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Trigger Finger

Trigger finger limits finger movement. When you try to straighten your finger, it will lock or catch before popping out straight.

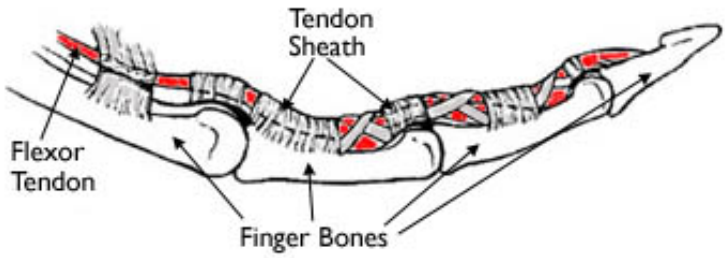
Trigger finger is a condition that affects the tendons in your fingers or thumb.

In this photo, the patient's finger sticks in the bent position as she tries to straighten it.

Anatomy

Tendons are tissues that connect muscles to bone. When muscles contract, tendons pull on bones. This is what causes some parts of the body to move.

The muscles that move the fingers and thumb are located in the forearm, above the wrist. Long tendons — called the flexor tendons — extend from the muscles through the wrist and attach to the small bones of the fingers and thumb.



The tendon sheath attaches to the finger bones and keeps the flexor tendon in place as it moves.

These flexor tendons control the movements of the fingers and thumb. When you bend or straighten your finger, the flexor tendon slides through a snug tunnel, called the tendon sheath, that keeps the tendon in place next to the bones.

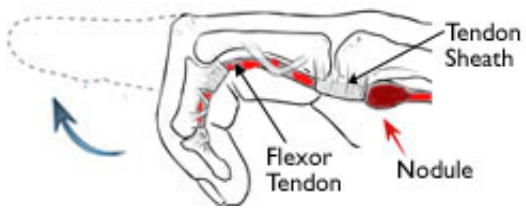
Description

The flexor tendon can become irritated as it slides through the tendon sheath tunnel. As it becomes more and more irritated, the tendon may thicken and nodules may form, making its passage through the tunnel more difficult.

The tendon sheath may also thicken, causing the opening of the tunnel to become smaller.

If you have trigger finger, the tendon becomes momentarily stuck at the mouth of the tendon sheath tunnel when

you try to straighten your finger. You might feel a pop as the tendon slips through the tight area and your finger will suddenly shoot straight out.



The thickened nodule on the flexor tendon strikes the sheath tunnel, making it difficult to straighten the finger.

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Cause

The cause of trigger finger is usually unknown. There are factors that put people at greater risk for developing it.

- Trigger fingers are more common in women than men.
- They occur most frequently in people who are between the ages of 40 and 60 years of age.
- Trigger fingers are more common in people with certain medical problems, such as diabetes and rheumatoid arthritis.
- Trigger fingers may occur after activities that strain the hand.

Symptoms

Symptoms of trigger finger usually start without any injury, although they may follow a period of heavy hand use. Symptoms may include:

- A tender lump in your palm
- Swelling
- Catching or popping sensation in your finger or thumb joints
- Pain when bending or straightening your finger

Stiffness and catching tend to be worse after inactivity, such as when you wake in the morning. Your fingers will often loosen up as you move them.

Sometimes, when the tendon breaks free, it may feel like your finger joint is dislocating. In severe cases of trigger finger, the finger cannot be straightened, even with help. Sometimes, one or more fingers are affected.

Doctor Examination

Your doctor can diagnose the problem by talking with you and examining your hand. No other testing or x-rays are usually needed to diagnose trigger finger.

Nonsurgical Treatment

Rest

If symptoms are mild, resting the finger may be enough to resolve the problem. Your doctor may

recommend a splint to keep your finger in a neutral, resting position.

Medications

Over-the-counter pain medications, such as non-steroidal anti-inflammatory medicines (NSAIDS) or acetaminophen can be used to relieve the pain.

Steroid Injections

Your doctor may choose to inject a corticosteroid — a powerful anti-inflammatory medication — into the tendon sheath. In some cases, this improves the problem only temporarily,and another injection is needed. If two injections fail to resolve the problem, surgery should be considered.

Injections are less likely to provide permanent relief if you have had the triggering for a long time, or if you have an associated medical problem, like diabetes.

Surgical Treatment

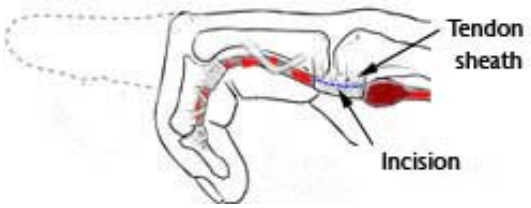
Trigger finger is not a dangerous condition. The decision to have surgery is a personal one, based on how severe your symptoms are and whether nonsurgical options have failed. In addition, if your finger is stuck in a bent position, your doctor may recommend surgery to prevent permanent stiffness.

Surgical Procedure

The goal of surgery is to widen the opening of the tunnel so that the tendon can slide through it more easily. This is usually done on an outpatient basis, meaning you will not need to stay overnight at the hospital.

Most people are given an injection of local anesthesia to numb the hand for the procedure.

The surgery is performed through a small incision in the palm or sometimes with the tip of a needle. The tendon sheath tunnel is cut. When it heals back together, the sheath is looser and the tendon has more room to move through it.



During surgery, the tendon sheath is cut.

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Complications

- Incomplete extension — due to persistent tightness of the tendon sheath beyond the part that was released
- Persistent triggering — due to incomplete release of the first part of the sheath
- Bowstringing — due to excessive release of the sheath
- Infection

Recovery

Most people are able to move their fingers immediately after surgery.

It is common to have some soreness in your palm. Frequently raising your hand above your heart can help reduce swelling and pain.

Recovery is usually complete within a few weeks, but it may take up to 6 months for all swelling and stiffness to go away.

If your finger was quite stiff before surgery, physical therapy and finger exercises may help loosen it up.

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