

A Patient's Guide to Partial Knee Resurfacing





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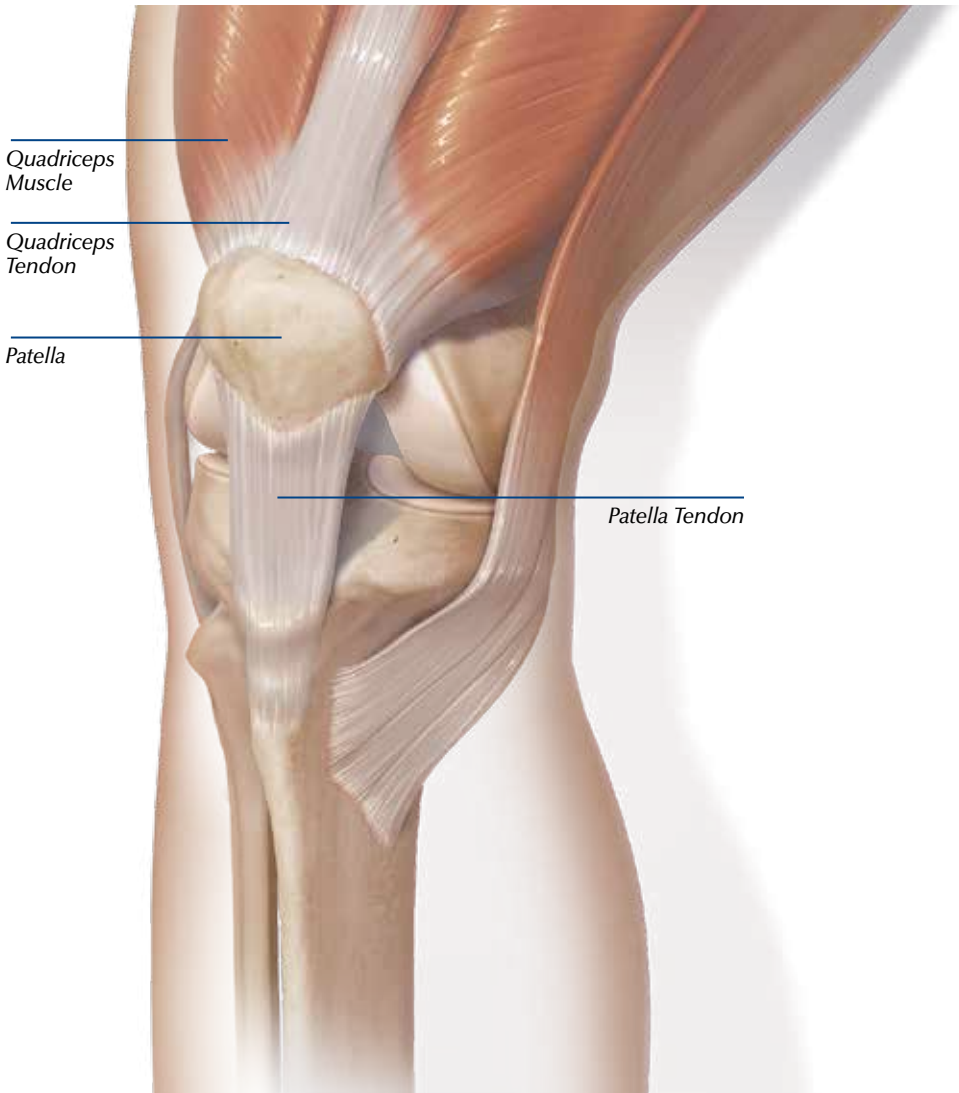
