

Knee Replacement Surgery

The Minimally Invasive Twin Insertion Flex Fixed Knee

Animated view for Knee Replacement Surgery

There are millions of people who suffer from osteoarthritis. The restricted movements due to the pain of arthritis have made their everyday life very difficult. In some cases, total knee replacement may be the best option for relief. But many individuals avoid this, fearing further limitations in their daily activities.

A new total knee replacement implant can help put those concerns to rest.

High Flexion Knee

The High flex knee (High Flexion Knee) is a boon for those patients seeking increased function instead of just pain relief. It allows activities like stair climbing, squatting, kneeling, and gardening which are not possible with conventional knee replacements.

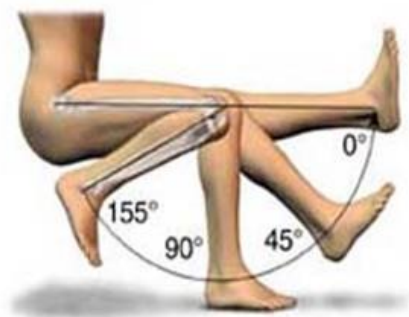
High flexion can be achieved with a combination of implant selection, patient selection, surgical technique and dedicated physiotherapy. High flex implants include fixed and mobile bearing (rotating platform) options.

In order to benefit from a high flex knee replacement a few criteria should be met

- a) Osteoarthritis is the main indication. If it is rheumatoid arthritis, bony destruction should not be advanced.
- b) Revision knees are not suited for high flexion
- c) Fused knees cannot be replaced with a high flexion knee.
- d) The thigh calf index should be above 90 degrees.
- e) The patient should be motivated to achieve deep knee bending and should participate in aggressive post operative physiotherapy.

Some activities possible only with the full bending or high flex knee replacements are shown below.

For patients with the ability and desire, the Flex Fixed Knee is designed to accommodate resumption of deep



knee bending activities. Early diagnosis, good preoperative flexibility and appropriate rehabilitation (physical therapy) can help a patient's chance for success.

- A Higher Degree of Bending for Total Knee Replacement Recipients.
- The Surgery is Minimally Invasive Ensuring a Faster Recovery.
- A Leading Edge Treatment for Joint Replacements Patients.
- Patients can resume an Active Lifestyle after Total Knee Replacement

The Flex Fixed Knee replacement is the first knee specifically designed to safely accommodate flexibility of up to 155 degrees. Many activities of daily living require good range of motion, such as climbing stairs (75-140 degrees) and sitting in a chair (90-130 degrees). Hobbies such as gardening and golfing or activities such as kneeling for prayer and sitting cross-legged can demand an even greater degree of bending. Generally, knee replacements have been designed to accommodate flexibility up to 125 degrees.

What is the benefit of the Flex Fixed Knee?

The Flex Fixed Knee is specifically designed to safely accommodate up to 155 degrees of flexion in patients who had this ability before surgery. This means that with appropriate rehabilitation a patient can resume an active and comfortable lifestyle after total knee replacement – deeply bending the knee for recreational, religious and other day-to-day activities. Patients today want to continue their previous lifestyles – even after total knee replacement. The Flex Fixed Knee may be an option for many patients to help them achieve this goal.



High Flex Knee Replacement - Surgical Procedure

The knee is the hinge joint consisting of three bones. The upper part of the hinge is at the end of the upper leg bone (femur), and the lower part of the hinge is at the top of the lower leg bone (tibia). When the knee bends, the end of the femur rolls and slides on top of the tibia. A third bone, the kneecap (patella), glides over the front and end of the femur.

In a healthy knee joint, the surfaces of these bones are very smooth and covered with a tough protective tissue called cartilage. Osteoarthritis causes damage to the bone surfaces and cartilage where the three bones meet and rub together. These damaged surfaces can eventually become painful. There are several ways to treat the pain caused by osteoarthritis. One way is a total knee replacement surgery. The decision to have total knee replacement surgery should be made very carefully after consulting your doctor and learning as much as you can about the knee joint, osteoarthritis, and the surgery.



In some cases, the Flex Fixed Knee may be an option for total knee replacement. The basic surgical procedure for the Flex Fixed Knee is the same as for any other total knee replacement. In total knee replacement surgery, the bone surfaces and cartilage that have been damaged by osteoarthritis are removed and replaced with artificial surfaces made of metal and a plastic material. We call these artificial surfaces "implants," or "prostheses."

