

# KNEE REPLACEMENT

The knee is an engineering marvel. More than a simple hinge, it has one of the widest ranges of motion of any joint in your body. Not only does it bend, but it also slides, glides and swivels. Time and injury can affect parts of the knee and pain, swelling and stiffness can result. A degenerative knee can severely affect your ability to lead a full and active life.

## Symptoms

The symptoms of a degenerative knee joint usually begin as pain while weightbearing. A limp or swollen knee may also result. The degeneration may lead to a reduction in the range of movement. As the condition becomes worse the pain may persist all the time and even keep you awake at night.

## Common Cause

The most common reason for surgery is osteoarthritis, in which the articular surfaces of the knee deteriorate leading to bone rubbing on bone. This can cause severe pain, limitation or loss of function and/or deformity of the joint.

## Conservative Treatment

Before surgery is recommended other treatments have usually been tried, such as anti-inflammatory and pain management medication, physical therapy, avoiding activities that cause pain, Synvisc injections and, if necessary, weight loss. An arthroscopy has usually been performed to assess the damage and clean up the joint (*chondroplasty and/or debridement*) and sometimes this can often give temporary relief and postpone the need for knee replacement. If these have not been effective, surgery is usually the next option. This can either be in the form of *total replacement or unicompartmental replacement* (where only the affected part of the knee is replaced)

## Knee Replacement

Since the 1970s knee replacement surgery has offered people with chronic debilitating knee pain a chance to resume an active lifestyle. Knee replacement surgery involves removing or resurfacing parts of your knee joint (*femur / tibia / patella*) with a prosthesis made of metal and plastic. Pain relief comes from replacing the diseased bone or tissue with new knee parts.

Knee replacement surgery is usually performed under a general anaesthetic. Much of the operation focuses on getting your joint ready for the new knee. An incision is made and the muscles, kneecap and connective tissues are moved aside. The diseased bone is removed. Special cutting jigs are used on both the femur and tibia to make sure that the bone is cut in the proper alignment to the leg's original angles. The prosthesis is then fixed in place. There are a number of prostheses on the market for both total knee replacement and uni-compartmental knee replacement. Your surgeon will decide on which will be suitable for your particular needs.

An artificial knee is not a normal knee, nor is it as good as a normal knee, but should provide pain relief for at least ten years.



**Preparing for the Operation** To prepare for this surgery there are certain procedures that we follow:

- If required we will arrange for all patients to be examined by a physician to assess suitability for surgery and to look after their medical needs during the hospital stay.
- Routine pathology (blood and urine tests) are ordered, together with a chest x-ray and ECG.
- Sometimes an appointment with the Pre-Admission Clinic at the hospital is encouraged to prepare you for the operation and your return home.

### Hospital Stay

- Depending on your post operative course, your hospital stay is usually 5-7 days.

### Rehabilitation

- If you have a drain tube inserted, this usually is removed around 1 day after your operation
- You will work with a physiotherapist to regain movement as soon as possible during the first six weeks. This includes full extension (by “pushing your knee into the bed”) and flexion.
- You may be fitted with a “CPM” or “Continuous Passive Movement” device to help you improve and maintain your range of movement while you are an inpatient.
- Upon discharge, it is very important to continue your exercises and physiotherapy
- You will continue to see improvement even beyond 3 months of physiotherapy and exercise

**Return to Activities** When you return home you will most likely need crutches or a walker for several weeks, and then a cane for another three to six weeks. After this recovery period you should be able to resume many of your favourite activities, walking, dancing, golfing, swimming and bicycling.

**Follow-up Visits** Follow-up visits are important to see how you are progressing. Infrequently problems do occur, such as infection and loosening, but for most patients their new knees are a new lease of life.

**Complications** The most common complications are not directly related to the knee and usually do not affect the result of the operation. These complications include urinary tract infection and blood clots. Post-operatively you will be prescribed antibiotics to prevent infection and anticoagulant medication to prevent blood clots.

- Other complications may be stiffness, infection or loosening of the prosthesis. In a small number of cases further surgery may be required.
- If after your total joint replacement you are to undergo any dental procedures or other surgical procedures please inform your treating doctor that you have undergone a joint replacement and there may be a need for prophylactic antibiotics. There is a slight risk that a skin infection or the shedding of bacteria in to the blood stream from dental or urological procedures may in fact predispose to infection in a joint replacement, although this risk has been shown recently not to be as great as first thought, however prophylactic antibiotics for any of these conditions would be worthwhile and your general practitioner will be able to supervise this.
- Likewise, if you notice any skin or surface infections then please see your general practitioner as quickly as possible and have these treated as he thinks appropriate with antibiotics.

**This brochure is a brief overview of the surgical management of knee replacement and not designed to be all-inclusive. If you have any further questions, please do not hesitate to contact your surgeon.**