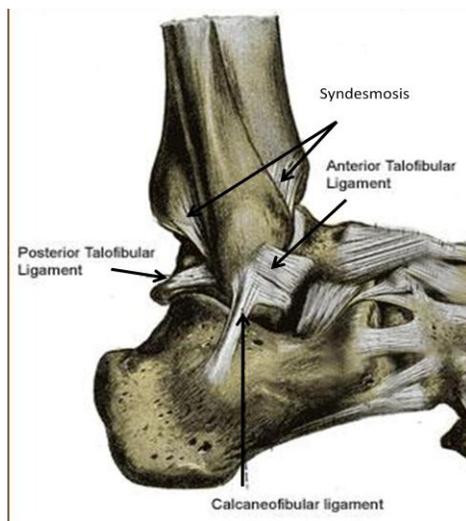




Lateral Ankle Sprains



The most common ankle sprain is of the lateral or outside part of the ankle.

There are three lateral ligaments that attach the lower leg to the foot, the Anterior Talofibular ligament (ATF), Calcaneofibular ligament (CF), and Posterior talofibular ligament (PTF).

These three ligaments are often injured or torn in a lateral ankle sprain.

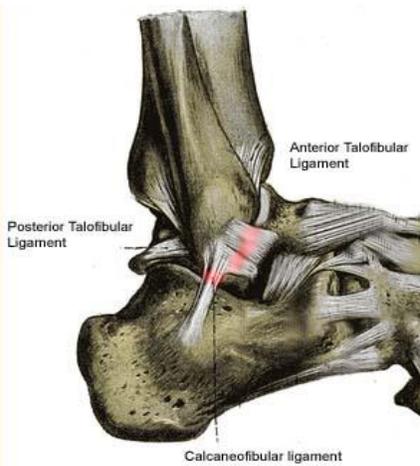
Causes:



A lateral ankle sprain happens when the foot rolls inwards stretching the lateral ligaments.

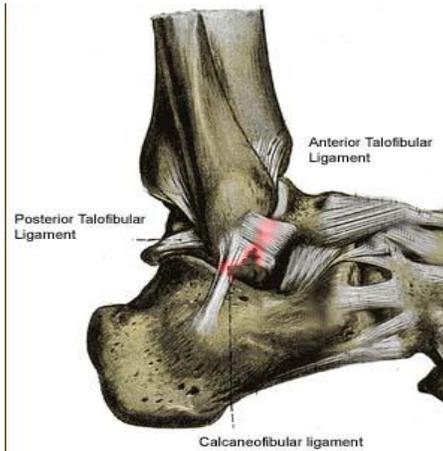
Often this happens when a basketball player lands on another player's shoe or someone steps on uneven ground.

Ankle sprains are divided into three grades ranging from mild to severe.



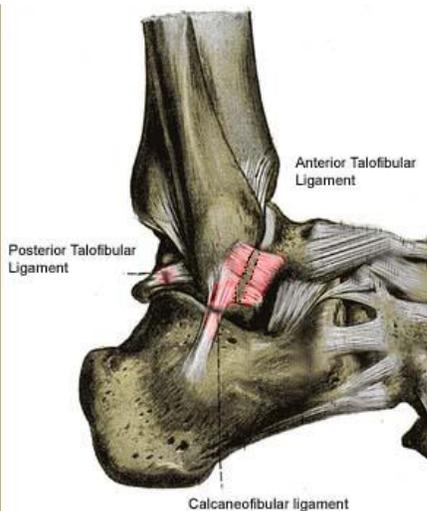
Grade I: Ankle sprains are the most mild.

The ligaments are stretched and have slight tears. There is swelling, mild tenderness, and stiffness around the ankle but people are able to walk with minimal pain.



Grade II: Ankle sprains are more severe.

Ligaments are partially torn, and will be tender when touched. A grade II sprain may make walking difficult.



Grade III: Ankle sprains are the most severe.

The ligaments are completely torn, and will be tender when touched. The ankle will very unstable and walking will be difficult.

