

ANKLE SPRAIN

Ankle sprains are the result of stretching or tearing one or several of the ligaments that hold the ankle joint together. Ankle sprains occur when the ankle joint is forced to bend further than normal. The most common type of sprain occurs when the foot turns inward and the full weight comes down on the ankle. This causes a sprain on the outside of the ankle. Almost everyone has a sprain sometime in his or her life. Almost all resolve completely without further problems.

Symptoms of Your Diagnosis

The symptoms of a sprain include a popping or tearing sensation at the time of injury. This results in pain whenever the ankle bears weight. Usually swelling occurs almost immediately at the site of injury. Bruising will often develop during the next 24 hours. If you think you have a sprain, contact your healthcare provider because you may need an x-ray to be sure you did not break a bone in your ankle or foot.

Treatment

Treatment helps prevent swelling, relieve pain, protect the joint until it heals and prevent unnecessary muscle weakness. Treatment also helps remove any swelling, helping you to get moving again as quickly as possible.

The initial therapy consists of four steps you can remember by the acronym **RICE: Rest, Ice, Compression and Elevation**. First, immediately apply ice to the injury because the swelling can start in a few minutes. The less swelling you have, the quicker you can return to normal activity. Ice the injury 4 to 8 times a day unless your healthcare provider tells you otherwise. To prevent skin damage, do not apply ice for longer than 20 minutes at a time and not while sleeping. Never use heat before 72 hours after the injury, or longer than that if swelling is present. Heat nearly always causes more swelling that can slow recovery. Second, rest the joint for 1 or 2 days. This may include using crutches if you have to be up and around. Third, use a compression wrap or air splint, although not while sleeping. Rewrap the ankle several times a day to prevent circulation damage. Fourth, elevate the ankle above the level of your hip.

The second part of treatment is protected motion. This allows the ankle to move without moving too far and further injuring the joint. It may be as simple as using a compression wrap, splint or brace. Physical therapy may be ordered. This keeps muscles from weakening and helps remove any swelling. Severe injuries may require casting of the foot or even surgery. This is usually necessary when the ligaments are completely torn or multiple ligaments are injured.

Medications

For severe sprains and pain, prescription medicines may be ordered. Otherwise, take over-the-counter non-steroidal anti-inflammatory drugs, such as ibuprofen, to lessen both pain and swelling.

Warning Signs

If you wear a shoe or applied a splint, brace or compression wrap to your ankle, watch for signs of tightening or cutting off circulation to the toes. These signs include:

- numbness or tingling in the foot or toes
- blueness or duskiness of the toes
- coldness in the toes

Remove your shoe and loosen whatever is tight. Contact your healthcare provider if your symptoms persist or if any of the following occurs as these may be signs of a more severe injury than was originally apparent:

- no significant improvement within 7 to 10 days after the sprain
- popping, catching or giving way of the ankle after the swelling has gone away

Prevention

After your recovery, your healthcare provider may recommend exercises or physical therapy to prevent further injury. Prevention is the best way to avoid another ankle sprain. Follow these simple recommendations:

- warm up before exercising
- maintain strength, balance and flexibility through exercise
- wear well fitting supportive shoes (high-top, lace-up shoes like hiking boots are best)
- keep alert for uneven or slippery surfaces
- slow down or stop when feeling fatigue or pain
- consider exercises that may improve "proprioception," which is the ability to recognize the position of your foot without looking at it

What to Do

- follow your instructions for RICE immediately after your injury
- avoid activities that will increase swelling, such as too early application of heat, excessive activity and standing or sitting with the ankle hanging
- if you are an athlete, your trainer may be able to help speed your recovery

What We Have Learned

1. Ice does not help to reduce the swelling.
TRUE or FALSE
The answer is FALSE
2. RICE stands for rest, ice, compression and elevation.
TRUE or FALSE
The answer is TRUE
3. Do not apply ice or use a compress while you sleep.
TRUE or FALSE
The answer is TRUE

For More Information

National Guideline Clearinghouse
<http://www.guidelines.gov/>

National Institute of Health
<http://www.nih.gov/>