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## ANKLE SPRAIN IN BASKETBALL

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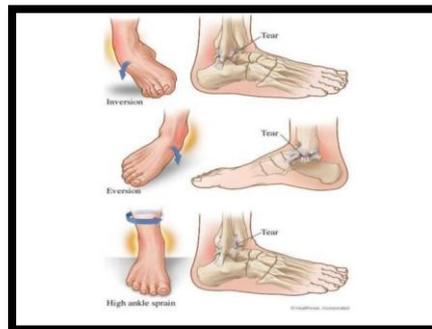
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### Introduction

Ankle sprain is an injury that occurs when the ankle is rolled, twisted or rotated awkwardly. This can stretch or tear the tough bands of ligaments that help to hold the ankle bones together. Ligaments stabilize the joint and prevent excessive movement. Ankle sprains occur when the ligaments are forced beyond their normal range of motion. Most ankle sprains are injuries to the ligaments on the outside of the ankle.



Ankle sprain has two types

**Eversion Sprain** – Occurs when the ankle rolls outward and tears the deltoid ligaments.

**Inversion Sprain** - Occurs when you twist your foot and the ankle rotates inward and tears lateral ligament.

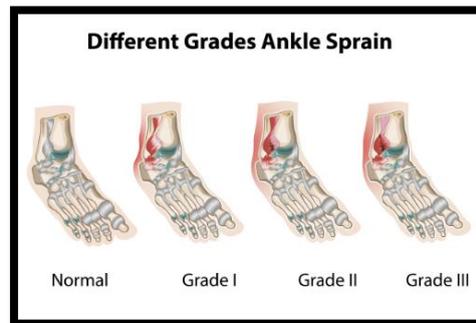
Less common are sprains involving the ligaments of the medial ankle (medial ankle sprain) and injuries to the tibiofibular ligament (the ligament that connects the two bones of the leg tibia and fibula just above the ankle). It is a healing sprain. Symptomatic sprains, most common in contact sports, can lead to chronic ankle instability and subsequent sprains, among others.

### How do ankle sprains occur in basketball

Winter The weather may have moved the basketball pick-up game indoors, but I'm still determined to do that workout and improve my game. Basketball is a fun sport that can burn calories, build stamina and muscle, improve coordination, and increase focus. Unfortunately, playing basketball can easily hurt your ankles. I often jump during a twist and land off balance. Our ankles are designed to be flexible, allowing for a wide range of motion while supporting our weight, but missteps and twisted falls can still cause painful injuries. An ankle sprain is a common injury in basketball and other activities involving jumping, spinning, or kicking a curb in the wrong direction. An incorrect landing can cause the foot to twist under the leg, stretching the ligaments on the outside and tearing or tearing.

## Severity of Ankle Sprains

The severity of ankle sprains depends on the extent of the injury and the resulting degree of joint instability. The more severe the sprain, the longer it will take to recover (see Severity of Ankle Sprains).



### Grade 1 - (minimal stretch, no tear)

Grade 1 ankle sprains are the most common. In this injury, ligaments, including the anterior talofibular ligament (ATFL), are stretched but not completely torn. Slight swelling but no major instability. **Recovery period 1-3 weeks**

### Grade 2 - (Partial Tear)

A grade 2 sprain involves a partial tear of the anterior talofibular ligament. Increased swelling and tenderness, increased pain, and generally slower recovery. Some movement and function restrictions. It hurts when you carry it or walk on it. **Recovery Time 3-6 weeks**

### Grade 3 - (Complete Tear or Fracture)

Third degree ankle sprain involves complete tearing of the lateral ankle ligaments, starting from the anterior talofibular ligament and extending posteriorly to the talofibular ligament. Severe pain, swelling, tenderness, bruising. Marked instability, loss of function and movement. Unable to bear weight or walk. **Recovery time period up to several months**

## SOME MAJOR CAUSES OF ANKLE SPRAIN

Rolling or twisting the ankle causes ankle sprains. The most common ankle sprains are the result of: Falling or tripping on uneven surfaces. Landing incorrectly after a jump, Losing balance. Participating in sports that involve rolling or twisting your foot (basketball, football, soccer, tennis).

## HOW TO TREAT SPRAINED ANKLE

The first goal is to decrease the pain and swelling to protect the ligaments from further injury. This usually means adopting the classic PRICE regimen-Protection, rest, ice, compression, and elevation.

**Protection-** Use crutches or apply a splint or brace to limit use of your injured ankle.

**Rest-** Limit all the physical activities that may cause stress to the sprained ankle (no running, jumping, exercising)

**Ice-** Apply ice or a towel-wrapped ice pack to each ankle for 20 minutes to reduce swelling.

**Compression-** An elastic bandage gently wraps around the ankle to reduce swelling.

**Elevation-** Raise your ankle above your heart on a pillow while sitting or lying down.



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If you have high pain and over swelling, rest your ankle as much as possible for 24 to 48 hours. During this time, soak your feet and ankles in cold water or apply ice packs (cover ankles with a towel to protect skin) 3 times a day or for 15-20 minutes until swelling subsides. Compress the ankle with an elastic bandage to reduce swelling. ACE bandage or elastic ankle cuff. Once seated, raise your ankles as high as possible. Waist high if possible. For the first 24 hours, avoid hot showers, hot packs, heat friction, and anything else that can make swelling worse.

