Anterior Cruciate Ligament Tear

orthonY
SPORTS MEDICINE TEAM

ACL RECONSTRUCTION SURGERY
The following is designed to present an overview of ACL reconstruction surgery.

A Healthy Knee:

How is the knee designed, and what is its function?

The knee is a joint that has three compartments. This joint has an inner (medial) and an outer (lateral) compartment. The kneecap (patella) joins the femur to form a third compartment called the patellofemoral joint. The thighbone (femur) meets the large shinbone (tibia), forming the main knee joint. The knee joint is surrounded by a joint capsule with ligaments strapping the inside and outside of the joint (collateral ligaments) as well as crossing within the joint (cruciate ligaments). These ligaments provide stability and strength to the knee joint.

The meniscus is a thickened cartilage pad between the two joints formed by the femur and tibia. The meniscus acts as a smooth surface for motion and absorbs the load of the body above the knee when standing. The knee joint is surrounded by fluid-filled sacs called bursae, which serve as gliding surfaces that reduce friction of the tendons. Below the kneecap, there is a large tendon (patellar tendon) which attaches to the front of the tibia bone. There are large blood vessels passing through the area behind the knee (referred to as the popliteal space). The large muscles of the thigh move the knee. In the front of the thigh, the quadriceps muscles extend the knee joint. In the back of the thigh, the hamstring muscles flex the knee. The knee also rotates slightly under guidance of specific muscles of the thigh.
What is ACL reconstruction surgery?

Anterior cruciate ligament reconstruction (ACL reconstruction) is a surgical tissue graft replacement of the anterior cruciate ligament, located in the knee, to restore its function after anterior cruciate ligament injury. The torn ligament is removed from the knee before the graft is inserted through a hole created by a single hole punch. The surgery is performed arthroscopically.

An ACL reconstruction is sometimes referred to, incorrectly, as an ACL repair. A torn anterior cruciate ligament cannot be "repaired", and must instead be reconstructed with a tissue graft replacement.

Two alternative sources of replacement material for ACL reconstruction are commonly utilized:

- Autografts (employing bone or tissue harvested from the patient's body), and
- Allografts (using bone or tissue from a donor's body, typically a cadaver's or a live donor).
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Post-Operative Rehabilitation Guidelines for
ACL Reconstruction

WOUND CARE:

- Maintain your surgical dressing and loosen ACE-bandage if swelling of foot occurs or if too tight.
- Remove outer dressing on post operative day #1*, keep steri-strips on (white band-aids).
- It is normal for some bleeding to occur, if blood soaks through the dressing do not be alarmed, reinforce with additional dressing.
- Keep surgical incisions clean and dry. Cover with plastic bag or Saran wrap for showering. DO NOT immerse the operative site.

MEDICATIONS:

- If you have had a nerve block, it will wear off in several hours. Start taking the pain medication before the nerve block has lost its effectiveness.
- Take your narcotic pain medication only as needed and refer to directions on the bottle.
- Nausea and drowsiness are common side effects of narcotic medications, to decrease these effects, take medication with food.
- DO NOT drive, drink alcohol or take Tylenol products while taking narcotic pain medications.
- DO TAKE Ibuprofen 600mg (i.e. Motrin or Advil) in between taking narcotic pain medication. Take up to 600mg 3 times daily (1800mg daily). This will reduce swelling and decrease narcotic use.
ACTIVITY:
- Elevate the operative leg to chest level whenever possible to decrease swelling.
- Place pillows or blankets under operative leg to elevate the whole leg.
- Weight bear as tolerated, WHILE WEARING THE KNEE BRACE LOCKED IN EXTENSION. Discontinue crutches after 2-3 days (UNLESS instructed to not weight-bear on the leg, see meniscus repair).
- The knee brace should be worn and locked in full extension at all times (day and night - except to perform range of motion exercises or bathing)
- Avoid long periods of sitting (without leg elevated) or traveling long distances.

ICE THERAPY:
- Begin immediately after surgery. Use a large bag of ice every 2 hours for 20 minutes daily until the first post operative appointment.

EXERCISES:
- Begin exercises 24 hours after surgery (straight leg raise, heel slides, ankle pumps) unless instructed otherwise.
- Complete these exercises several times daily until the first post operative appointment. SEE ATTACHED EXERCISE INSTRUCTIONS SHEET.
- Formal physical therapy will start 8-12 days after surgery unless instructed otherwise.

EMERGENCIES (CALL THE OFFICE 453-9088 FOR THE FOLLOWING)
- Painful uncontrolled swelling or numbness
- Fever or chills (Fever over 101°F, it is common to have low grade fever for the first two days following surgery).
- Redness around incisions or color change in extremity.
- Continuous drainage or bleeding from incision site.
- Difficulty breathing or excessive nausea/vomiting.

*If you have an emergency after office hours or on the weekend, contact the office at 518-453-9088 and you will be connected to our page service, which will page one of our on-call providers.

*If you require immediate attention, go to the nearest Emergency Room.*