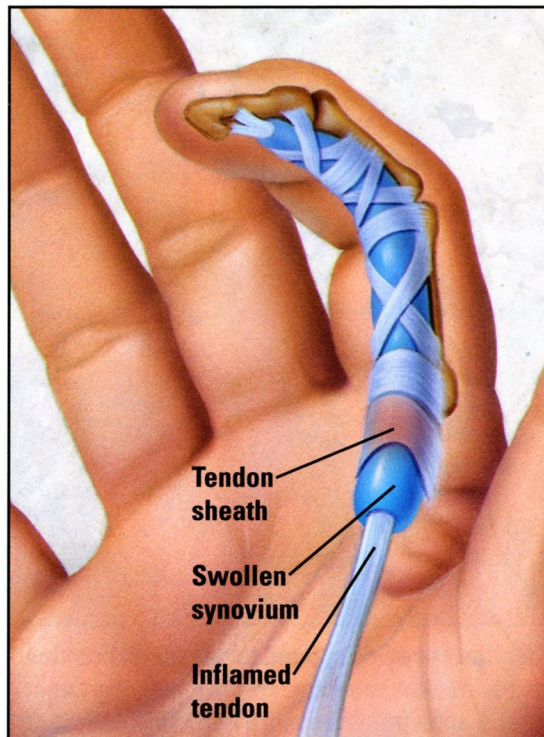


Inside Your Finger

Tendons connect muscles in your forearm to the bones in your fingers. The tendons in each finger are surrounded by a protective tendon sheath. This sheath is lined with synovium, which produces a fluid that allows the tendons to slide easily when you bend and straighten the finger. If a tendon is irritated, it becomes inflamed.

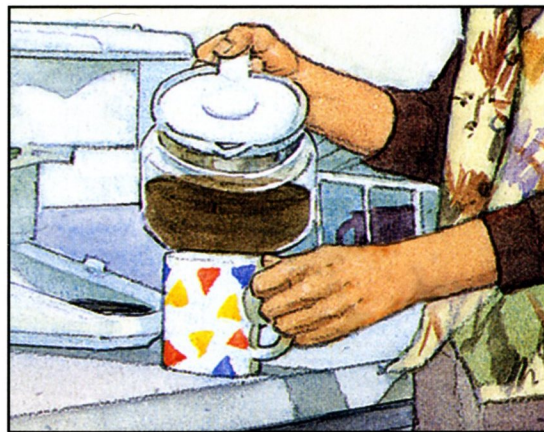
When a Tendon Is Inflamed

When a tendon is inflamed, it causes the lining of the tendon sheath to swell and thicken. Or the tendon itself may thicken. Then the sheath pinches the tendon, and the tendon can no longer slide easily inside the sheath. When you straighten your finger, the tendon sticks or “locks” as it tries to squeeze back through the sheath.



Using Your Finger Again

The goal of your treatment is to relieve your pain and allow you to straighten your finger or thumb again without its sticking. Once the tendon is no longer inflamed, your doctor may give you exercises to help you regain movement in the finger. You may also need to vary the way you hold or lift things. Following these directions will help you get back to your normal activities.