#### **WHEN TO SEE YOUR DOCTOR**

If symptoms are mild or do not improve quickly after injury, see a doctor. If the pain or swelling is severe, or if your ankle is numb or has no recovery, you may want to go to the doctor soon. Doctor will examine the ankle and foot and may manipulate them in various ways to determine the type of sprain and the extent of injury. This examination may be delayed for a few days until swelling and pain improve; in the meantime, continue with the PRICE regimen. X-rays aren't routinely used to evaluate ankle injuries. Ligament problems are the source of most ankle pain, and ligaments don't show up on regular x-rays. To screen for fracture, clinicians use a set of rules called the Ottawa ankle rules, after the Canadian team that developed them to identify areas of the foot where pain, tenderness, and inability to bear weight suggest a fracture. A review of studies involving more than 15,000 patients concluded that the Ottawa rules identified patients with ankle fractures more than 95% of the time.

#### **HOW TO STRENGTHEN YOUR ANKLE AFTER A SPRAIN**

To fully recover from an ankle sprain, you need to restore normal ankle range of motion and strengthen your ligaments and supporting muscles. Studies have shown that when treatment is aimed at restoring function in the ankle, people usually do not have ankle function, often with the help of splints, braces, taping, or elastic bandages, rather than immobilization (such as using a cast) has been shown to return to activity earlier. This strategy, called functional therapy, typically has three stages: For the first 24 hours, use PRICE treatment to reduce pain, swelling, and risk of further damage. Mobility and ankle strengthening exercises within 48-72 hours; training to improve endurance and balance once recovery is on track. Range of motion and stretching can usually be initiated within first 48 hours and should be continued until the pain is as good as before the sprain. Begin the exercise by sitting on a chair or on the floor. As your sprained ankle improves, you can continue standing exercises. If symptoms do not improve after 2-4 weeks, you may need to see a physical therapist or other specialist.

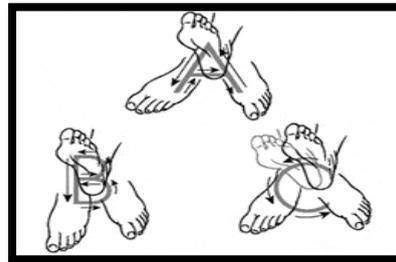
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## FUNCTIONAL RECOVERY EXERCISES

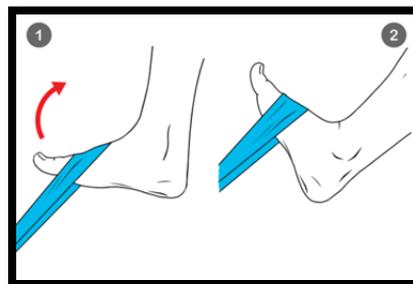
### (Range of Motion, Stretching, AnkleStrengthening) First Two Weeks



**Flexion** - Place the heel of the injured leg on the floor. Bring your toes and feet as close to your body as possible. Then move them as far away from your body as possible. Publishing. Repeat as often as possible for first week.



**Ankle Alphabet** - Place your heel on the floor and write all the capital letters of the alphabet with your big toe. Make the letters as large as possible.



**Push Down and Pull Back** - Wrap elastic band or tube around leg and hold gently taut  
(A) Push your toes down hold for a few seconds. Repeat 30 times. Tie one end of the ribbon to a table or chair leg  
(B) Wrap the other end around your leg. Slowly pull your leg forward. Hold for a few seconds. Repeat 30 times.



**Ankle Abduction** - Sit on the floor, tie an elastic band or tube around the injured leg, secure it around the uninjured leg, and slowly rotate the injured leg outward. Repeat 30 times.

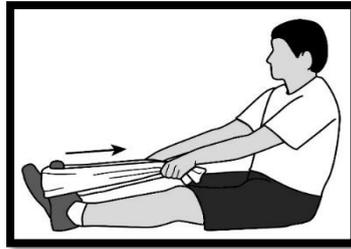


**Ankle Inversion** - Sit on the floor and cross your legs on your injured leg. Gently rotate the injured leg inward by wrapping an elastic band or tube around the injured leg and securing it around the uninjured leg. Repeat 30 times.

### Stretching and Strengthening: 3-4 Weeks



**Standing Stretches** - Stand at arm's length from a wall. Place the injured leg behind the other leg with the toes pointing forward Drop your heels down and keep your back knee straight. Slowly bend your front knee until you feel a stretch in the calf of your back leg. Hold for 15-20 seconds. Repeat 3-5 times.



**Seated Stretch** – Place an elastic band or tube around the ball of your foot. Keeping your knee straight, slowly pull the band back until you feel a stretch in your upper calf. Hold for 15 seconds. Repeat 15-20 times.



**Stand Up** - Stand facing a wall and place your hands on the wall for balance tiptoe. Hold for 1 second, then slowly lower to the starting position. Repeat 20-30 times. As you get stronger, do this exercise by lowering yourself and putting weight on the injured side only.



**Stretching** - Stand with the toes and balls of the affected foot on a book or stair nosing. keep heels from touching the ground Use a wall, chair, or rail for balance with your knee slightly bent, lift your other leg off the floor behind you. Lower your heels slowly holds the position for 1 second. Return to starting position. Repeat several times a day, up to 15 times. This exercise can put a lot of strain on your ankles, so get your doctor's approval before trying it.

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