Getting to the Joint

The patient is first taken into the operating room and given anesthesia. After the anesthesia has taken effect, the skin around the knee is thoroughly scrubbed with an antiseptic liquid. The knee is flexed about 90 degrees and the lower portion of the leg, including the foot, is placed in a special device to securely hold it in place during the surgery. Usually a tourniquet is then applied to the upper portion of the leg to help slow the flow of blood during the surgery. An incision is then made that typically extends from just above the knee to just below the knee. The incision is gradually made deeper through muscle and other tissue until the bone surfaces are exposed.



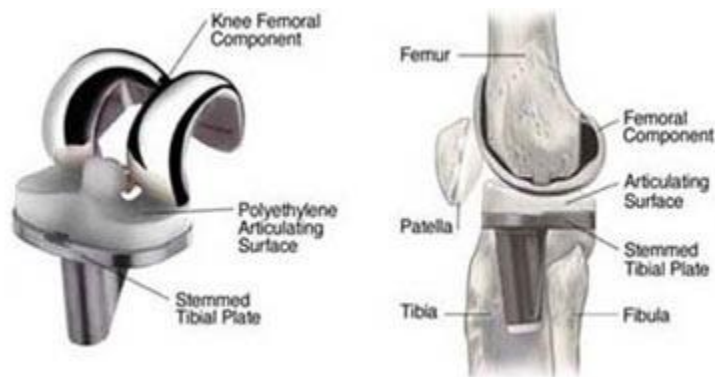
Removing the Damaged Bone Surfaces

The damaged bone surfaces and cartilage are then removed by the surgeon. Precision instruments and guides are used to help make sure the cuts are made at the correct angles so the bones will align properly after the new surfaces (implants) are attached. Small amounts of the bone surface are removed from the front, end and back of the femur. This shapes the bone so the implants will fit properly. The amount of bone that is removed depends on the amount of bone that has been damaged by the osteoarthritis. A small portion of the top surface of the tibia is also removed, making the end of the bone flat. The back surface of the patella (kneecap) is also removed.

Attaching the Implants

An implant is attached to each of the three bones. These implants are designed so that the knee joint will move in a way that is very similar to the way the joint moved when it was healthy. The implants are attached using a special kind of cement for bones. The implant that

fits over the end of the femur is made of metal. Its surface is rounded and very smooth, covering the front and back of the bone as well as the end. The implant that fits over the top of the tibia usually consists of two parts. A metal baseplate fits over the part of the bone that was cut flat. A durable plastic insert is then attached to the baseplate to serve as an articulating surface between



the baseplate and the metal implant that covers the end of the femur. The implant that covers the back of the patella is also made of a durable plastic. Artificial knee implants come in many designs. The surgeon will choose the implant design that best meets the patient's needs.

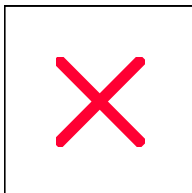
Knee Implants after Attachment

Closing the Wound. If necessary, the surgeon may adjust the ligaments that surround the knee to achieve the best possible knee function. When all of the implants are in place and the ligaments are properly adjusted, the surgeon sews the layers of tissue back into their proper position. A plastic tube may be inserted into the wound to allow liquids to drain from the site during the first few hours after surgery. The edges of the skin are then sewn together, and the knee is wrapped in a sterile bandage. The patient is then taken to the recovery room.

MEDICAL TOURISM IN INDIA

- [Laparoscopic Surgery India](#)
- [Liver Transplant Surgery](#)
- [Kidney Transplant Surgery](#)
- [Bone Marrow Transplant Surgery](#)
- [Hair Transplant Surgery](#)
- [Hip Replacement Surgery](#)

CUSTOMER SPEAK:



Knee Replacement Surgery India, Cost Knee Replacement Surgery, Knee Replacement India, Low Cost Knee Replacement Delhi India, Knee Replacement Surgery Hospital Delhi, Knee Replacement Mumbai Hospital, Cost Knee Replacement Surgery Mumbai, Delhi-India, Low Cost Knee Replacement Surgery Hospital, Affordable Knee Replacement Hospital Mumbai, Delhi, Cost Knee Replacement Surgery Hospital Delhi, Cost Knee Replacement Surgery Mumbai, Affordable Knee Replacement Hospital Bangalore, Pune,

Ahmedabad, Chennai, Hyderabad, Knee Replacement Surgery Chennai, Cost Knee Replacement Ahmedabad Knee Replacement Hyderabad Low Cost Knee Replacement Surgery Pune