



As the largest joint in the body, the knee is susceptible to a range of injuries. This is partly because it has so many multifaceted components. The bones, ligaments, cartilage, and tendons that make up the knee can be easily injured, and in many cases, can be treated with simple procedures. For knee injuries that involve more than one structure in the knee, surgery is often required to allow the knee to function normally again. The most common knee injuries include fractures, dislocations, and sprains and tears of soft tissues such as the tendons, cartilage, and ligaments.

KNEE INJURIES ARE GENERALLY CAUSED BY ONE OF THE FOLLOWING:

1

Chronic wear and tear - Many adults suffer from chronic knee pain, a result of the natural, inevitable wearing of the joint that comes with aging. You may have chronic wear and tear knee pain if you feel reoccurring pain and/or swelling, have difficulty straightening or bending the knee, or hear audible 'clicks' when you move your knee.

2

Direct trauma - This usually happens to athletes (of any age) who have experienced a rapid or abnormal twisting motion in the knee as a result of a direct contact or collision. This can also happen after a bad landing or due to a fall or a blow.

Symptoms include immediate pain after the injury, swelling of the affected knee within 4 to 12 hours, a popping sound when the ligament ruptures, difficulty with knee movement, walking with a painful limp, and instability.

3

Overuse or repetitive stress- occur with repetitive activities or repeated or prolonged pressure on the knee usually leading to irritation and inflammation. Often experienced by the elderly or people with active lifestyle, the indicators are knee pain and swelling that is usually relieved with rest but may be persistent in severe cases to the point where it worsens with physical activity.

The ultimate purpose for treating a knee injury is to relieve pain and bring the joint back to peak performance. Because each injury is different, the prognosis is usually determined by the individual injury, the underlying health of the patient, their willingness to work with their therapist or doctor, and the treatment path the patient chooses. Depending on the injury, your doctor may suggest either surgical or non-surgical treatment.

HEMOCARE & NONSURGICAL TREATMENTS



R.I.C.E. – This method can help your way to speedy recovery. (R) Rest – (I) Ice – (C) gentle compression and (E) Elevation of the injured body part.



Immobilization - With the help of a brace, you can prevent your knee from moving and causing additional pain. If you have a fracture, a cast holds the broken bones in place while they heal. Further protection can be provided by crutches, which you can use to avoid putting too much weight on your leg.



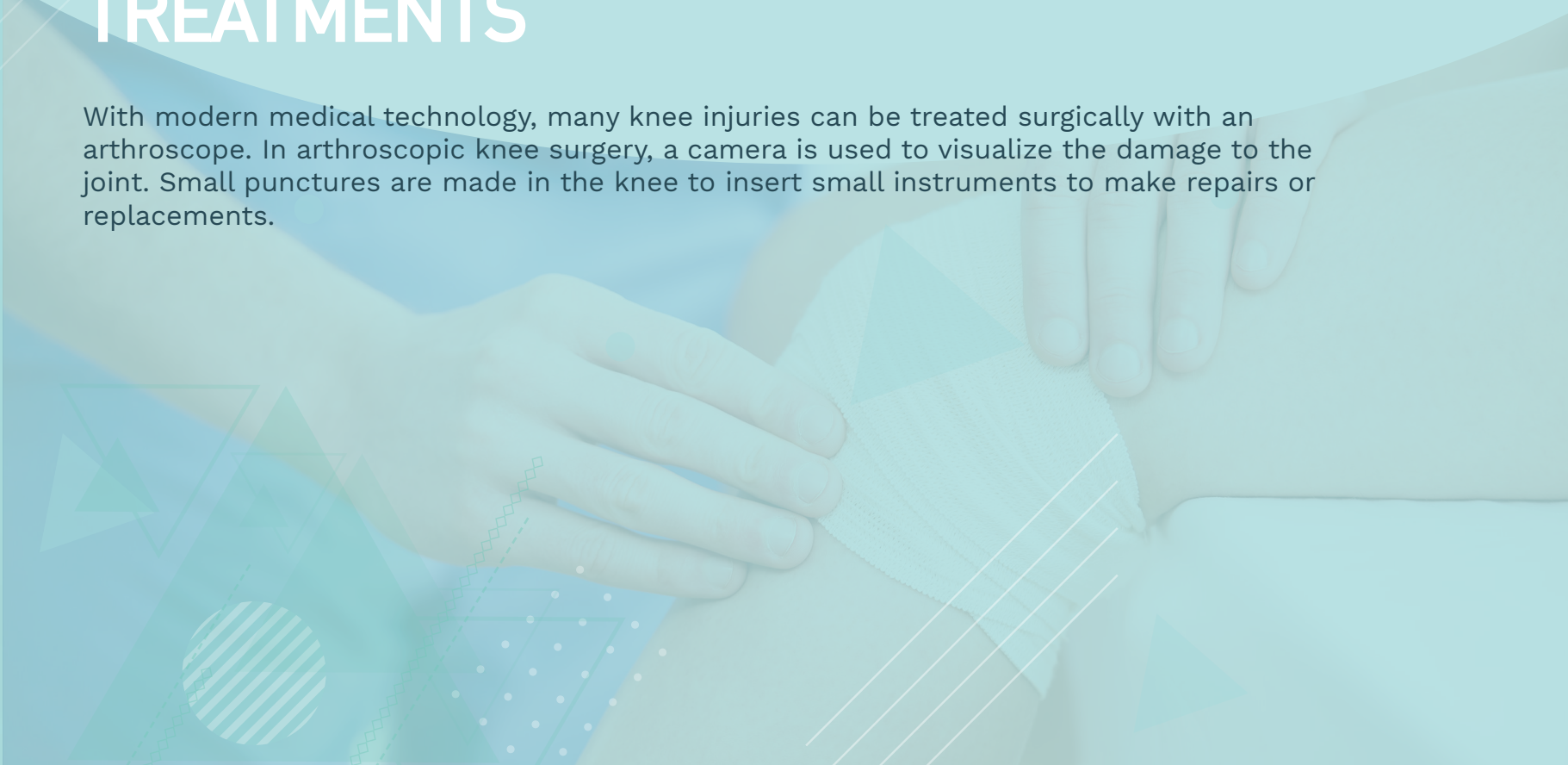
Physical therapy – Structured exercises guided by professionals can restore function to your knee and strengthen the leg muscles that support it.



