

SPRAIN



■ ■ ■ Description

A sprain is a stretched or torn ligament. Ligaments work like a rope between bones of a joint to prevent excessive motion between the bones. Sprains occur most commonly around the ankles, knees, or fingers, although any joint ligament can be sprained. Sprained joints can function, although with pain. There are three grades or degrees of sprains. A *first-degree* sprain is microscopic tearing of the ligament. The ligament is not lengthened but is painful. A *second-degree* sprain is a partial tear of the ligament. The ligament is stretched but still functions. A *third-degree* sprain is a complete tear of the ligament. The ligament is torn and does not function.

■ ■ ■ Common Signs and Symptoms

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

■ ■ ■ Causes

Sprains usually occur secondary to trauma or injury, such as a fall or twisting injury. The ankle is most often injured because of its mechanical weakness, its exposed position, and the stress it sustains in athletic and recreational activities.

■ ■ ■ Risk Increases With

- Trauma, especially with high-risk activities, such as sports with a lot of jumping, for knee and ankle sprains (basketball, volleyball); sports with a lot of pivoting motions, for knee sprains (skiing, soccer, football); and contact sports
- Falls onto outstretched hands and wrists (wrist sprains)
- Sports such as water polo and baseball (finger sprains)
- Poorly fitting and high-heeled shoes
- Poor field conditions
- Poor physical conditioning (strength and flexibility)
- Inadequate warm-up before practice or competition

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Muscle strength
 - Endurance and flexibility
 - Cardiovascular fitness
- Wear proper protective equipment.
- Wrap weak joints with support bandages before strenuous activity.

■ ■ ■ Expected Outcome

With appropriate treatment and rest, usually 2 to 8 weeks for recovery, this condition usually can be cured. Healing may take longer depending on the severity of injury. Some ligaments cannot heal and require surgery.

■ ■ ■ Possible Complications

- Permanent instability of a joint if the sprain is severe or if a ligament is repeatedly sprained
- Arthritis of the joint

■ ■ ■ General Treatment Considerations

Initial treatment consists of medications and ice to relieve pain and modification of activity to rest and protect the affected ligament and joint. A brace, splint, cast, or elastic bandage may be recommended, particularly for severe sprains, to protect and support the injured joint and reduce inflammation. Surgery may be necessary to repair badly torn ligaments.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Stronger narcotic pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.
- Cortisone injections are generally not recommended for sprains, because cortisone may affect the healing of the ligament.

■ ■ ■ Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

■ ■ ■ Notify Our Office If

- Symptoms get worse or do not improve in 2 to 6 weeks despite treatment

Notes:

(Up to 4400 characters only)

Notes and suggestions