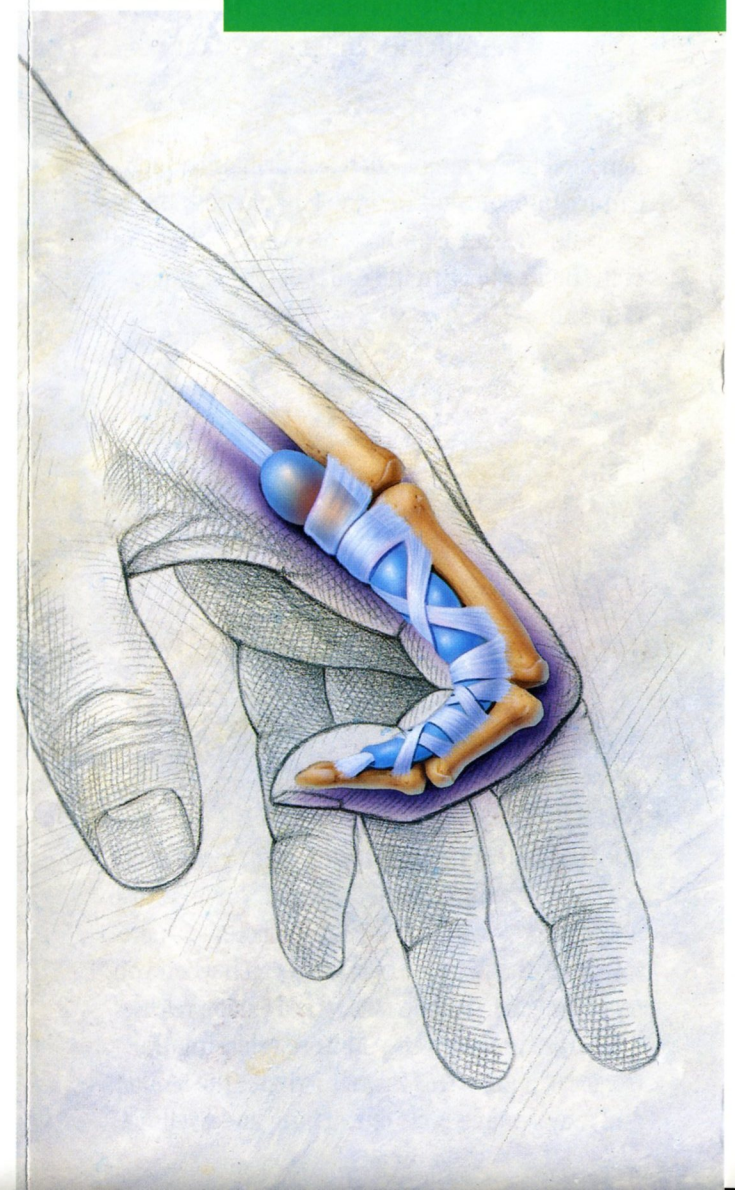
Consultant:
H. Relton McCarroll, Jr., MD,
Orthopaedic Surgery

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Trigger Finger

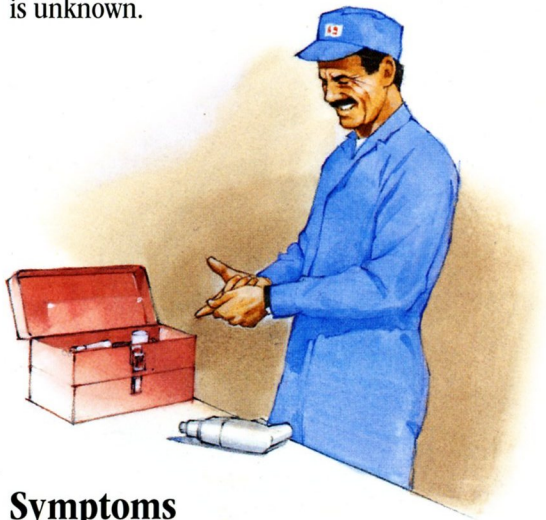


What Is Trigger Finger?

Trigger finger is an inflammation of tissue inside your finger or thumb. It is also called **tenosynovitis** (ten-oh-sin-oh-VY-tis). **Tendons** (cordlike fibers that attach muscle to bone and allow you to bend the joints) become swollen. So does the **synovium** (a slick membrane that allows the tendons to move easily). This makes it difficult to straighten the finger or thumb.

Causes

Repeated use of a tool, such as a drill or wrench, can irritate and inflame the tendons and the synovium. So can arthritis or an injury to the palm of the hand. But often the cause of trigger finger is unknown.



Symptoms

The first sign of trigger finger may be pain where the finger or thumb joins the palm. You may also notice some swelling. As the tendon becomes more inflamed, the finger may start to catch when you try to straighten it. When the locked tendon releases, the finger jumps, as if you were releasing the trigger of a gun. This further irritates the tendon, and may set up a cycle of catching and swelling.

Diagnosing and Treating Trigger Finger

Your doctor can usually tell from examining your finger or thumb whether a tendon is inflamed. Your treatment will depend on how severe your condition is.

Evaluating Your Finger

Your doctor will ask you to make a fist and then straighten your fingers. The affected finger or thumb may stay curled and then suddenly pop to a straight position. Or you may have to straighten it with your other hand. Your doctor may also feel for tenderness and swelling at the base of the finger or thumb.



