
- Using a knee brace

All surgery and treatment carry some risk these are the most common for a revision knee replacement:

Most Common 2-3% or higher risk of occurring

Infection: Infection after a 2-stage revision knee replacement for infection is higher than normal and the reinfection rate is from studies to be in the region of up to 25%. The infection can sometimes lead to sepsis (blood infection) and strong antibiotics are required. The worst case would be that this infection could be a risk to your life or require you to lose your leg above the knee.

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. Rarely, pain will be a chronic problem. This may be due to altered leg length or any of the other complications listed below, or sometimes, for no obvious reason. 1 in 10 patients can have worse pain after surgery than before that can be permanent. Some patients will regret having surgery and wish they had not proceeded. The risk of ongoing pain after revision surgery is higher than that in a first-time joint replacement.

Bleeding: A blood transfusion or iron tablets. May rarely be required. Rarely, the bleeding may form a blood clot or large bruise within the knee which may become painful require an operation to remove it (Haemarthrosis).

Blood clots: a DVT (deep vein thrombosis) is a blood clot in a vein. The risks of developing a DVT are greater after any surgery (and especially bone surgery). DVT can pass in the blood stream and be deposited in the lungs (a pulmonary embolism – PE). This is a very serious condition which affects your breathing. We will give you medication to try and limit the risk of DVTs from forming. We will also ask you to wear stockings on your legs and may use foot pumps to keep blood circulating around the leg. Starting to walk and moving early is one of the best ways to prevent blood clots from forming. A DVT may be life threatening.

Knee stiffness: may occur after the operation, especially if movement post-operation is limited. Manipulation of the joint (under general anaesthetic) may be necessary. Stiffness is more common in revision knee surgery.

Less Common Risks Less of occurring 1%:

Infection: You will be given antibiotics just before and after the operation and the procedure will also be performed in sterile conditions (theatre) with sterile equipment. Despite this there are still infections (approx. 1%). The wound site may become red, hot and painful. There may also be a discharge of fluid or pus. This is usually treated with antibiotics, but an operation to washout the joint may be necessary. In rare cases, the prostheses may be removed and replaced at a later date. The infection can sometimes lead to sepsis (blood infection) and strong antibiotics are required. The worst case would be that this infection could be a risk to your life or require you to lose your leg above the knee.

Prosthesis wear: Modern operating techniques and new implants, mean around 80% of knee replacements last over 15 years. In some cases, this is significantly less. The reason is often unknown. The plastic bearing is often the most commonly worn away part.

Nerve Damage: efforts are made to prevent this, however damage to the small nerves around 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 of the lower leg.

Bone Damage: the thigh bone may be broken when the prosthesis (false joint) is inserted. This may require fixation, either at time or at a later operation.

Blood vessel damage: the vessels at the back of the knee may rarely be damaged. This may require further surgery by the vascular surgeons or very rarely amputation.

COVID 19 Risk: It is difficult to quantify at this time the true risk to developing COVID 19 due to your surgery and inpatient stay. We will ask you to isolate before and after surgery. You will also have a COVID 19 swab prior to admission. Despite this there is a risk of contracting COVID. If you did contract it having had surgery and an anaesthetic, you would be at an increased risk of developing breathing complications and this could be a risk to your life.

If you have any questions or concerns, please do not hesitate to contact us before your surgery.