

FINGER SPRAIN



■ ■ ■ Description

Finger sprain results from violent overstretching and tearing of one or more ligaments that hold the finger joints together. Sprains involving two or more ligaments cause more disability than a single-ligament sprain. Sprains are classified into three grades: In a *first-degree* sprain the ligament is not lengthened but is painful. With a *second-degree* sprain, the ligament is stretched or a portion of the ligament is ruptured, but it still functions (although there is some loss of function). With a *third-degree* sprain, the ligament is torn (complete rupture) and does not function. Severe sprains occasionally require surgery.

■ ■ ■ Common Signs and Symptoms

- Severe pain at the time of injury
- Often, a feeling of popping or tearing inside one or more fingers
- Tenderness, swelling, and later bruising in the finger
- Impaired ability to use the injured finger

■ ■ ■ Causes

Stress on a ligament that temporarily forces or twists finger joints out of their normal location. The ligaments that normally hold the joint in place are stretched or torn.

■ ■ ■ Risk Increases With

- Previous finger sprain or injury
- Contact sports and sports that involve catching and throwing, such as baseball, basketball, and football
- Poor physical conditioning (strength and flexibility)
- Inadequate or poorly fitting protective equipment

■ ■ ■ Preventive Measures

- Taping, protective strapping, bracing, or splints may help prevent injury.

■ ■ ■ Expected Outcome

If this is a first-time injury, proper care and sufficient healing time before resuming activity should prevent permanent disability. Ligaments have poor blood supply and when torn require as much healing time as fractures. Average healing time for a first-degree sprain is 2 to 6 weeks; a second-degree sprain takes up to 8 to 12 weeks; and a third-degree sprain takes up to 12 to 16 weeks, although swelling of the finger may last up to 1 year.

■ ■ ■ Possible Complications

- Prolonged healing time if usual activities are resumed too soon
- Frequent recurrence of symptoms and repeated injury, resulting in a chronic problem; appropriately addressing the problem the first time decreases frequency of recurrence and optimizes healing time

- Injury to other structures (bone, cartilage, or tendon) and chronically unstable or arthritic finger joint with repeated sprains
- Prolonged disability (sometimes)
- Finger stiffness

■ ■ ■ General Treatment Considerations

Initial treatment consists of medication and ice to relieve the pain and compressive elastic bandage and elevation to help in reduce swelling and discomfort. Taping (such as buddy taping the injured finger to the one next to it), casting, splinting, or bracing may be recommended to provide support to the joint for varying lengths of time depending on severity and location of the injury. After immobilization, stretching and strengthening of the injured and weakened joint and surrounding muscles (due to the injury and the immobilization) are necessary. These may be done with or without the assistance of an occupational or physical therapist or athletic trainer. Surgical treatment is rarely needed, except in specific instances with a third-degree sprain or with associated injury. Taping may be recommended when returning to sports.

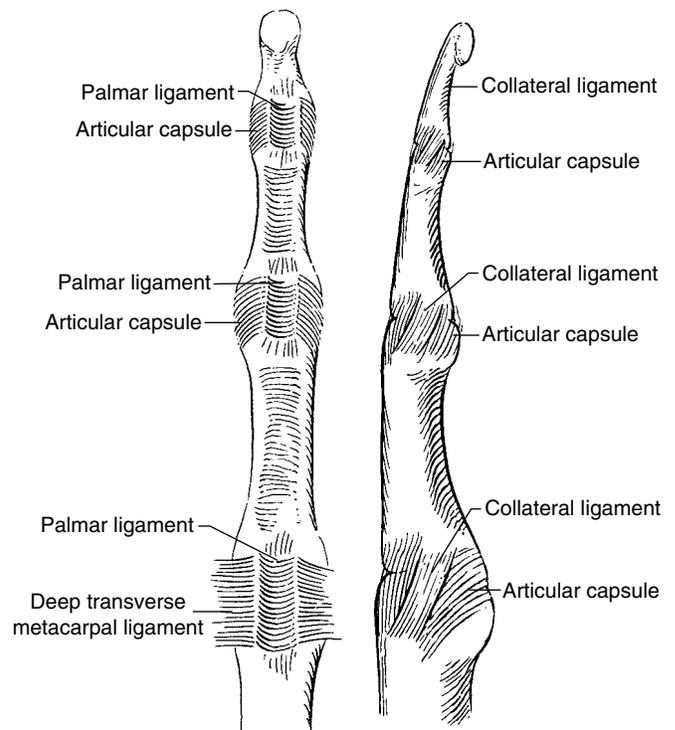


Figure 1

From Jenkins DB: Hollinshead's Functional Anatomy of the Limbs and Back, 6th ed. Philadelphia, WB Saunders, 1991, p. 160.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications (such as aspirin and ibuprofen) 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.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed.

■ ■ ■ 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

- Pain, swelling, or bruising worsens despite treatment or you experience persistent pain lasting more than 2 to 4 weeks
- You experience pain, numbness, discoloration, or coldness in the hand or fingers or blue, gray, or dusky fingernails
- Any of the following occur after surgery: increased pain, swelling, redness, drainage, or bleeding in the surgical area or signs of infection, including fever
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions