

Total Knee Replacement

A total knee replacement, also called total knee arthroplasty, might be more accurately described as a knee "resurfacing" because only the surface of the bones are removed and replaced.

There are four basic steps to a total knee replacement:

- **Bone Preparation.** The damaged cartilage surfaces at the ends of the femur and tibia are removed along with a small amount of underlying bone.
- **Placement of the Implants.** The removed cartilage and bone are replaced with metal components that recreate the surface of the joint. These metal parts are usually cemented into the bone.
- **Patella Resurfacing.** The backside of the patella or kneecap is cut and resurfaced with a plastic button. At times the patella is not resurfaced, depending on the quality and size of the patella bone.
- **The Bearing Surface.** A high grade plastic bearing surface is inserted between the metal components to create a smooth gliding joint surface.

When Surgery Is Recommended

There are several reasons why a total knee replacement is recommended including:

- Severe knee pain or stiffness that limits everyday activities, including walking, climbing stairs, and getting in and out of chairs. It may be hard to walk more than a few blocks without significant pain and it may be necessary to use a cane or walker
- Moderate or severe knee pain while resting, either day or night
- Chronic knee inflammation and swelling that does not improve with rest or medications
- Knee deformity — a bowing in or out of the knee
- Failure to substantially improve with other treatments such as anti-inflammatory medications, cortisone injections, lubricating injections, physical therapy, or other surgeries

Candidates for Surgery

- There are no absolute age or weight restrictions for total knee replacement surgery, but obesity has been implicated with other comorbidities that may impact the outcome following surgery.
- Recommendations for surgery are based on a patient's pain and disability, not age. Most patients who undergo total knee replacement are age 50 to 80, but every patient is evaluated for their specific symptoms and failure to respond to prior treatment. Total knee replacement has been performed successfully at all ages, from the young teenager with juvenile rheumatoid arthritis to the elderly patient with degenerative osteoarthritis.

Realistic Expectations

- When deciding to undergo a total knee replacement, it is important to have realistic expectations and understand what you can do and cannot do after surgery.
- Following recovery from total knee replacement, most people experience a dramatic reduction in knee pain and a significant improvement in their ability to perform common daily activities. It is important to understand that total knee replacement may not allow you to do more than you could before you developed knee arthritis.
- Over time with normal activity the implant may show signs of wear. Excessive activity or weight may speed up this normal wear and may cause the knee replacement to loosen and become painful. Therefore, we advise against high-impact activities such as running, jogging, jumping, or other high-impact sports for the rest of your life after surgery.
- Realistic activities following total knee replacement include unlimited walking, swimming, golf, driving, light hiking, biking, ballroom dancing, and other low-impact sports.
- With appropriate activity modification, knee replacements can last for many years, as a predictable and durable treatment for knee arthritis