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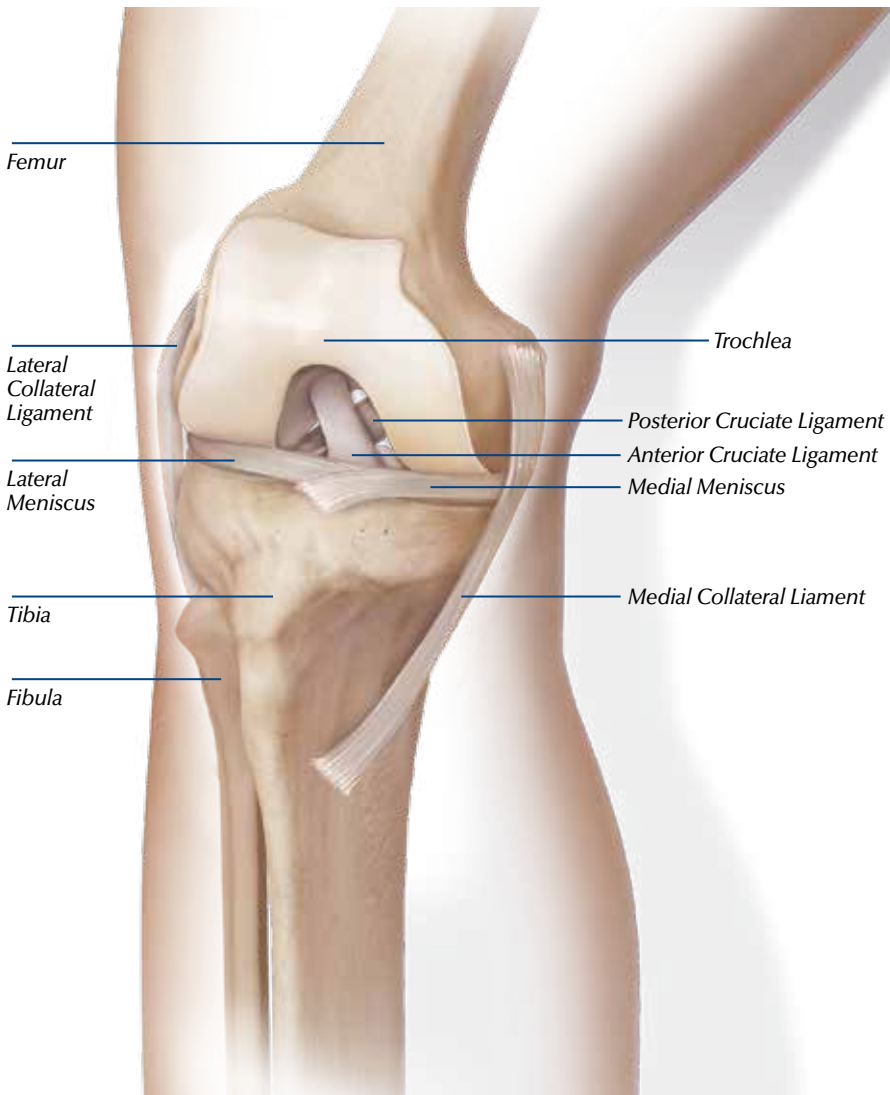
INTRODUCTION

