

Trigger finger (stenosing tenosynovitis) is a painful condition that affects the tendons in the hand. As the finger or thumb is bent towards the palm, the tendon gets stuck and the finger clicks or locks in the hand. Tendons run down the bones in the fingers and are attached to the muscles in the forearm. The tendons are held in place on the bones by a series of ligaments (strong bands of tissue) called pulleys. These are shaped like arches over the tendon, attaching it to the bone. The pulleys form a tunnel, or sheath, on the surface of the bone, which the tendons slide through.

Trigger finger occurs when a problem with the sheath means that the tendon can no longer slide easily through it. As a result, it becomes harder to bend the affected finger or thumb. The tendon can get caught in the opening of the sheath and the finger gives a painful click, like a trigger, as it is straightened.

How common is trigger finger?

Around 2-3% of people develop trigger finger.

It is more common in:

- Females,
- People who are over 40 years of age, and
- People with certain medical conditions like Diabetes, Hypothyroidism, Gout and Rheumatoid Arthritis.

Around 10% of people with diabetes develop trigger finger.

Symptoms

Symptoms of trigger finger include, pain at the base of the affected finger or thumb, a nodule at the base of the affected finger or thumb, and stiffness or clicking when you move the affected finger or thumb. If the condition gets worse, your finger may get stuck in a bent position and then suddenly pop straight. Eventually, it may not fully straighten. Trigger finger usually affects your thumb, ring finger or little finger.

Causes

Trigger finger is caused by a problem in the sheath (tunnel) that the tendon in your finger runs through. This makes it difficult for your tendon to glide smoothly through the tunnel, and causes the pain and stiffness associated with trigger finger. The most common problem in the sheath involves one of the pulleys in your finger. Pulleys are made of ligament (strong bands of tissue). They form an arch over the tendon, attaching it to the bone in your finger. When you bend your finger or thumb, the tendon slides down the sheath towards your arm. As you straighten your finger or thumb, the tendon should slide back up the sheath into your finger. The stuck tendon may suddenly pop past the pulley into the sheath, releasing your finger like the release of a trigger.

Treatment

The treatment of trigger finger depends on the severity of your symptoms and how long you have had them. While surgery is generally considered to be the best treatment, you may also try other treatments.

Non-surgical treatments

Before suggesting surgery, rest your affected hand to see whether it helps relieve your symptoms. Non-steroidal anti-inflammatory Drugs (NSAIDs), such as ibuprofen may be used. These can help relieve the inflammation (swelling), as well as reducing the amount of pain.

Corticosteroid injections

Liquid corticosteroids are injected around the tendon sheath (the tunnel that the tendon slides through) at the base of your affected finger or thumb. Corticosteroids are thought to work because they have an anti-inflammatory effect on the thickened sheath. This reduces the swelling in the sheath and allows the tendon to move freely again. Corticosteroids are an effective treatment for 50% of people.

Serious side effects of corticosteroids are rare, but include:

- Tendon rupture (when the tendon bursts),
- Infection at the site of the injection, and
- Dermal atrophy

Surgery

If the treatments above do not work, surgery is usually recommended. Surgery involves slicing through the thickened pulley (the arch of ligament that attaches the tendon to the bone in your finger) so that your tendon can move freely again. Surgery is 90-100% effective, although you will need to take some

Time off work (see box, right) and there can be complications. The operation takes around 20 minutes and will be completed as an out-patient procedure, which means that you will not need to be admitted to hospital overnight. The procedure is usually performed under local anesthetic, so you will be conscious but not feel any pain in your hand.

Open trigger finger release surgery

Dr Sarda will give you an injection of local anesthetic into the palm of your hand. A small incision (cut) about 1.5cm size will be made in the palm of your hand along one of the natural creases, so that the scar will be less noticeable. The incision will be opened up to expose the tendon, sheath and pulleys. The thickened pulley is sliced through to release the tight opening of the tendon sheath. The wound will then be closed with stitches and covered with a light bandage. Usually it only needs 3-4 stitches

Recovering from surgery

After the procedure, you should be able to move your finger straightaway. The dressings can be removed after a few days to make movement easier, and full movement should return within a week or two. Your palm may feel sore immediately after the procedure, but any discomfort should pass within two weeks. After removing the stitches in 2-3 weeks, you may be left with a small scar running along your palm, where the incision was made.

Complications from surgery

Trigger finger release surgery is a safe procedure but, as with any type of surgery, there are some risks. Complications are rare, but could include:

Infection.

Stiffness in the finger.

Pain in the finger.

Nerve damage.

Complex Regional Pain Syndrome (CRPS), which causes pain and swelling in your hand after surgery.

This usually resolves itself after a few months, but there can be permanent problems.

There is a small chance that the surgery may not be successful or that your trigger finger returns. The recurrence rate for trigger finger after surgery is around 3%.