



BASIC INFORMATION

DESCRIPTION

A strain is a stretched or torn muscle. A sprain is a stretched or torn ligament. Sprains occur most often in ankles, knees or fingers, although any joint can be sprained. Sprained joints can function, but only with pain.

FREQUENT SIGNS AND SYMPTOMS

- Pain or tenderness in the area of injury; severity varies with the extent of injury.
- Swelling of the affected joint.
- Redness or bruising in the area of injury, either immediately or several hours after injury.
- Loss of normal mobility in the injured joint.

CAUSES

Strains usually are associated with overuse injuries. Sprains usually occur secondary to trauma (fall, twisting injury or automobile accident). The ankle is injured most often because of its anatomical weakness, its exposed position and the stress it sustains in athletic and recreational activities. It is sometimes difficult to differentiate sprains from strains.

RISK INCREASES WITH

- Obesity.
- Trauma.
- Excessive exercise.
- Poor conditioning.
- Poor fitting shoes and high heeled shoes.
- High risk activities such as skateboarding, contact sports, ice and roller skating, mountain biking, skiing and rock climbing.

PREVENTIVE MEASURES

- Maintain good level of physical fitness.
- Avoid injury:
- Wrap weak joints with support bandages before strenuous activity.
 - Stretch muscles before and after exercise.
 - Strengthen weak muscles with rehabilitative exercises to prevent a recurrence.
 - Accident-proof your home.

EXPECTED OUTCOMES

With appropriate treatment and rest, 6-8 weeks for recovery. May take longer depending on severity of the injury.

POSSIBLE COMPLICATIONS

- Permanent weakness if the sprain is severe, if the injury is not given time to heal adequately or if a joint is sprained repeatedly.
- Arthritis.



TREATMENT

GENERAL MEASURES

- Diagnostic tests may include x-rays of the injured area, or CT scan or MRI.
- RICE therapy - rest, ice, compression, elevation.
- Apply ice to the injured joint during the first 24 hours. Place ice in a plastic bag and separate it from the skin with a thin towel. Hold it against the joint with your hand or an elastic bandage. Keep the ice pack on the joint up to 2 hours at a time either constantly or intermittently depending on your ability to tolerate the cold. Continue the ice treatment at 2-hour intervals for 24 hours.
- After 24 hours, you may continue ice treatment or switch to heat.
- To use heat, soak the joint in hot water or apply heat for 15 minutes every 2 hours or whenever possible. Don't apply heat during the first 24 hours. It may increase bleeding and swelling and prolong healing time.
- Compression with an elastic (Ace) bandage.
- Whenever possible, elevate the joint (especially while sleeping) so fluid can drain and diminish swelling.
- Surgery may be necessary to repair badly torn ligaments.
- A cast may be necessary for severe sprains or following surgery. Following cast removal, you will wear support bandages for a while.
- Air cast type devices are very effective.
- Learn how to use crutches, if needed.

MEDICATIONS

You may use non-prescription pain relievers such as acetaminophen or ibuprofen. If the sprain is severe, a stronger pain reliever may be prescribed. Avoid aspirin as it may increase the tendency to bleed.

ACTIVITY

- Allow the joint to rest 1 or 2 days. Then begin exercising the joint gently, without putting weight on it.
- Physical therapy may be recommended to regain strength and normal use of the joint.

DIET

No special diet.



NOTIFY OUR OFFICE IF

- You or a family member has a sprained joint that won't bear weight or move normally.
- Pain becomes intolerable.
- Swelling or bruising increases, despite treatment.