

MALLET FINGER



■ ■ ■ Description

Mallet finger is characterized by a bent tip of the finger and an inability to straighten the finger under its own power. An extensor tendon is the attachment of the muscle to a bone that straightens a joint. This injury is usually to the tendon that straightens the last joint of the finger. This results in a bent fingertip and an inability to straighten the finger under its own power, although it can be straightened using the other hand (passively). Usually the tendon is pulled from the bone, although occasionally some bone may be pulled off with the tendon (avulsion fracture). Mallet finger most often occurs in the long, ring, and little fingers.

■ ■ ■ Common Signs and Symptoms

- A pop or rip felt in the finger at the time of injury
- Pain with moving the injured finger
- Finger that is bent at the last joint and unable to straighten under its own power
- Full passive motion of the finger (can be straightened)
- Tenderness, swelling, and warmth of the injured finger, especially on the back of the injured finger or joint
- Bruising after 48 hours

■ ■ ■ Causes

Mallet finger is usually due to a direct blow to the tip of a straightened finger, leading to a rupture of the extensor tendon to the last joint of the finger. This blow forces the finger to bend, pulling off the tendon from its insertion. Occasionally some bone is pulled off with the tendon. It may occur due to a laceration (cut), but this is less common.

■ ■ ■ Risk Increases With

- Sports that involve catching such as softball, baseball, basketball, and football, as well as volleyball
- Poor physical conditioning (strength and flexibility)
- Previous or concurrent finger sprain
- Previous or untreated mallet finger
- Adolescent or young adult males
- Middle aged and older women

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Hand and finger flexibility
 - Muscle strength and endurance
- Taping, splinting, or protective strapping may be recommended before practice or competition.

■ ■ ■ Expected Outcome

This condition usually heals with splinting.

■ ■ ■ Possible Complications

- Permanent deformity (inability to straighten finger)
- Stiffness of the finger
- Untreated, hyperextended middle finger joint with the last joint bent, causing a “swan-neck” deformity
- Rerupture of the tendon
- Pain with gripping
- Death of the skin if the finger is splinted too tightly
- Prolonged disability
- Arthritis of the finger, especially if there is an associated fracture
- Risks of surgery, including infection, injury to nerves (numbness, weakness), bleeding, and stiffness

■ ■ ■ General Treatment Considerations

For injuries that are not due to a laceration (cut), initial treatment consists of splinting the finger in a straight position and icing and elevating the injured finger to eye level to reduce swelling. Medications may be given for pain. Variable periods of splinting are necessary (usually 6 to 12 weeks). Occasionally, surgery is recommended for these injuries. If the tendon pulls off a large piece of bone, especially if it involves the joint, if the finger is not in proper alignment, or if the injury is due to a laceration, surgery is usually recommended to repair the tendon to bone and immobilize the joint. After immobilization (with or without surgery), 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.

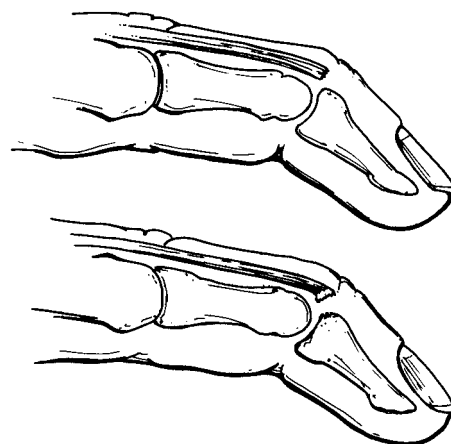


Figure 1

From DeLee JC, Drez D Jr.: Orthopaedic Sports Medicine: Principles and Practice. Philadelphia, WB Saunders, 1994, p. 951.

■ ■ ■ 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.

■ ■ ■ Notify Our Office If

- Pain increases despite treatment
- Any of the following occur after surgery:
 - You experience pain, numbness, or coldness in the finger
 - Blue, gray, or dusky color appears in the fingernails
 - You develop signs of infection, including fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions