

# ACL Reconstruction: Preparing for Surgery

## What is ACL reconstruction?

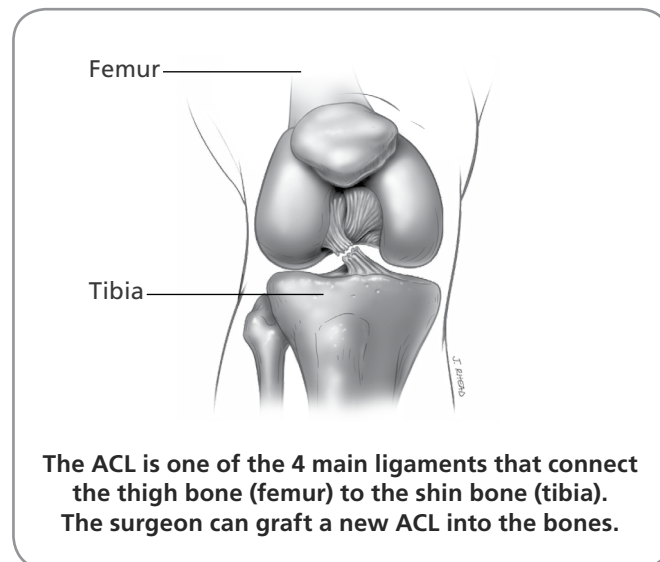
This is a type of surgery to replace a ligament in the center of your knee, which is called the ACL (anterior cruciate ligament). A ligament is a strong band of tissue that attaches one bone to another. The ACL is 1 of 4 ligaments that attach your thigh bone (**femur**) to your shin bone (**tibia**). Your ACL keeps your shin bone in place and your knee from buckling (“giving out”) during physical activity. A damaged ACL will not heal on its own.

An ACL tear is a common knee injury, especially in people who do sports that involve running combined with pivoting and jumping.

## Why do I need it?

Your doctor may recommend ACL reconstruction if you have:

- A knee that gives out or feels unstable during everyday activities
- Ongoing knee pain or other injured ligaments
- Gone through a rehabilitation program and still are having symptoms
- A job that requires knee strength or are very active in sports
- A willingness to complete a difficult rehabilitation program



## Where does a new ligament come from?

The tissue used to create your new ACL is called a **graft** and can come from your body (an **autograft**) or from a donor (an **allograft**). An autograft is most often taken from the hamstring tendon or knee cap tendon. The hamstring is the muscle at the back of your knee and thigh. An allograft comes from someone who, before death, chose to donate their body to help others.

## What are the benefits and risks?

Talk with your doctor about benefits, risks, and alternatives to ACL reconstruction (see below). Also ask about the time and effort it will take to recover.

Potential benefits	Risks and potential complications	Alternatives
<ul style="list-style-type: none"> <li>• Increased stability in the knee</li> <li>• Decreased pain</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Risks related to any surgery:</b> Allergic reaction to anesthesia, breathing problems, bleeding, infection</li> <li>• <b>Risk related to ACL reconstruction:</b> Blood clot in the leg, ligament does not heal, surgery does not relieve symptoms</li> </ul>	<p>ACL reconstruction is usually done after non-surgical options have been tried. These can include:</p> <ul style="list-style-type: none"> <li>• Physical therapy and rehabilitation exercises</li> <li>• Knee braces</li> </ul>

## How do I prepare for surgery?

To make your surgery go better, try to:

- **Stop smoking.** Non-smokers have better outcomes and recover faster.
- **Ask for time off work.** Ask your doctor how long you may need to be off work, and arrange this with your employer.
- **Check your medicines.** Ask your doctor if you should stop taking any current medicines before surgery. On the day of surgery, bring a list of all medicines, vitamins, and supplements you take.
- **Fast the night before.** Don't eat or drink anything for 8 to 12 hours before surgery. Take routine medicines, if told to do so, with a few sips of water.
- **Arrange for someone to drive you home** and stay with you for the first 24 hours.

## What happens during surgery?

Before surgery, an anesthesiologist will talk with you about pain control — either general anesthesia that keeps you asleep and pain free or regional anesthesia that blocks feeling in your legs. The surgery itself will be done by an orthopedic surgeon and usually takes between 60 and 90 minutes. It involves:

- **Making small incisions.** For this type of surgery (called **arthroscopy**), the surgeon typically makes 2 or 3 small incisions (cuts) around the knee and inserts small instruments that will be used to make repairs. Sterile fluid may also be added to expand the area and make it easier to see and work on.
- **Preparing for the graft.** The surgeon removes the damaged ACL. If you're having an autograft, there will be another incision for taking replacement tissue (graft) from another part of your leg.
- **Placing the graft.** The surgeon drills small holes in your thigh and shin bones where the graft will be placed. As it heals, the holes in the bone fill in and keep the new ligament in place.
- **Closing the wound.** The surgeon will close the wound with sutures (stitches) or staples and cover it with a dressing.

## What happens after surgery?

After surgery, you will be taken to a recovery area where nurses monitor your vital signs until the anesthesia wears off. You can go home when your vital signs are normal and you are fully awake — usually about 2 hours after surgery.

Your healthcare providers will talk with you about how the surgery went and what you should do at home. Since you may not remember all of this information, ask a friend or family member to take notes.

## What does rehabilitation involve?

**Rehabilitation** is a series of exercises and treatments designed to help you recover from surgery and rebuild your strength. For most ACL reconstructions, rehabilitation can take a few months and may involve:

- Wearing a knee brace for a week or more
- Using crutches for several weeks
- Doing physical therapy exercises for several months
- Restricting some activity for several months
- Taking pain medicine for a brief time

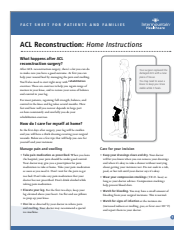
Athletes will need a doctor's signed permission before returning to competitive sports.

## What can I expect?

About 90% of people who have ACL reconstruction surgery have improved knee stability. How successful your surgery is depends in large part on how carefully you do your rehabilitation activities.

## For more information

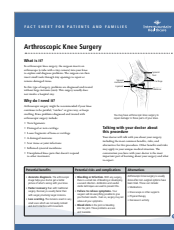
Ask your doctor for these Intermountain fact sheets:



ACL Reconstruction:  
Home Instructions



Allograft  
Transplant



Arthroscopic  
Knee Surgery