

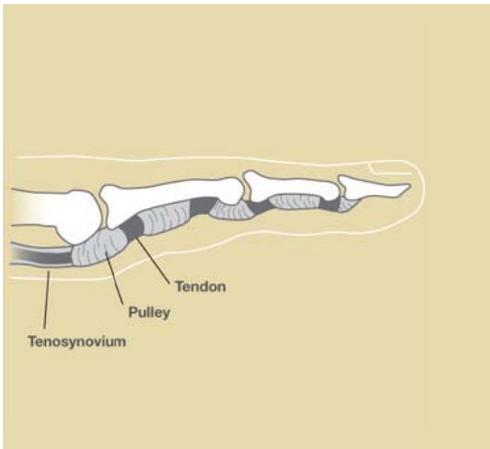
# Trigger Finger: Diagnosis and Treatment



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## What is a trigger finger?

Trigger finger (or thumb) is the term for a very common type of tendon entrapment. It can occur in any of the digits. It's also known as stenosing tenosynovitis. Symptoms can include pain where the finger (or thumb) meets the palm, clicking on flexion and extension, or locking of the digit when fully flexed.



The tendons connect the muscles of the forearm with the bones of the fingers and thumb.

The tendons are held closely against the bone of the fingers by a pulley system, a series of rings, that form a tunnel through which the tendons glide.

The gliding is aided by a slick tendon lining called tenosynovium.

**Trigger finger occurs when** the pulley at the base of the finger, or thumb, becomes too thick and constricting around the tendon, making it difficult for the tendon to move through the pulley, or the tendon develops a nodule or swelling of its lining (tenosynovium).

This creates a discrepancy between the size of the tendon and the size of the entrance to the tendon sheath. This size discrepancy creates resistance to the gliding of the tendon through the tendon tunnel, and often results in pain, popping or catching with movement. When the tendon catches, it produces inflammation and swelling, leading to a cycle of triggering, inflammation, and swelling. On occasion, this will lead to joint stiffness.

## What is the treatment for trigger finger?

The goal of treatment is to eliminate the catching or locking and allow full movement of the finger without discomfort. This may be accomplished by non-surgical interventions such as:

- cortisone injection into the area around the tendon and pulley to reduce the inflammation
- oral medications (NSAIDs or corticosteroids)
- wearing a splint to restrict movement and irritation of the tendon
- reducing activities that cause pain

If non-operative treatment measures do not relieve the symptoms, surgery may be recommended. The goal of **surgery** is to widen the opening of the tunnel so the tendon can glide through it more easily.

The surgery is typically done under local anesthesia, and sometimes in conjunction with intravenous (IV) sedation.

Surgery involves an approximately 1 cm incision over the base of the finger to allow direct visualization of the entrapped tendon, with release of the tendon tunnel with a scalpel and scissors.

This **brief procedure** is done under **local anesthesia** with typically **no medical clearance required**. This procedure typically causes minimal discomfort. Return to light use of the hand is immediate, and unrestricted full use of the hand after the incision is fully healed.

## What is the rehabilitation following trigger finger surgery?

Movement of the fingers should begin immediately after surgery. Normal use of the hand can usually be resumed when comfort permits.

The patient will experience some pain, discomfort and swelling about the area of the surgery for the first 24 — 48 hours.

Immediately following the procedure, the hand is wrapped with a compressive bandage to aid in swelling reduction and the hand should be kept elevated at all times until swelling has resolved (when the hand looks like the opposite hand in size again). After 2 days, the patient is seen back for a check-up in the office, the initial bandage is removed and the incision is covered with a band-aid which is changed daily. A small amount of hydrogen peroxide should be applied with a q-tip to the incision when changing the band-aid, to keep the wound clean.

The incision site should be kept as clean and dry as possible for the first 3 weeks to minimize wound issues. One should avoid submersion in water such as in a sink, bathtub, pool, hot tub, lake, or the ocean until at least 3 weeks postoperatively (once the wound is fully healed) to minimize wound issues or infection.

The middle joint of the finger may have occasional soreness for several months following the procedure, especially if the joint was stiff preoperatively.

## **What are the possible complications of a trigger finger release?**

Trigger finger release surgery is generally very safe and effective; however, there are possible known complications with any procedure.

There is a small chance of infection, recurrence of triggering, stiffness due to pre-existing joint stiffness or inadequate post-operative movement of the digits, and damage to nerves or tendons.