



TOTAL KNEE REPLACEMENT

WHAT IS A TOTAL KNEE REPLACEMENT (TKR)?

A TKR is a surgical operation performed on someone's knee that is damaged, normally through osteoarthritis, rheumatoid arthritis or following trauma in association with post-traumatic arthritis. Basically, the surgery replaces the surfaces of the thigh bone (femur) and shin bone (tibia) where they join, which is called the knee.

BACKGROUND:

Healthy knee's these are covered in smooth cartilage and consequently glide and move well on each other. When the cartilage is worn away by arthritis then knee often becomes painful, weak, stiff and affects everyday living. If non-surgical treatment fails (medication, exercise, diet, physiotherapy, gait aids) then a TKR may be performed.

SIGNS AND SYMPTOMS TO JUSTIFY TKR

Some possible causes hip arthritis include:

- Aging process;
- Repetitive load bearing exercises;
- Hip muscle weakness;
- Obesity;
- Leg length discrepancy;
- Genetics;
- Previous trauma

- Injury and pain strategy education;
- Activity and diet education
- Supplement advice

The major goal of physiotherapy is keeping you active through light exercise including swimming, walking and cycling.

SURGERY SIMPLIFIED

There are four basic steps to a TKR:

1. *Bone preparation.* The damaged cartilage and some underlying bone are removed;
2. *Metal implant positioning.* Metal components replace the removed surfaces;
3. *Patella resurfacing.* The under surface of the kneecap is cut a resurfaced.
4. *Plastic spacer inserted.* This is positioned between the metal surfaces to create a smooth gliding movement at the joint





The
Physio
Movement

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PRE AND POST SURGICAL PHYSIO TREATMENT OPTIONS:

- Pool and bike exercises
- Muscle strengthening programs
- Activity modifications
- Gait education and gait aid prescription
- Electrotherapy for muscle activation and pain relief
- Massage
- Joint mobilization techniques

ALTERNATIVE OPTIONS:

Before a TKR is performed surgeons may opt for an arthroscope, which is a minimally invasive surgery to clean up the joint. Alternatively, osteotomy may be performed where the surgeon will cut and reset the leg bones in the hope of decreasing pain and improving function.

PROGNOSIS/TIMELINES:

Most people who undergo TKR have very good outcomes in regards to pain reduction and improved function. Driving can often be resumed 6 weeks following the surgery and the graded recovery varies depending on individuals. The life expectancy of the TKR is roughly 15 years.