

Revision Total Knee Replacement



A Total Knee Replacement (TKR) has been one of the most successful operations in treating the pain of knee arthritis and restoring mobility and level of function. While TKR is a durable operation in the majority of patients, a knee replacement is a mechanical device with parts that are assembled before and during the operation and as with any other mechanical device, a total knee replacement can be subject to various forms of mechanical or biological failure. Some of these conditions may require a re-operation to replace part or all of the TKR components and this is known as a revision.

The majority of TKR have a life-span of 15-20 years and most patients who have a TKR retain it for life. However TKR performed at a younger age, complications such as loosening, infection and require earlier revision.

The main influence of success of a revision TKR is to have a thorough understanding of the mechanical and biological reasons why the primary TKR failed. During your review you may need multiple blood tests, x-rays, CT scan, bone scan, biopsy or other tests to diagnose the reason behind the failure of the primary TKR.



A revision TKR is typically performed under general or spinal anaesthesia. Surgery is usually performed through the same incision but may need some extension. It is a more complex procedure compared to a primary TKR. During revision surgery, the surgeon may need to remove or exchange one or more of the TKR components. The parts that are not attached to the bone can be safely exchanged with minimal to no removal of the patient's bone. However, if the metallic parts in contact with the bone need to be changed, some bone loss generally occurs. Donor or artificial bone grafts as well as metal components may be used to fill in any defects and specialized components are usually required for re-implantation. Revision total knee replacement takes longer than a standard total knee replacement and has a slightly higher complication rate. The prosthesis may also not last as long as a primary knee replacement.

Many surgeons who perform primary TKR do not perform revision procedures due to their complexity. Dr Khatib has undertaken subspecialist training in the field of revision hip and knee replacement at a world famous centre, St Michael's Hospital, in Toronto, Canada. If you already have a TKR and you are developing symptoms in your knee we recommend that you present to your local general practitioner for review and if appropriate a referral can be made to Dr Khatib for review at one of our practice locations.