

ACL Reconstruction Surgery with Patellar Tendon Autograft

The problem:

Tear of the anterior cruciate ligament (ACL).

Reason for treatment:

The knee buckles or gives way with daily activities, work, or recreational activities. The ligament tear usually occurs from a specific injury during work, a fall, or a sporting activity.

The treatment:

The torn ligament is replaced with a section of the patellar tendon and portions of bone from the patella (kneecap) and tibia (leg bone). The new ligament is held in place using two screws.

Day of surgery:

The patient arrives 2 hours prior to the procedure to get situated and meet the operative team. The procedure is done arthroscopically, but an open incision is required to obtain the new ligament and bone ends. This incision is between 3 and 5 inches long and is on the front of the knee. Tunnels are drilled through the tibia and femur bones to place the new ligament. The screws are placed inside the bone.

The patient is asleep for the procedure. The procedure itself takes between 60 and 90 minutes depending on whether any other surgery is necessary on the cartilage. Recovery room time is approximately 1 hour. Patients go home on the same day as surgery.

After surgery:

The patient is allowed to bear partial weight with a brace on and locked out with the knee straight. Crutches are used for balance and support. The brace may only be removed when bathing or when the patient is awake and sitting/lying. It may not be removed if the patient is moving from one area to another.

Exercises begin on the day of surgery to bend the knee and strengthen the knee with the brace off, but not while the patient is standing. These exercises should be done daily until clinic follow-up in 1-2 weeks.

The knee is often painful, swollen, and warm for several weeks after surgery. This can be managed by icing the knee several times each day (20 minutes each time), using a compressive wrap (ACE), and taking pain medication provided by a prescription. Do not take any anti-inflammatory medications (Advil, Aleve, etc.) for 6 weeks after the surgery. Most patients will be able to stop using pain medicine within 2 weeks.

After 4 weeks, most patients walk without the brace. Gradual rehabilitation is performed over the next several months including weightlifting, walking, cycling, use of an elliptical trainer, swimming, and running without any pivoting or twisting. Most patients can return to playing sports in 6 to 12 months.

