

An Overview of Total Knee Replacement Surgery

Filters

Select Category

An Overview of Total Knee Replacement Surgery

Diana Khoury

Comments (0)



If you suffer from chronic knee pain, the condition may worsen over time and ultimately require knee replacement surgery. Although knee replacement is a major surgery with a significant recovery process, recuperation is a lot easier and more effective than it used to be, allowing patients to return to their regular activities sooner.

Now, many patients can have total knee replacement done at an outpatient surgery center and return home the same day to start the recovery process. With the help of a caregiver, patients have a lot of control over how quickly and how thoroughly they recuperate at home.

In this article, we'll cover what leads to knee replacement and what the surgery and recovery process look like.

What leads to knee replacement

The joint degeneration that leads to knee replacement is most often a result of degenerative arthritis.

“There may be some people with congenital joint malformations that can lead to replacement, but 99% of the time it’s for some type of arthritis,” said Dr. Brent Thiel, Orthopedic Surgeon at WWMG’s Orthopedic, Sports, Spine & Hand Center.

There are many kinds of arthritis, but osteoarthritis is the most common culprit for knee replacements. Osteoarthritis can result from traumatic injury, joint misalignment, or simply as part of the aging process.

Osteoarthritis is less responsive to pharmaceutical treatment (compared to other types of arthritis that have an autoimmune component), and leads to knee replacement most frequently.

Treatments recommended before getting surgery

Because total joint replacement is a major surgery, health care providers work hard to delay it as long as possible. When a patient has knee pain, their primary care provider will recommend anti-inflammatory medication and a physical therapist will prescribe exercises to build muscle support for the knee joint.

As the pain gets worse over time, an Orthopedic doctor may recommend joint injections or support braces. But when the patient’s pain becomes debilitating, knee replacement is recommended.

Outpatient vs Hospital surgery

For nearly 80% of patients, as long as they have support at home, knee replacement can be performed as an outpatient surgery. A major advantage of outpatient surgery is the ability to receive more focused care. Nurses work closely with patients in the weeks leading up to the procedure to manage their surgery preparation process, while making sure that all the patient’s questions are answered.

At facilities like WWMG's Gateway Surgery Center, additional time is spent to prepare the patient before *and after* the surgery. This leads to better outcomes and a less stressful surgery scenario for patients and their family members.

Patients who are candidates for outpatient surgery must have a caregiver who can commit to supporting them at home during the recovery period, and be available to drive them to PT and follow-up medical appointments. After surgery, patients return home the same day to enjoy the comfort of recovering in their own home.

Like any major surgery, knee replacement involves some risk. For patients who have other medical conditions such as cardiac or pulmonary issues that put them at higher risk of complications, or who require more intensive care during recovery, their knee surgery will be performed in a hospital.

The knee replacement procedure

Although it is possible to perform a partial knee replacement that targets only a single damaged area, most patients have damage throughout the knee, which requires a total joint replacement.

Whether it is performed at the hospital or an outpatient surgery center, there is no difference in the surgical procedure itself.

"Knee replacement surgery is basically opening the knee, and with special instruments we're cutting out small wafers of bones with the arthritis on it, and replacing it with metal and plastic," said Thiel.

The knee is opened from the front, and the kneecap is moved out of the way. Using precision tools, the surgeon will then remove the damaged bone and attach a flat metal platform to the healthy bone underneath, utilizing different methods according to the quality of the remaining bone.

From there, the surgeon builds up an artificial knee using metal and plastic component pieces that are matched to measurements of the patient's own bones. Essentially, every artificial knee is a custom made construction that accounts for the individual's size, bone strength, and metal allergies, if any.

“While we’re there we put the joint through the full range of motion to make sure the alignment is right and the kneecap is tracking,” said Thiel. With the current generation of precision instruments and parts, surgeons are able to ensure that artificial knees reproduce natural motion much better than in the past.

“The implants have improved tremendously,” said Thiel, so that a knee replacement performed today can successfully last for up to 25 or even 30 years.

Risks of joint replacement surgery

For all patients, there is a small risk of complications that could arise from knee replacement surgery, such as a painful infection or development of scar tissue that reduces the knee’s range of motion.

But the risks of avoiding the surgery are much higher. When the degeneration caused by arthritis is allowed to continue, legs can become misshapen, making it impossible to walk with a normal gait.

“Without surgery, pain and loss of function are inevitable. Eventually people just become sedentary and can’t do what they want or even basic things that their body is supposed to do. They become very weak, and some people are almost bedridden,” said Thiel.

Patients who opt for surgery can improve their mobility and their quality of life for many years to come.

Recovery and pain control

The knee replacement surgery itself takes less than two hours, and most patients will be able to go home 3-5 hours afterward. As with any surgery, the patient may experience significant pain in the first few days.

However, Thiel says that pain control options today are much better than they were in past decades, making it much easier for patients to begin using their leg right away.

Typically, patients will need a support person at home to help them move around and drive them to appointments for the first week or two. Outpatients will also have online access to nursing support for as long as they choose to use it.

Rehabilitation after surgery

“There is quite an extensive rehab program that knee replacement patients need,” said Thiel.

Physical therapy begins the day after the surgery. The patient will use a walker for a week or two and use a cane for some time after that. Patients will work with a physical therapist two or three times a week and must keep up with their PT exercises at home.

This is where the patients’ choices have a serious impact on their own recovery. Although it is tempting to skip the discomfort and effort of at-home PT exercises, doing so delays recovery and can lead to long-term joint stiffness.

“The most important thing is the patient’s dedication to rehab,” said Thiel. A patient who diligently follows their PT’s daily exercises recommendations can expect to regain normal range of motion in two or three months, and to regain their strength sometime after six months. Although rehabilitation is challenging, it is worth the effort.

“It’s hard for people to wrap their minds around taking 6 to 12 months to recover,” said Thiel. But with dedicated effort, an artificial knee can provide nearly the same mobility that was possible before the onset of arthritis.

Where to seek help for knee pain

If you have chronic knee pain and want to learn more about your treatment options, including knee replacement surgery, request an appointment with a WWMG Orthopedic Surgeon today.

We’re here to help you get out of pain and back to doing the activities you love.

All, Orthopedic Sports, Spine, and Hand, Rheumatology

[Previous Post](#)