

## What Are the Potential Complications and Risks of the Operation?

The rate of serious complications following total knee replacement is low. Common complications include:

- Heart attack, stroke, etc
- Wound infection or poor wound healing
- Excessive bleeding
- Deep vein thrombosis, pulmonary embolism, fat embolism
- Fractures
- Nerve palsy
- Loosening of the prosthesis, etc.



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by Appointment



# Total Knee Replacement



For enquiries and appointments,  
please contact us

## Total Knee Replacement

Total knee replacement is to replace the damaged joint surfaces of the knee with metallic and special plastic prostheses.



## When Is a Total Knee Replacement Necessary?

When the knee joint is badly damaged and other treatment methods cannot relieve the symptoms, total knee replacement may help solve the problem. It aims to relieve pain and regain motion of the knee joint. The mobility of the patient is usually greatly improved after the operation.

Common causes of advanced knee joint damage include:

- Primary osteoarthritis related to age
- Rheumatoid arthritis
- Post-traumatic arthritis

## How Long Can the Total Knee Replacement Last?

Based on past experience, the newly designed implants are expected to last for 15 to 20 years. The duration of the implants also depends on how vigorously one is using the replaced knee.

## What Is the Navigation System and How Does It Help Total Knee Replacement?

The navigation system basically consists of a computer, the infrared camera emitting and receiving infrared signals, the instrument with markers that reflect infrared signals and the software specifically designed for the individual operation.

In total knee replacement, the system makes use of infrared technology to produce the model of one's knee joint during the operation. With the special software, the surgeon knows exactly where to make the cut into the joint. This will in turn help the surgeon to put the prosthesis in the best position. A properly positioned total knee prosthesis is more durable.



## What Is Minimally Invasive Total Knee Replacement?

Total knee arthroplasty techniques are evolving and surgeons are using smaller incisions to insert the knee implants. It aims to reduce the surgical trauma to the soft tissues, thereby yielding smaller wounds and a faster recovery.

## What Are the Pre-operative Preparations?

- General body check like blood tests, ECG, chest X-ray
- Stabilization of existing conditions like hypertension, diabetes mellitus, heart disease, anemia, shortness of breath etc.
- Elimination of possible septic focus in the body. Common areas requiring attention include dental caries, fungal infection of the feet and urinary tract infection

## What Is It Like in the First Few Days After the Operation?

- Three to four hours after the operation, when his/her condition is stable, the patient can resume eating. Patients should take fluid food like congee or soup. An intravenous drip will usually be kept for the first day to replenish fluid loss
- Adequate analgesics will be given to the patient. The pain in the knee may last for around three to four days
- There will be drains leading from deep inside the wound to plastic bottles at bedside. They help remove blood clots within the knee joint after the operation, and will be removed in two to three days after the operation
- If the patient cannot pass urine, he/she may require a urinary catheter. It will usually be removed in two to three days
- Deep breathing and mobilization exercises of the lower limbs are advised to prevent chest infection and deep vein thrombosis
- By the day after the operation, many patients can sit out in a chair. Some can start walking with assistance from the physiotherapists. Appropriate walking aids would be arranged