



# LATERAL ANKLE LIGAMENT RECONSTRUCTION

SEARCH

## WHAT IS LATERAL ANKLE LIGAMENT RECONSTRUCTION?

**Ankle sprains** are one of the most common sports-related injuries. When the ligaments on the outside of the ankle are stretched or torn, you may have pain and feelings of **instability** in your ankle. If these symptoms persist after non-surgical treatment, surgery may be required.

The goal of ankle ligament reconstruction is to restore normal stability to the ankle. This should also fix your feeling that the ankle "gives out" and relieve any pain that is associated with an unstable ankle.

### Diagnosis

Surgery is considered when you have an unstable ankle that does not respond to non-surgical treatment, such as bracing or physical therapy. Six months of non-surgical treatment is often recommended before surgery. Your **foot and ankle orthopaedic surgeon** will perform a physical examination to confirm that the ankle is unstable, and may order X-rays to help with the diagnosis.

Your general health plays a role in any decision to have surgery. If you have nerve or collagen diseases, you may not be helped by this type of surgery. You should not have this surgery if you have certain medical

issues or poor circulation or are unable to follow the recommended post-surgery rehab. You should discuss any medical concerns with your foot and ankle orthopaedic surgeon.

Other diagnoses, including **ankle arthritis**, may require different surgeries that treat the bones and joints. Patients with chronic pain may benefit most from non-surgical management with a pain specialist. Surgery is not recommended for treatment of a single ankle sprain.

## Treatment

Ankle ligament reconstruction (ALR) typically is an outpatient surgery, meaning you can go home the same day as the procedure. It is most often done under general or **regional anesthesia**. Other surgeries may be performed at the same time, most often **arthroscopic surgery** of the ankle joint. At least one larger incision is required for the ligament reconstruction.

Several different techniques can be performed depending on the individual patient. One option is to repair the patient's own existing ligaments with stitches. This repair is called a modified Bröstrom procedure and can result in a stronger repair because of support from other tissues. Another option is to use a tendon to replace the torn ligaments. This technique is similar to what is done in knee ligament reconstructions.

### Specific Techniques

The modified Bröstrom procedure is the most commonly performed surgery for this problem. Your surgeon begins by making a C- or J-shaped incision over the outside of the ankle. The ankle ligaments are identified if possible. They are then tightened using either stitches or anchors that are placed into one the bones of the ankle (the fibula bone). Stitching other tissue over the repaired ligaments further strengthens the repair.

Tendons may also be used to replace the ligaments. In this procedure, your surgeon weaves a tendon into the bones around the ankle. The tendon is held in place with stitches and possibly a screw in the bone. One option is to use the patient's own hamstring tendon, which is taken through a separate incision on the inside part of the knee. Another option

is to use a cadaver tendon. A different method is to take a portion of one of the tendons from the side of the ankle and weave it into the fibula bone.

## Recovery

You can expect to be in a splint or cast for a minimum of two weeks. You may need to **keep weight off** your ankle for up to six weeks. You will be allowed to put weight on your ankle gradually while wearing a removable walking boot. An athletic ankle brace typically is used after the boot.

Ankle strengthening begins after six weeks as pain and swelling allow. This may involve formal physical therapy. Straight-line running is allowed when the ankle is strong enough for it. Sport-specific exercises can then start gradually. The total expected recovery time is 6-12 months. It is recommended that patients wear a brace for sports activities for up to a year.

## Risks and Complications

All surgeries come with possible complications, including the risks associated with anesthesia, infection, damage to nerves and blood vessels, and bleeding or blood clots.

Patients who have ALR commonly experience decreased feeling around their incision. It also is common to have decreased feeling that extends to the top of the foot. This occurs up to 20% of the time and ranges from increased sensitivity to complete loss of sensation. Other less common problems include delayed wound healing and infection. Blood clots in the leg veins also can occur. Recurrent **ankle instability** or stiffness also may occur.

## What are the alternatives to surgery?

Treatment for ankle instability typically involves bracing and physical therapy. Many patients will respond to this treatment.

## What can happen if ankle instability goes untreated?

Repeat ankle sprains can occur. This can lead to ankle joint damage, bone and tendon injuries, and arthritis.

## What is the risk of retearing my ligament after it has been repaired?

Complete tearing of the ligament can occur, but usually only after repeat injury. However, repaired ligaments can stretch out over time. Long-term studies that look at these surgeries and patient satisfaction have shown that more than 90% of patients have a good or excellent outcome.

## What if my ankle instability does not improve after surgery?

The results of surgery vary based on the severity of the initial injury. Outcomes will vary as well. Patients who have persistent instability after surgery may improve with physical therapy or by wearing a brace. Additional surgeries to reconstruct the ligaments may be an option. **Ankle fusion** or **ankle replacement** could also be considered.

*Original article by Brandon Jeffrey Hayes, MD*

*Contributors/Reviewers: David Garras, MD; Jason Tartaglione, MD*

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American Orthopaedic Foot & Ankle Society®  
Orthopaedic Foot & Ankle Foundation  
9400 W. Higgins Road, Suite 220  
Rosemont, IL 60018  
800-235-4855 or +1-847-698-4654 (outside  
US)

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