The normal knee joint consists of the femur, the patella, and the tibia bones, all of which are all held together securely with soft tissue structures including ligaments and tendons. The bones are separated by shock-absorbing cartilage and lubricating synovial fluid. All of these structures move naturally through an arcing, hinge-like range-of-motion during daily activity. The knee can be divided into three main compartments or areas: the medial or inner compartment, the lateral or outer compartment, and the patellofemoral compartment under the kneecap.



When the cartilage structures of the knee wear out, the underlying bone surfaces are exposed and rub against each other, leading to swelling and pain with activities of daily living. This condition is commonly known as osteoarthritis (OA). OA is often referred to as degenerative arthritis or “wear and tear” arthritis because of the degenerative nature of the disease process.

Although there are many types of arthritis that can affect the joints, including Rheumatoid, Septic, and Psoriatic, the focus of this educational guide will be OA.



OSTEOARTHRITIS

What is OA?

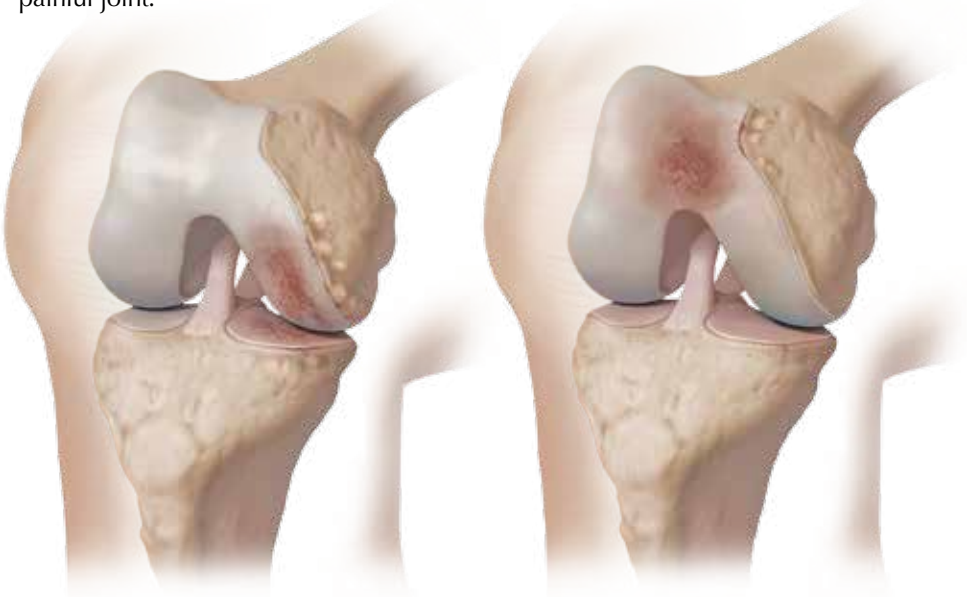
OA is a disease process that affects your joints. It can start with an injury, poor alignment of an extremity, or simply from everyday wear. When OA begins, a cascade of events takes place that start to degrade the cartilage, bone surfaces and soft tissue structures. Eventually, the degenerative nature of this joint disease causes breakdown and loss of cartilage which serves as a cushion between the bones that make up the joint. Bone spurs around the joint can form, and the joint can stiffen as the soft tissue structures become thickened and inflamed.

The symptoms of OA can include any combination of pain, joint stiffness, swelling, tenderness to touch, and even a grinding sound when moving the joint. In some people, OA can become debilitating in severity.

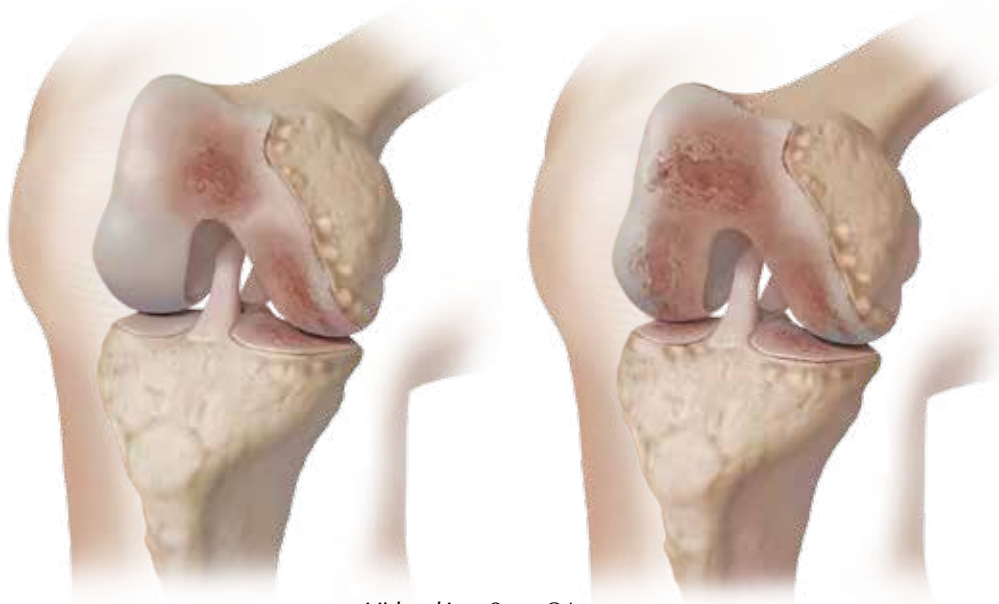
OA affects more than 50% of the population over the age of 65. By the age of 75 nearly everyone has some form of OA in one or more of their joints, often including the weight-bearing hip and knee joints. Over the age of 55, women are more prominently affected by OA than men.

How is OA Diagnosed?

Only your doctor can diagnose you properly with OA. In order to make the correct diagnosis, your doctor will perform a physical exam, consider your symptoms and medical history, and order one or more diagnostic tests. These tests could include but are not limited to bloodwork, x-rays, CT-Scan, or an MRI to get a clear picture of the painful joint.



Early Stage OA of the medial and patellofemoral compartments



Mid and Late Stage OA

How is OA Treated?

Only your doctor can treat your OA and will recommend different treatment paths after the severity of your OA is identified. The treatment options will be presented to you according to your medical history, OA severity, and the level of your disability. These treatment options can range from conservative options to surgery.

