

ACL Reconstruction Surgery with Hamstring 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 two of the four hamstring tendons taken from the patient's leg. The new ligament is held in place using pins and screws.

Day of surgery:

The patient should plan to arrive 2 hours prior to the procedure to get situated and meet the operative team. The procedure is done arthroscopically, but a small open incision is required to place the bone tunnels. This incision is between 1 and 2 inches long and is on the front and inside of the knee. Tunnels are drilled through the tibia and femur bones to place the new ligament. The graft is secured with pins and screws placed inside or on the surface of 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 the same day.

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 9 to 12 months.