

Knee Replacement

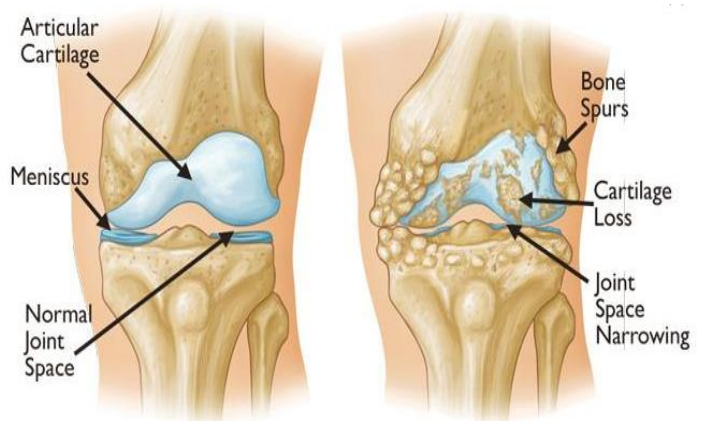
Summary

Knee replacement surgery, also known as arthroplasty, is usually necessary when the knee joint is worn or damaged, leaving mobility reduced and the patient in pain even while resting.

Knee replacement surgery is considered when all other forms of conservative treatment have been exhausted. The procedure involves removing all or part of the knee joint and replacing the damaged parts with an artificial joint. These artificial joints are made of metal and plastic.

Causes

The most common reason for knee replacement surgery is osteoarthritis which is an age related wear and tear type of arthritis. It usually occurs in people fifty years of age and older, but may occur in younger people too. The cartilage that cushions the bones of the knee softens and wears away. The bones then rub against one another causing knee pain and stiffness.



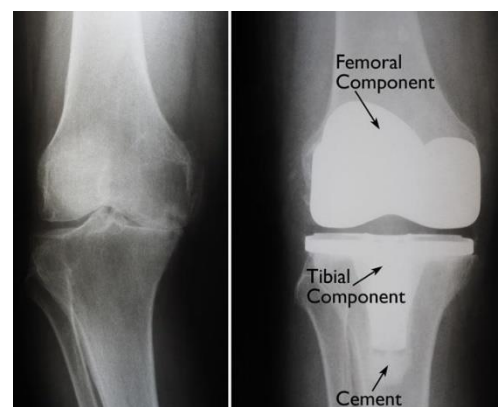
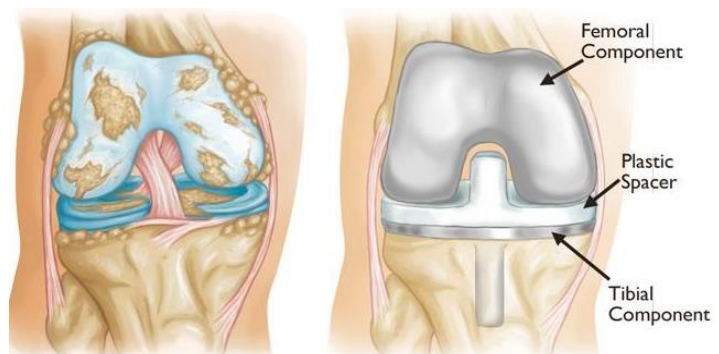
Total Knee Replacement

The goal of a total knee replacement is to relieve knee pain and increase function by resurfacing the bones that meet at the knee joint.

The arthritically damaged areas at the bottom of the femur and the top of the tibia

are removed and each bone is reshaped to exactly fit its new prosthesis. Components are attached to the femur, tibia and if applicable, the patella. The new components are normally cemented in place with bone cement. However, if cement is not used, then the surface of the component facing the bone is textured or coated to encourage bone to grow onto it, forming a natural bond.

A flexible cushion, usually made of polyethylene, is attached on top of the new tibia surface. This spacer acts as a shock absorber between the two new prosthetic surfaces.



Partial Knee Replacement

A partial knee replacement is also known as a unicompartmental knee replacement. In this procedure, only a portion of the knee is resurfaced. This procedure is an alternative to total knee replacement for patients whose disease is limited to just one area of the knee, either the inside (medial) part, the outside (lateral) part, or the kneecap. Because this procedure involves less interference with the knee, it usually means a quicker recovery and better function.



Post Surgical Recovery

Recovery time can vary depending on the individual and what type of surgery has been performed.



Following knee replacement surgery, patients could be discharged on the same day or they may require longer periods in hospital, normally up to five days. Post surgical treatment will initially be aimed at pain and wound management.



Outpatient physiotherapy will usually begin within a week of surgery and will be aimed at knee strengthening exercises, knee exercises to encourage range of motion and reduce scar tissue, and assistance with how to use assistive walking devices. By gradually building strength and flexibility, the patient will eventually be able to walk unaided.

Most patients are able to care for themselves and resume normal activities including driving within three to six weeks. However, it may take four to six months, or up to an entire year to fully recover and realise the full benefits of knee replacement surgery.

Prognosis

For eighty to ninety percent of people who have a total knee replacement, the new knee joint should last about twenty years if not longer.

For patients who have had a partial knee replacement, it is more likely that a repeat operation will be required with one in ten people needing further surgery after ten years.



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