Conservatively, your doctor will offer you treatment options that could include home based therapy such as weight loss options, nutritional supplements, and mild to moderate exercise. If you are unresponsive to these options, physical therapy may be prescribed by your doctor and may help with increased mobility and pain relief through a guided exercise program and other techniques. If your doctor feels that you need additional help in pain relief, they may prescribe an over the counter or prescription strength anti-inflammatory medication and cold therapy to help reduce the inflammation and pain associated with OA. If warranted, your doctor may also offer you a localized joint injection of cortisone to help further reduce the inflammation. Joint lubrication injections may also be considered. Additional supportive measure that may be prescribed by your doctor to aid in walking and standing include a cane or walker to take the pressure off of your affected joint(s).

If conservative measures to control your pain, inflammation and disability are not effective, your doctor may discuss surgical options that are tailored specifically to your OA location, severity and overall medical condition. These options range from removal of small amounts of inflamed or diseased tissue by arthroscopic debridement, to arthroplasty which involves replacing or resurfacing the diseased surfaces of the joint. Please talk with your doctor in length to determine the best treatment option for your condition.

ARTHROPLASTY - Knee Replacement & Resurfacing Surgery

After failed conservative treatment for your knee OA, with continued pain and disability, your doctor may recommend knee replacement surgery. Annually nearly 600,000 people in the United States undergo knee replacement surgery. Knee replacement surgery has been conducted for approximately 50 years.

Knee replacement surgery can include either partial knee resurfacing and or total knee replacement. Total Knee Replacement surgery is the most common surgical procedure performed for knee OA where all three compartments of the knee are diseased. In this procedure, all three compartments of the knee are replaced or resurfaced. However, Total Knee Replacement is not always optimal for younger patients with early to mid-stage arthritis in only one or two compartments of the knee. Partial knee replacement involves resurfacing only a portion of the knee. The decision on how much of the knee to replace is made by your doctor based upon findings of your physical examination, x-ray studies, age, and health and activity level.

Knee replacement/resurfacing surgery requires a surgical incision about the knee to allow access to the inside of the joint where your doctor can remove the diseased portions of the bone, cartilage and soft tissue and replace these surfaces with very smooth high grade metal alloys and advanced plastic components that form an artificial joint, or prosthesis. The new knee prosthesis moves in many ways like a normal knee joint. However, it is important to understand that an artificial knee will likely never work as well as your original knee did before you had arthritis. With pain relief, and good health, you should be able to resume most of your normal activities. The artificial knee may allow you to return to active sports or heavy labor under your physician's instructions. Activities that overload the artificial knee must be avoided. About 90 percent of patients with arthritic knees before surgery will have better motion after knee replacement/resurfacing surgery.



iBalance® Patellofemoral Joint Arthroplasty



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What is Partial Knee Resurfacing?

Partial knee resurfacing is a less invasive surgical treatment option for adults with OA affecting only one or two compartments of the knee. Utilizing highly accurate and specialized instruments, your physician can remove only the diseased portions of the bone and cartilage and preserve the healthy cartilage, bone and soft tissue structures. Once the diseased portions of cartilage and bone are removed, these focal areas are resurfaced using highly anatomic iBalance® UKA or PFJ implants adhered to bone to recreate the smooth action of the healthy joint.

The benefits of Partial Knee Resurfacing Include:

- *Highly accurate instruments facilitate placement your implants in the ideal position according to the shape of your joint surfaces to lead to a more natural feeling knee*
- *Smaller instruments allow for a minimally invasive incision*
- *Can be performed on an outpatient basis*
- *Results in a shorter stay and more rapid recovery when compared to a total knee replacement*
- *Can be combined with advanced orthobiologic products to preserve tissue*

You are Scheduled for Partial Knee Resurfacing Surgery - What's Next?

Most knee replacement surgical procedures are performed in the hospital setting and require a patient to stay for a few days to recover before being discharged home. However, there is a growing trend, especially in the younger and healthy patients to having same day or outpatient joint replacement. Your surgeon may or may not choose to perform this procedure at a hospital depending on your overall health status and/or facility availability. More and more patients and surgeons are electing to go home directly after surgery without the need for an overnight stay in the hospital. Your surgeon can discuss whether you are healthy enough for this treatment option.

