

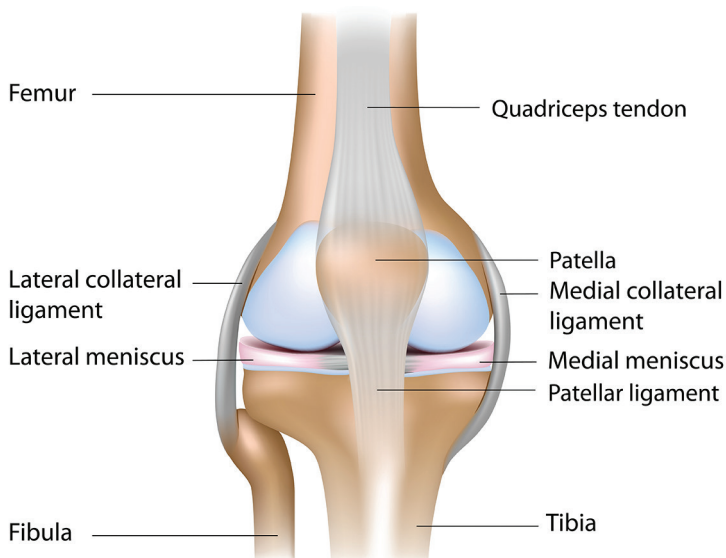
The Knee Joint

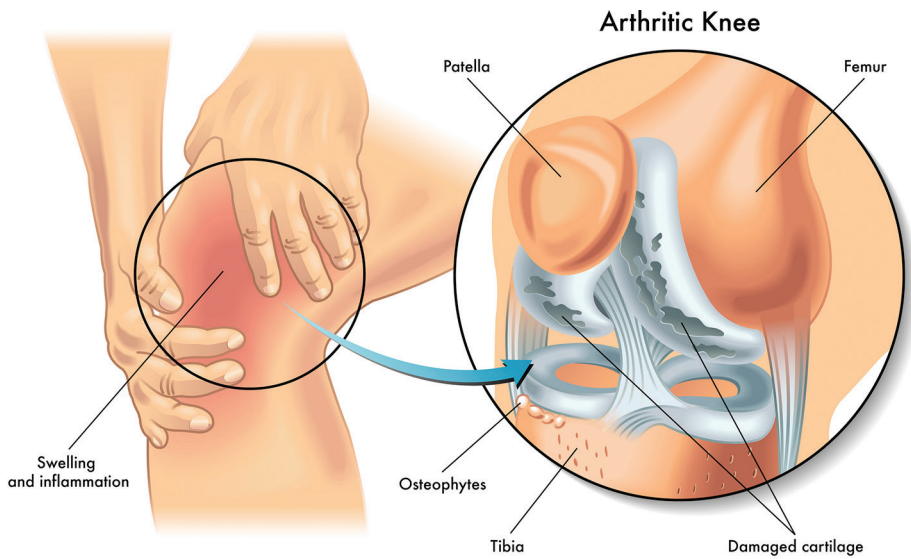
The knee is the largest and one of the strongest joints in the body. It is also delicate and complex. It joins the thigh with the leg and is made up of bones, ligaments, tendons, and cartilage. It consists of two joints: one between the femur and tibia and another between the femur and patella.

The knee is classified as a pivotal hinge joint, meaning it can straighten and bend in one direction while it allows some twisting to occur. This is known as flexion and extension; you will often hear your surgeons refer to this when discussing your knee.

Movements at the knee joint are essential to everyday life such as walking, climbing stairs, standing and sitting. Because it is such an integral part of normal activity, the knee is often susceptible to injuries and arthritis.

Anterior view of the right knee

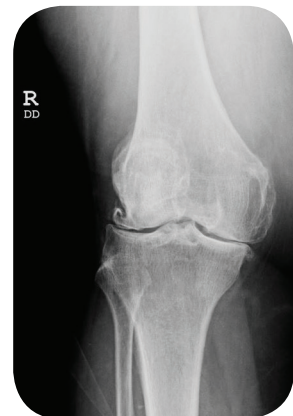




Arthritis

Knee Arthritis can make everyday life very difficult. There are three types of arthritis that you can have in your knee:

1. **Osteoarthritis (OA):** This type of arthritis is due to wear and tear on your joints over time. It causes the cartilage to deteriorate and can result in bone rubbing on bone.
2. **Rheumatoid arthritis (RA):** This type of arthritis is caused by an autoimmune disease that attacks various joints throughout the body. The disease is chronic and inflammatory in nature and damages ligaments and cartilage while softening the bone.
3. **Post-traumatic arthritis (PA):** This type of arthritis will develop after a trauma or injury to the knee. It may not develop until years after the injury.



Arthritis and Your Life

Arthritis pain can begin suddenly, but it is most likely to develop gradually over time. You may first experience pain when waking up in the morning or when you stand up after sitting for a while. Some patients say changes in weather can bring on arthritis pain.

Eventually you may notice that the pain has taken control over your ability to complete everyday tasks. It may hurt to walk, climb stairs, or even sit down. You may not be able to bend or straighten your knee as you once could. You may also feel a grinding sensation in your knee or popping and cracking sounds when you walk. Arthritis can even wake you up in your sleep. The appearance of your knee may change and become deformed due to the breakdown of the joint. There may come a time when you decide that you need help.



Why Knee Surgery?

Knee replacement surgery is considered once all other conservative options have failed to provide any relief. If you have tried all your doctor's recommendations and are still experiencing pain, stiffness, or lack of stability, then it is time to consider making a choice that will allow you to get your life back.

Over 700,000 knee surgeries are performed each year in the United States to help relieve knee pain. 9 out of 10 patients who undergo knee replacement surgery state they feel immediate pain relief and 95% of all patients are satisfied with the procedure. Patients can expect implants to last up for at least a decade, with some lasting as long as 20 years. This allows for years of active and healthy living. The impact of a knee replacement surgery on your life can be profound.





What Is Knee Replacement Surgery?



The goal of knee replacement surgery is to ease pain and restore mobility back to the knee. Your orthopedic surgeon will remove the damaged and diseased portions at the end of the femur (thigh bone) and top of tibia (shin bone) and replace them with artificial implants made of metal or plastic. Each bone is shaped to exactly fit the prosthesis. Components are then attached to the thigh bone, shin and knee cap, most commonly using surgical cement. The surgeon may need to resurface the back of the kneecap, known as the patella.





Preparation for Your Surgery

Your orthopedic surgeon will require a few activities to be completed prior to surgery that may include the following:

Complete Physical Examination: Your doctor will ask for a examination as well as some tests to be completed such as blood work, an EKG, and a chest x-ray.

Surgical Consultation: Your doctor will review the procedure with you and answer any questions you may have. You will need to sign a surgical consent form. Your doctor will also review any test results from your physical examination and you will notify the surgeon of any allergies or medications you currently take.