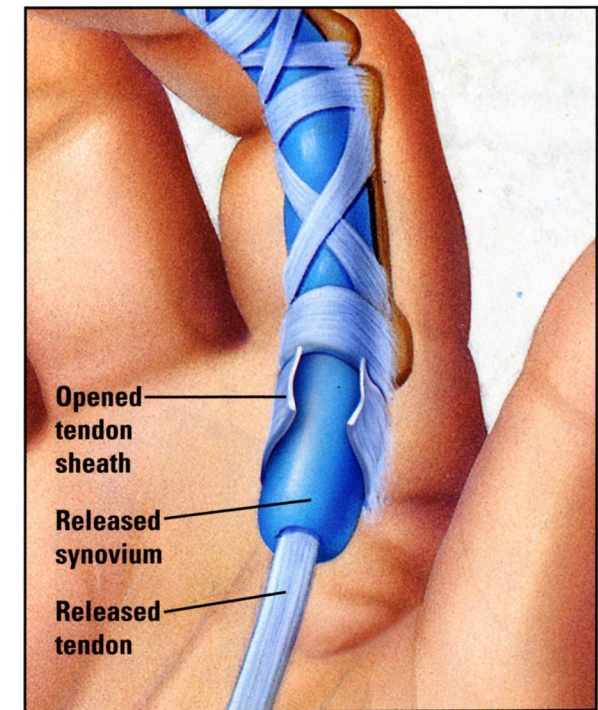
Nonsurgical Treatment



If your symptoms are mild, your doctor may have you rest the finger or thumb and take oral anti-inflammatory medication, such as aspirin. If this does not reduce the swelling, your doctor may give you injections of an anti-inflammatory, such as cortisone, in the base of the finger or thumb.

Surgery

If other treatments don't relieve your symptoms, your doctor may recommend surgery. The sheath that surrounds the tendon is opened to enlarge the space and release the swollen tendon. This allows the finger to bend and straighten normally again. Surgery takes about 20 minutes, and can often be done under a local anesthetic. You can usually go home the same day. Your hand will be wrapped in a soft bandage, and you may wear a plaster splint for a short time to keep the finger stable and more comfortable. The stitches will be removed in about 2 weeks. Your doctor will discuss the risks and possible complications of surgery with you.

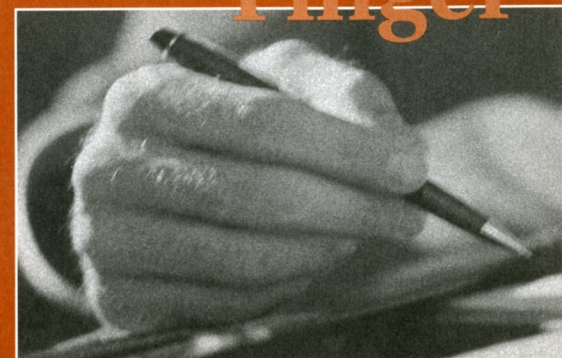


The tendon sheath is opened to release the tendon. Once the tendon can move freely again, the finger can bend and straighten more normally.

Treatment. The goal of treatment in trigger finger/thumb is to eliminate the catching or locking and allow full movement of the finger or thumb without discomfort. Swelling around the flexor tendon and tendon sheath must be reduced to allow smooth gliding of the tendon. The wearing of a splint or taking anti-inflammatory medication by mouth or an injection into the area around the tendon may be recommended to reduce swelling. Treatment may also include changing activities to reduce swelling.

If nonsurgical forms of treatment do not improve symptoms, surgery may be recommended. This surgery is performed as an outpatient. The goal of surgery is to open the first pulley so the tendon will glide more freely. Active motion of the finger generally begins immediately after surgery. Normal use of the hand can usually be resumed once comfort permits. Some patients may feel tenderness, discomfort, and swelling about the area of their surgery longer than others. Occasionally, hand therapy is required after surgery to regain better use.

Trigger Finger



MISSION STATEMENT

The mission of ASSH is to advance the science and practice of hand surgery through education, research and advocacy on behalf of patients and practitioners.



AMERICAN SOCIETY *for* SURGERY OF THE HAND

6300 North River Road, Suite 600
Rosemont, IL 60018-4256
Phone : 847.384.8300
Fax: 847.384.1435
E-mail : info@assh.org
www.assh.org



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Figure 1 Normal anatomy flexor sheath showing pulley, tendon, and tenosynovium.

