

ULNAR COLLATERAL LIGAMENT INJURY OF THE THUMB (Gameskeeper's or Skier's Thumb)



■ ■ ■ Description

Ulnar collateral ligament injury of the thumb involves stretching and tearing of a ligament at the base of the thumb (ulnar collateral ligament [UCL]). This ligament is important in the function of the thumb, particularly when you grab, grasp, or pinch (such as when holding your keys). 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 and painful but still functions. With a *third-degree* sprain, the ligament is torn and does not function.

■ ■ ■ Common Signs and Symptoms

- Pain, tenderness, bruising, swelling, and redness at the base of the thumb, starting at the side of injury, that may progress to the whole thumb and even hand with time
- Impaired ability to grasp or hold things soon after injury

■ ■ ■ Causes

This injury is caused by stress imposed on the thumb that temporarily forces or pries the thumb out of its joint (metacarpal-phalangeal joint). The ligament (UCL) that normally holds the joint in place is stretched or torn. This most often occurs when falling onto outstretched hands while holding on to a ski pole or in baseball, when catchers try to catch awkwardly.

■ ■ ■ Risk Increases With

- Previous thumb injury or sprain
- Skiing with ski poles
- Contact sports, especially catching sports, such as baseball, basketball, or football, or sports in which the thumb may be pulled away from the rest of the hand
- Poor muscle conditioning

■ ■ ■ Preventive Measures

- Use proper technique when catching and when falling while skiing.
- Taping, protective strapping, bracing, or other equipment can prevent the thumb from being pulled away from the rest of the hand.
- Allow complete healing before returning to activities.

■ ■ ■ Expected Outcome

A *first-degree sprain* usually heals enough in 5 to 7 days to allow modified activity and requires an average of 6 weeks to heal completely. A *second-degree sprain* requires 6 to 10 weeks to heal completely, whereas a *third-degree sprain* requires 12 to 16 weeks to heal, although surgery may often be recommended.

■ ■ ■ Possible Complications

- Frequent recurrence of symptoms, resulting in a chronic problem; appropriately addressing the problem the first time decreases frequency of recurrence and optimizes healing time; severity of the initial sprain may predict likelihood of later instability
- Injury to other structures, such as bone, cartilage, or tendon
- Chronically unstable or arthritic thumb joint
- Prolonged disability, particularly inability to pinch, grasp, or grip with any strength
- Delayed healing or resolution of symptoms, particularly if activity is resumed too soon
- Risks of surgery, including infection, bleeding, injury to nerves (numbness, weakness, or paralysis), looseness of the ligament and weakness of pinching, thumb stiffness, and pain

■ ■ ■ General Treatment Considerations

Initial treatment consists of medication and ice to relieve the pain and compressive elastic bandaging and elevation to help reduce swelling and discomfort. A brace or cast may be recommended to provide support to the joint for varying times, depending on severity of injury. For complete tears of

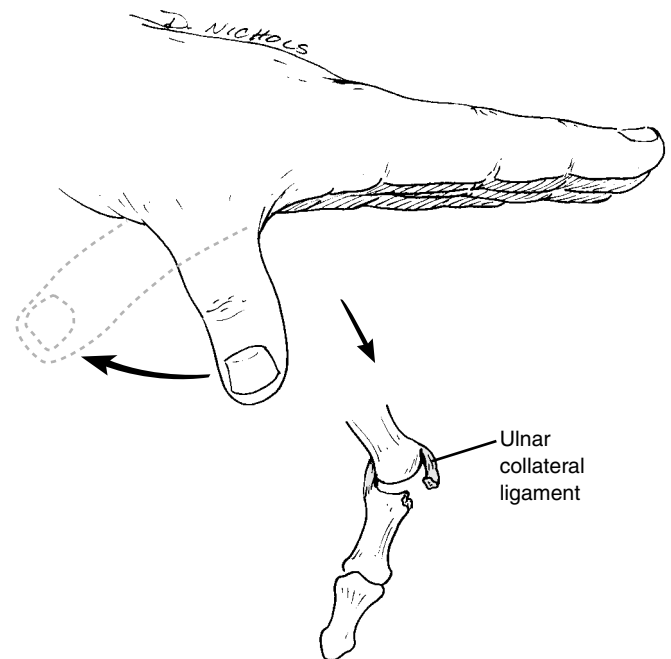


Figure 1

From Shankman GA: Fundamental Orthopaedic Management for the Physical Therapy Assistant. St. Louis, Mosby Year Book, 1997, p. 291

the ligament, surgery is often recommended because other tissues may become entrapped between the ends of the ligament, preventing healing.

■ ■ ■ 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.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

■ ■ ■ 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
- You experience pain, numbness, discoloration, or coldness in the hand or thumb
- After surgery you develop fever, increasing pain, redness, swelling, drainage or bleeding, or increasing warmth
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions