

ACL RECONSTRUCTION SURGERY

INDICATIONS (Who Needs Surgery, When, Why & Goals)

- Athletes who regularly perform sports that require pivoting, cutting, jumping/landing
- Patients with recurrent giving way or knee instability, despite 3 - 6 months of an adequate rehabilitation program.
- ACL tear in a patient with a reparable meniscus tear
- ACL tear in a patient with other ligament injuries in the same knee
- Surgery usually is not recommended until the injured knee has full range of motion and muscle control of the thigh (usually 3 or more weeks following injury)
- Surgery is performed to replace the torn ligament. The ligament, when torn, usually cannot be repaired (sewn together). Results after repairing the ligament are not as good as reconstructing (replacing) the ligament.
- The goal of the operation is to restore the function of the torn ligament, that is, to return to sports that require pivoting, cutting, change of direction, jumping/landing.
- ACL grafts undergo a degeneration process (the graft is usually at its weakest 6 weeks after the surgery) followed by a regeneration process (may take up to 1 ½ years).

CONTRAINDICATIONS (Reasons Not To Operate)

- Those individuals that do not perform sports that require pivoting, cutting, jumping / landing frequently, surgery is usually not required.
- Individuals that usually exercise by jogging, cycling and/or swimming only, usually do not require ACL surgery.
- Inability or unwillingness to complete the post-operative program or to perform the rehabilitation necessary.
- Infection of the knee (current or previous - not an absolute contra-indication)
- Skeletal immaturity (not fully grown yet - not an absolute contra-indication – but some variation in technique may be needed)
- Severe knee arthritis

RISKS AND COMPLICATIONS OF SURGERY

- Infection, bleeding, injury to nerves (numbness, weakness, paralysis) of the knee, leg and foot (it is not uncommon to have some numbness, temporary or permanent, on the outer part of the knee or upper leg).
- Rupture or stretching out of the reconstructed ligament causing recurrent instability
- Knee stiffness (loss of knee motion)
- Rupture of the patellar tendon or patellar fracture (both uncommon or rare)
- Pain from screw used to hold the graft (rare)
- Clot in the veins of the calf or thigh (deep venous thrombosis, phlebitis) that may break off in the blood stream and go to the lungs (pulmonary embolus) or brain (causing a stroke)

TECHNIQUE (What Is Done)

Surgery is usually performed with the assistance of the arthroscope and may be done as an outpatient (go home the same day) or stay in the hospital overnight. The torn ACL is replaced by a graft. Grafts most commonly used include (1) the central 1/3 of the patellar tendon - from the same or opposite knee, (2) hamstring tendons, (3) quadriceps tendon, and (4) allograft (transplant from a cadaver) patellar tendon or Achilles tendon. Each graft has its benefits and risks and the one for you is based on a discussion with you and your surgeon. Dr. Safran's graft preferences are generally patellar tendon autograft in patients under 40, patellar tendon allograft for those 40 and over. For skeletally immature (kids who still have a fair amount of growth left) patients, Dr. Safran's preference is a hamstring graft.



When the torn ACL is removed, some bone in the knee is shaved to help the surgeon see where the graft goes and to help reduce pressure on the graft. Other structures in the knee are examined at the time of reconstruction, including the meniscus and articular cartilage. Bone tunnels are drilled in the leg bone and the thigh bone to place the ligament in almost the exactly same position as where the torn ACL was. The graft is held in position with screws, heavy sutures (stitches), spiked washers and/or posts. The devices used to hold the graft in place usually do not need to be removed.

POST-OPERATIVE COURSE

- This surgery is often felt to be therapy dependent. In other words, much of the success of the results after ACL reconstruction is dependent on the patient and therapist and being able to follow through and maintain with the therapy schedule.
- Keep wound clean and dry for the first 10 - 14 days after surgery
- Ice the knee for 20 minutes every 2-3 hours while awake for the first 1 -2 weeks after surgery
- You will be given pain medications by your physician. Take only as directed.
- You will be given a knee brace for the first few weeks after surgery
- Rehabilitation of ACL reconstruction includes reducing knee swelling, regaining knee range of motion, and regaining strength of the leg and thigh muscles. Check with your surgeon and/or physical therapist for the exact exercises to perform. Often a graduated program is specified.

RETURN TO SPORTS

This occurs when there is no pain and when knee full range of motion, muscle strength and endurance, and functional use has been restored. This usually requires 6 - 9 months following ACL reconstruction.

NOTIFY OUR OFFICE IF

- You experience pain, numbness, or coldness in the foot and ankle
- Blue, gray or dusky color appears in the toenails
- Increased pain, swelling, redness, drainage or bleeding in the surgical area.
- Signs of infection (headache, muscle aches, dizziness, or a general ill feeling with fever)
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.

Do not eat or drink anything before surgery. Solid food makes general anesthesia more hazardous.

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