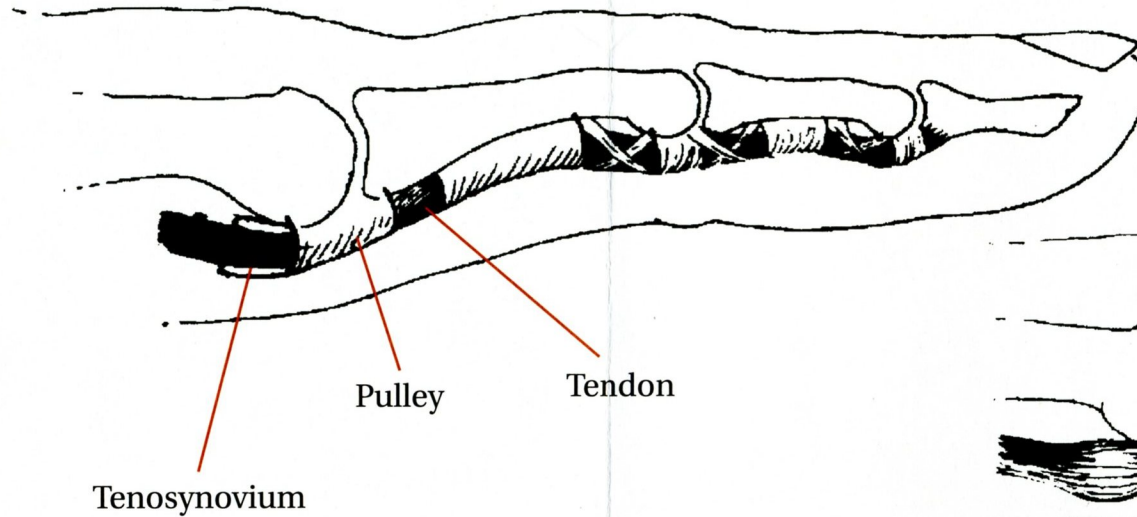
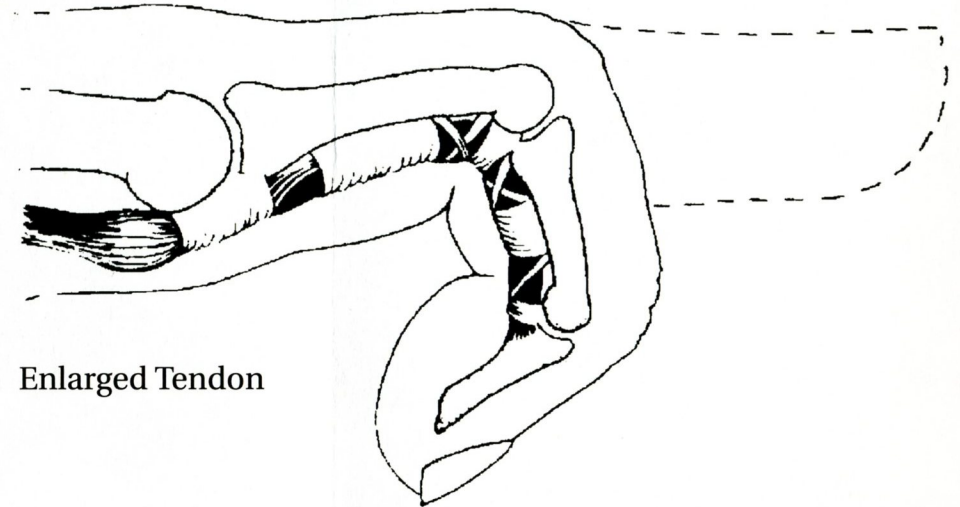


Figure 2 Abnormal anatomy showing enlarged tendon catching on flexor sheath.



What is it? Stenosing tenosynovitis, commonly known as trigger finger or trigger thumb, involves the pulleys and tendons in the hand that bend the fingers (*see Figure*). The tendons work like long ropes connecting the muscles of the forearm with the bones of the fingers and thumb. In the finger, the pulleys form a tunnel under which the tendons must glide. These pulleys hold the tendons close against the bone. The tendons and the tunnel have a slick lining that allows easy gliding inside the pulleys (*see Figure 1*).

Trigger finger/thumb happens when the tendon develops a nodule (knot) or swelling of its lining. When the tendon swells, it must squeeze through the opening of the tunnel (flexor sheath), which causes pain, popping, or a catching feeling in the finger or thumb (*see Figure 2*). When the tendon catches, it produces inflammation and more swelling. This causes a vicious cycle of triggering, inflammation, and swelling. Sometimes the finger becomes stuck (locked) and is hard to straighten or bend.

What causes it? Causes for this condition are not always clear. The medical conditions of rheumatoid arthritis, gout, and diabetes may be associated with trigger finger/thumb symptoms.

Signs and symptoms. Trigger finger/thumb may start with discomfort felt at the base of the finger or thumb. A thickening may be found in this area. When the finger begins to trigger or lock, the patient may think the problem is at the middle knuckle of the finger or the top knuckle of the thumb.