Medicine - Non-steroidal anti-inflammatory drugs like aspirin and ibuprofen reduce pain and swelling.

SURGICAL TREATMENTS

With modern medical technology, many knee injuries can be treated surgically with an arthroscope. In arthroscopic knee surgery, a camera is used to visualize the damage to the joint. Small punctures are made in the knee to insert small instruments to make repairs or replacements.



KNEE REPLACEMENT

Each year, about 600,000 Americans have knee replacement surgery. In the last several years, orthopedic medicine has advanced to the point where many patients can find the pain relief and return to function they need with a partial knee replacement, as opposed to total knee replacement. The thinking is, why replace the whole knee—which requires a long rehabilitation and recovery—when it is possible to return to function with your original ligaments intact?

Partial vs. total knee replacement: What do doctors recommend?

The knee is composed of three main compartments: the medial compartment (along the inside of the knee), the lateral compartment (along the outside of the knee), and the patellofemoral compartment (the front of the knee between the kneecap and thighbone). Whether your doctor recommends a full or partial replacement depends primarily on which parts of the knee are damaged. If two or three of the compartments are damaged by arthritis or by injury, doctors often recommend a total replacement. During the surgery, all the cartilage gets removed and the compartment of the knee are shaved down to receive a mix of metal or plastic that will serve as the surrogate knee. Compared to the partial knee replacement procedure, it carries a longer recovery time and the potential for other complications.

In a partial knee replacement, just one compartment of the knee is resurfaced. This can be done in an outpatient setting – one of the biggest advantages of the partial knee replacement. Compared to a total knee replacement, the partial replacement procedure features a smaller incision, which minimizes the physical trauma of the procedure and generally results in better post-surgery flexibility. Aside from cutting the initial recovery time in half, there are also fewer complications associated with this surgery as there is a smaller risk of infection and less bleeding. Full healing still requires several months, and the same restrictions on high-impact exercises apply.

Not all patients are possible candidates for partial knee replacement, however. If your knee is worn out everywhere and is beyond repair, the only option may be a total knee replacement. However, if you are in the fortunate situation to decide between having a partial and a total replacement, take plenty of time to weigh all possibilities. The best way to find out is to see an orthopedic surgeon for a thorough evaluation

ACL reconstruction vs. repair

Anterior cruciate ligament (ACL) reconstruction is one of the most common orthopedic procedures in the United States. Unlike other ligaments, the ends of a torn ACL do not regrow on their own without medical intervention. During an ACL reconstruction, an orthopedic surgeon removes the ends of the torn ACL and replaces it with a graft—usually the hamstring tendon or patellar tendon of the patient, or from a cadaver. Although most patients are able to return to sports, the ACL re-tear rate can be as high as 20 percent for teens, and 80 percent of patients develop arthritis 15 to 20 years after surgery.

What is ACL repair?

ACL repair, also known as ACL preservation, is a new, minimally invasive technique that uses a self-retrieving suture passer to pass high-strength, nonreabsorbable stitches in a locking pattern into the ACL fibers in the knee. The fibers are then reapposed back to the bone origin of the native ACL using two vented, bio composite, knotless suture anchors. The procedure is much quicker and less invasive than ACL reconstruction, and patients generally rehabilitate much faster. In addition, the procedure allows the patient to keep his or her native ACL. Because the ACL has nerve endings, this generally makes the knee feel more “normal” after the procedure.

HERE IS A TABLE FOR EASY COMPARISON:

ACL RECONSTRUCTION

- Gold standard care for ACL tears
- Proven to be safe and effective
- Other work done arthroscopically
- Requires graft harvest of patient’s own tendon or from a cadaver
- Remaining ACL tissue is removed

ACL REPAIR

- Novel, alternate option for ACL tears
- Non-traditional approach, not viable for all
- Requires minimal incision to deploy repair stitches and bio composite, knotless suture anchor
- Other work done arthroscopically
- Doesn’t require a graft
- Preserving the native ACL

Explore your options at Central Coast Arthritis and Orthopedic Specialists. With over 20 years of orthopedic experience, Dr. Orlando takes pride in providing thorough answers to all of the knee treatment questions potential patients may have. Give us a call at us at 805.781.6644 or head over to our website at ccorthospecialists.com to request an appointment. Whether you choose to seek treatment at Central Coast Arthritis and Orthopedic Specialists or elsewhere, we wish you a complete and smooth recovery!