



ACL Injury Handout

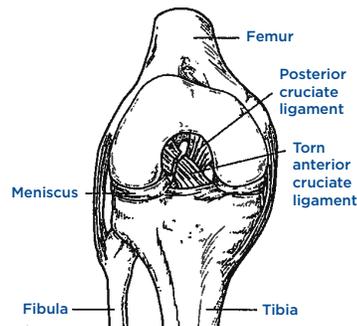
9250 SW Hall Blvd., Tigard, OR 97223
503-293-0161

WHAT IS IT?

The Anterior Cruciate Ligament (ACL) is a ligament or a “rope” that attaches the two bones of your knee together. When it is torn and you try to do things that your muscles are not able to control on their own your knee gives out and feels unstable. Later after the injury has calmed down many people are ok with daily activities but have episodes where the knee gives out if they do things too quickly or if they slip.

If you don't do things like cutting twisting sports you may be okay without an ACL, but if you do more vigorous sports and your knee gives out you can injure other structures in your knee, such as your meniscus, which can lead to early arthritis. In addition you can't really compete if your knee is giving out.

Anterior Cruciate Ligament
(ACL) Injury



WHAT ARE THE SYMPTOMS?

If the tear occurs from a sudden injury, you may feel and/or hear a “pop” at the time of the injury and experience an unstable or giving way sensation. Swelling after the injury will gradually increase over the next several hours and the knee will begin to feel tight & achy. As you recover from the pain and swelling from the injury you may feel fine until you try to do something quickly when your knee could give out.

WHAT DO I DO TO FEEL BETTER?

After suffering an ACL tear, your physician will usually order knee x-rays to make sure there is no damage to your bones and may also order a MRI of the knee to see the extend of the damage and determine if there are any cartilage tears. You will also be pre-prescribed physical therapy to get your knee moving again and medication that helps with the pain and swelling.

Initial treatment will consist of **RICE** = Rest, Ice, Compression & Elevation. Rest includes backing down from any activities that cause increased pain & discomfort. You should ice 3-5 times daily for 20-30 minutes. Compression ace wraps, elevating above the level of your heart and keeping your ankle moving will help reduce swelling and discomfort.

During the time right after the initial injury you should use crutches or a knee brace until you are able to bear full weight and have good control of your leg muscles. Range of motion exercises and straight leg raises should be started immediately. See the exercise suggestions on the back page for things you can do at home in addition to starting physical therapy. It is best to do the exercises frequently for short periods of time rather than trying to do too much at once which may lead to more swelling and pain.

WILL I NEED SURGERY?

The goal of reconstructive surgery is to prevent giving way episodes of the knee and to allow the return to the level of activity desired. ACL injuries do not all need to be reconstructed and people tend to fall into three groups.

- 1/3 have instability with most activities, even daily living activities.
- 1/3 are okay with daily activities but have instability with cutting, twisting, jumping etc.
- 1/3 are able to do almost all activities with no or minimal difficulty.

Immediately after the injury everyone has trouble with motion and instability so we won't know which group you fall into for several weeks. The likelihood that someone will do well without reconstructive surgery is also related to their activity level. Those that bike, swim, lift weights, etc are more likely to do better without surgery than those that participate in sports that involve cutting, jumping & twisting activities. Age is also a factor in a sense that it is related to activity level and the intensity of your participation.

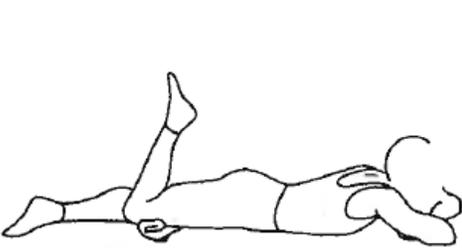
Based on our current knowledge of the knee and how it responds to a torn ACL, the option that has the best chance of minimizing knee arthritis is to adjust your activity level so that you do not have giving way episodes. Surgery may eliminate the giving way episodes but it does not return the knee to normal. A recent study showed that people who had successful ACL reconstruction developed more arthritis than those who were fortunate enough to have knees that allowed them to do what they wanted without surgery or who decreased their activity so that they did not need surgery.

The primary risk of not reconstructing the ACL early on is the possibility of suffering from a giving way episode, which could lead to further damage. We will send you to physical therapy to make sure that your muscles and coordination have recovered enough to allow the return to a certain level of activity. This part of the recovery process is crucial—trying to return to full speed before strength is symmetrical and balanced will lead to giving way episodes. The meniscus can often be torn during the initial injury but it can also be torn during giving way episodes. Losing the function of the meniscus makes future arthritis and instability more likely.

If the decision has been made to have ACL reconstructive surgery there are a few factors that will determine the timing of your surgery. Surgery is best done after the knee has recovered from the initial injury. If the surgery is done before the knee has recovered full extension, there is an increased risk that the knee will not be able to straighten after surgery. It is very common for us to wait about 3 weeks after the injury before we do surgery so the swelling has gone, full motion is restored and your muscle control has improved. All of this will make things recover better and faster after surgery.

PRONE KNEE BENDS

Lie on your stomach with your legs straight out behind you. Bend your knee so that your heel comes toward your buttocks. Hold 5 seconds. Relax and return your foot to the floor. Do 3 sets of 10. As this becomes easier you can add weights to your ankle.



HEEL SLIDE

Still on a firm surface with your legs straight in front of you. Slowly slide the heel of your injured leg toward your buttock by pulling your knee to your chest as you slide. Return to the starting position. Do 3 sets of 10.



STRAIGHT LEG RAISE

Tighten muscles on front of right thigh, then lift leg to level of other leg, keeping knee locked. Every time you return to the table, you MUST relax your muscles. Repeat 25 times per set. Do 2 times per day.

