

SPRAINS

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, though any joint ligament can be sprained. Sprained joints can function, though with pain.

There are 3 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.

FREQUENT SIGNS AND SYMPTOMS

- Pain and tenderness in the area of injury. The severity varies with the 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. Wrist sprains due to falls onto outstretched hands/wrists, and finger sprains with sports like water polo and baseball.
- Poor fitting and high heeled shoes
- Poor field conditions
- Poor physical conditioning (strength/flexibility)
- Inadequate warm-up before practice or competition

EXPECTED OUTCOME

With appropriate treatment and rest, 2 to 8 weeks for recovery. 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, modifying activity to rest and protect the affected ligament and joint. A brace, splint, cast or elastic bandage may be recommended, particularly severe sprains, to protect and/or support the injured joint and reduce inflammation. Surgery may be necessary to repair badly torn ligaments.

MEDICATION

- Non-steroidal anti-inflammatory medications (such as aspirin and ibuprofen), or other minor pain relievers (such as acetaminophen) are often recommended. Do not take non-steroidal anti-inflammatory medications if surgery is planned in 7 days or less. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- 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, as 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 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF:

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