Symptoms:



A person who sprains their ankle will feel pain with the injury.

The ankle will soon begin to swell and may form a bruise along the outside of the ankle and foot.

If someone has a grade II or III ankle sprain the ankle may feel unstable and wobbly, and walking may be difficult.

Mild ankle sprains will heal quickly but higher grade sprains will take longer to heal.

Exams (Need for X-ray):

Your doctor will do several exam tests and may decide to order X-rays of the foot and ankle. He or she will press on areas of the foot and lower leg and attempt to move the ankle and foot. Your doctor may order X-rays to make sure there are no broken bones in the leg or foot. Your doctor may also need to x-ray the normal foot to compare to the hurt foot.

But not all ankle sprains need to be X-rayed. Studies have shown that a doctor will not need X-rays if there is not pain over special areas of the foot and ankle and you can walk four steps.

Treatment:

Thankfully most ankle sprains will heal without surgery; however your doctor will set out a treatment plan to reduce pain and shorten the healing time.

For most injuries the **R.I.C.E.** (Rest, Ice, Compression, and Elevation), and medications works well.

- **Rest:** Your doctor may instruct you to use crutches until walking is no longer painful.
- **Ice:** Your doctor may ask you to apply ice for 10 minutes a few times a day. You can use an ice pack, a bag of frozen peas a rub the ice from a frozen Dixie cup on the painful swollen area.
- **Compression/Support:** Your doctor may provide you with an ASO brace which will compress the ankle and provide support to protect the healing injured ligaments.



- **Elevation:** After the injury your doctor may ask you to elevate your ankle to reduce the swelling.

- **Medicines:** Depending on the severity of the sprain, and amount of pain your doctor may prescribe an anti-inflammatory medication. Some common choices are ibuprofen (such as Advil, or Motrin) and naproxen, (Aleve). Be sure to tell your doctor if you know that you are allergic to these types of medicines or have a history of ulcers.

Physical Therapy:



Range of Motion Exercises: Your doctor will ask you to practice moving your ankle after an ankle sprain. Do these exercises 3-5 times per day.

ABC's Exercise: Trace the entire alphabet with your big toe 3 times.

Towel Curls: Sit in a chair with your foot on a towel. Grab the towel with your toes and curl the towel under your foot. Continue grabbing the towel and moving it past your foot until you get to the end of the towel. Then using the same motion push the towel away from you.



Stretching Exercises: You can do these stretches when you are able to without pain.



Towel Stretch: If you are unable to stand. Sit on a bed and wrap a towel around your foot and pull back until you feel a stretch. Hold for 15 seconds. Repeat this exercise 15 times per set. Do 5 sets per day.

Standing Stretch: If you are able to stand. Stand against a wall and lean forward until you feel a stretch in your calf. Hold this stretch for 15 seconds.



Strength and Balance: Ask your doctor before you do these exercises.

Balance:



Stand on your injured foot and follow these exercises of increasing difficulty.

- 1) Cross your arms over your chest with your eyes open.
- 2) Hold your arms out with your eyes closed
- 3) Cross your arms over your chest and close your eyes

Try to hold your balance for 1 minute. Do these exercises 5-6 times per day.

Remember to ask your doctor first!

Strengthening exercises



Your doctor or physical therapist will provide you with a Thera-band.

Sitting in a chair place the elastic band under your good foot and stretch it to the inside of your hurt foot.

Move your foot against the tension of the band.

Repeat this exercise for 15 seconds 6 times. Do these exercises 6 times per day.

Remember to ask your doctor first!

Note: This handout is intended to be a supplement for a doctor's advice, and is not intended to replace your doctor. **Always ask your doctor first.** All images used in this article are open source or original taken by the author. Some of these images have been modified from their original form. Thank you to UNC physical therapy for the use of some images. The images as presented in this handout should be considered copyrighted, and not to be used without permission from UNC-Family Medicine.

Article written by Evan Corey in April of 2010