

Total Knee Replacement Procedure

A total knee replacement procedure, as the name implies, involves the replacement of the entire knee joint with an artificial joint, or 'prosthesis'. It takes around 90 minutes and is conducted under general anaesthetic or an epidural (spinal) anaesthetic.

The procedure itself involves an incision to the front of the knee joint and the removal of damaged cartilage and bone from the thigh bone ('distal femur') and shin bone ('proximal tibia'). The artificial joint components are then inserted and fixated to the bones using bone cement or uncemented press-fit techniques.

We have special interest in multi-modality pain management and blood loss minimisation strategies in TKR surgery and utilise these for all patients.

POSTOPERATIVE INSTRUCTIONS

After a total knee replacement most patients need to stay in hospital for a few days (most are out of hospital within three days). The evening of surgery (or the following morning) you will be encouraged to get up and do simple physiotherapy exercises and/or walk around a little.

Discharge home is criterion based and depends on your recovery and independence in toileting, leg control and mobilisation.

To learn more about postoperative recovery and rehabilitation, see the following guide on **Total Knee Replacement Rehabilitation Protocol**.

RISKS

As with all surgical procedures there are some risks associated with total knee replacement. These are:

- Infection (about 1% risk)
- Bleeding
- Nerve injury causing numbness or weakness in affected leg
- Blood clots (DVT or embolism).

Risks specific to this procedure include:

- Post-operative stiffness in the knee
- Wearing or loosening of artificial joint - many artificial joints last a lifetime, however over time wearing and/or loosening may occur, in which case a revision procedure may be required.

In most cases of symptomatic advanced arthritis of the knee, the benefits of undergoing the procedure significantly outweigh the potential risks. Your surgeon will run through the details of the benefits as well as the potential risks and complications related to the procedure at your first consultation.

Total Knee Replacement Rehabilitation Protocol

The following is a brief guide to rehabilitation after a total knee replacement procedure.

- These rehabilitation timelines are approximate and actual progression depends on individual recovery.
- Patients can weight bear as tolerated from day one. Please use a walker or crutches until good pain control, quadriceps strength and walking mechanics are achieved.
- Avoid pillow under knees and focus on knee extension and quadriceps exercises from day one. Limb elevation with pillow under ankles or calves when lying is recommended.



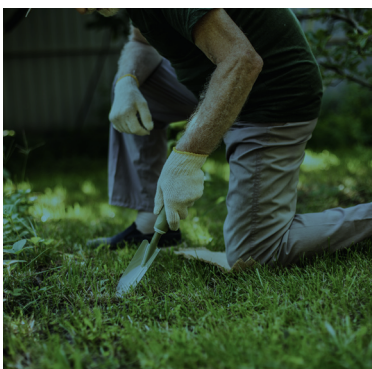
FIRST 2 WEEKS

- Apply icepacks 3-5 times daily for 10 minutes each time.
- Quadriceps and gluteal sets, proprioception and balance exercises (e.g. heel-to-toe walking).
- Straight leg raises.
- Active and passive Range of Movement (ROM) exercises.
- Gait training.
- Upper body conditioning.
- Please remember to apply ice packs three times daily for 10 min; take pain medication as advised and follow the advice of your therapist.



2 TO 6 WEEKS

- Continue with the home exercise program.
- Progress to walking outside.
- Progress with quadriceps, ROM and proprioception or balance exercises.
- Start core strengthening exercises.
- Hydrotherapy or pool work-outs once incisions have healed.
- Aerobic exercises after 4 weeks as tolerated (e.g. static exercise bike).



6 TO 12 WEEKS

- Add lateral steps and step-ups.
- Single leg stance (eccentric exercises initially).
- Progress with all functional activities including household chores, gardening, gentle sporting activities.
- Low impact activities only until 3 months.
- No twisting, pivoting until 3 months.
- Wean into a home or gym program.