Revision Total Knee Replacement

Although the failure rate per annum is low, knee replacements do not last forever. There are two main reasons to revise a knee replacement. The first, and most common, is infection, which can cause early loosening of the TKR. This usually occurs in the first couple of years after the initial operation and is often due to an infection at the time of the initial surgery.

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The other main reason for TKR failure is the non-infective loosening of the knee replacement. This generally occurs several years after initial operation and can be due to a mechanical failure of the knee replacement. In some early knee replacement designs, the plastic part of the tibial component became worn and fragmented after 8-10 years. Newer designs have considerably better durability but, eventually, even these will show signs of wear.

What happens in Surgery?

The surgery involves removing the old knee replacement whilst leaving as much of the original bone as possible. There can be a considerable amount of bone loss, particularly if the old knee replacement has been infected. If this is the case, it may be necessary to complete the procedure with two operations. In the first, the old knee replacement is removed and the wound is closed. Then antibiotics are given and the infection eradicated over 4-6 weeks. The second stage involves the insertion of the new knee replacement. This technique minimises the risk of any further infection.

Essentially, the revision TKR is similar to the Primary TKR. The revision, however, needs to be able to deal with the probable loss of bone incurred during the removal of the original knee replacement. This is achieved by using metal blocks and stems, which attach to the main components and compensate for any loss of bone.

The two X-ray images (1 & 2) illustrate the differences between the original and revision knee replacements.

After a Revision Total Knee Replacement

The day after the operation your exercise regime begins. With the aid of a physiotherapist you will get out of bed and begin to exercise your new knee replacement. With perseverance, you should be able to climb stairs by day 5 or 6 and go home the following day.

You will need to continue attending physiotherapy as an outpatient. This can be done closer to your home with one of our recommended group of physiotherapists.

For most people it will take around 6-8 weeks to be walking reasonably. After six months you should be able to walk well without pain, climb stairs (leading with your operated leg) and be capable of a range of movement with your new knee from 0 degrees to at least 90 degrees.

What can I do with my new knee?

The outcome of a revision TKR is generally not as good as that of a primary knee replacement. The revision knee replacement will, however, give excellent pain relief and as good a range of movement as a primary TKR. You will be able to walk without pain and climb stairs although you may need a stick to walk longer distances.

Lifespan of a Revision TKR

The lifespan of a revised TKR depends on the reasons for revision and the complexity of the procedure. There is a better than 80% chance that two operations for revision of an infected TKR will result in a knee replacement that is free of infection. Longevity of a revision knee replacement will be less than for a primary TKR but 75-80% should be still functioning after 10 years.