Every hospital or surgical institution has their own particular checklists, procedures and basic routines. These will include but not be limited to:

- *Preadmission checklists*
- *Hospital checklists*
- *What to expect on the day of surgery*
- *What to expect before being discharged from the hospital*
- *What to expect at home (home healthcare, physical therapy, wound care)*

These checklists and expected routines will be provided to you by your doctor and their staff, your internist, your anesthesiologist, and the facility where the surgical procedure will be performed. You will most likely be assigned a liaison at your doctor's office(s) that you can call anytime during this process to answer any questions that may arise. Your doctor will coordinate all of your preoperative and postoperative visits prior to scheduling surgery. Prior to scheduling surgery, your doctor will thoroughly explain all of the risks and benefits of partial knee replacement surgery.

The following information will be discussed with you in your surgeon's office:

- *Preoperative teaching about the surgical procedure*
- *Surgical risks*
- *Preparation for surgery*
- *What to bring to the surgical facility*
- *Discharge planning*
- *Home preparation for after surgery*

Your doctor's office will provide you with the information to schedule the required tests. These include:

- *Blood tests*
- *Urinalysis*
- *EKG and chest x-ray*
- *History and physical from an internist*

PREPARING FOR YOUR SURGERY

Typically you will be admitted to the outpatient surgery center or hospital on the morning of your surgery. This is called a "same-day admission." Insurance companies generally do not allow admission to the surgical facility the day before your procedure. Patients are asked to arrive at least one to two hours before the actual time of the surgery. Please make every effort possible to arrive on time, as a starting time for your surgery has been reserved.

You may be able to go home the day of surgery, although some patients benefit from one or even two nights in the facility. Patients are typically discharged to home without the need for an extended-care facility. With your help, your surgeon will make every effort possible to anticipate your needs and provide you with the appropriate support services.

YOUR SURGERY IS COMPLETE - WHAT'S NEXT

Recovery Room

After your surgery, you will be placed on a hospital bed and taken to the post anesthesia care unit (PACU/ "Recovery Room"). Your vital signs (heart rate, blood pressure, temperature and breathing), IV, wound dressing and level of comfort will be checked frequently. The anesthesiologist and your surgeon will continue to oversee your care in the recovery room. You may receive medications to decrease postoperative discomfort. Throughout your recovery, your condition and vital signs will be carefully monitored until it is determined that you are able to leave the recovery room. You will be asked to move your toes and ankle to test the motor function of your leg. The circulation and sensation of your leg will also be checked frequently.

Your leg may be in a brace after the procedure. Once you are awake and your vital signs are stable, you will be discharged from the post-anesthesia care unit and brought to a recovery suite. Most patients spend one to two hours in the recovery room for close observation after surgery. Your family members should be aware that after they leave you, it may take a number of hours before they will be contacted by your surgeon to discuss the results of your surgery.

PREPARING FOR HOME

Home Health Care

The need for home health care will be decided between you and your surgeon. It is important that your surgeon understand your level of independence, your general health status, and how much help you have at home. Many patients can get assistance from other family members, which will help ease the transition upon their return back home. Patients who live alone and do not have available transportation are more likely to be candidates for home care. Not all insurance companies allow for home health care or home physical therapy, and prior to surgery it is important that you understand the availability of these services and whether or not your insurance company will pay for this care. If your surgeon decides that you are an appropriate candidate for home care, a nurse and a physical therapist will come to your home to assist you. Home health care will be coordinated with the assistance of the hospital discharge planner and the home health care service while you are in the hospital.

Outpatient Physical Therapy

Eventually, you will be able to attend outpatient therapy or continue your exercise program at home on your own. You will be given a prescription for physical therapy when you leave the hospital or during an initial post-op visit. To receive supervised physical therapy outside your home, you must be able to travel to a facility that offers these services. It is recommended that you avoid driving for the first 2-3 weeks following your surgery or otherwise directed by your physician. Outpatient physical therapy centers may be located within a hospital setting, or may be free standing clinic. Your surgeon and staff will make every effort to recommend an appropriate facility that is within a reasonable distance from your home or one that provides transportation. You will be expected to attend supervised therapy sessions two to three times a week. Eventually, you will learn your exercise program and be able to continue with your exercises at home without supervision.

Long-term Issues

Physical activities: Most patients return to more active physical activities such as biking or swimming 4-6 weeks after the surgery. The time for return to such activities will be directed by your surgeon. It is best to avoid higher impact activities such as jogging to enhance the longevity of the implant.

Surgeon's name _____

Surgeon's telephone number

Hospital _____

Date/time of surgery _____

