



KATARZYNA MACKENZIE

PLASTIC SURGEON

Trigger Finger or Thumb

Trigger finger or thumb is a condition that causes pain, stiffness, and a sensation of locking or catching when you bend and straighten your finger. The condition is also known as “stenosing tenosynovitis.” Trigger finger or thumb is caused by a thickening around the tendon which bends your finger or thumb. The ring finger and thumb are most often affected by trigger finger, but it can occur in the other fingers, as well. It is more common in women than men and may be linked to diabetes.

Treatment is needed if the triggering of your finger or thumb is causing discomfort or stopping you from being able to perform normal daily activities.

Length of surgery	30 minutes
Anaesthesia	Local anaesthetic
Hospital stay	Day case
Risks/complications of surgery	Frequent: Swelling, stiffness, discomfort on movement Infrequent: Infection, bleeding (haematoma), delayed wound healing, painful scar, damage to the nerve, recurrence, incomplete resolution of symptoms, complex regional pain syndrome
Recovery	1-2 weeks until return to office work 3-16 weeks until swelling disappears 6-8 weeks until return to gym and other strenuous activities 6-10 weeks no heavy lifting 3-6 months until final result
Driving	1 week
Hand position	Elevation above the heart level
Follow up	1 week, 6 weeks, 3 months, 6 months
Duration of results	Permanent

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Trigger finger/thumb information sheet

Any hand surgery procedure is a personal choice and understandably there are a number of questions that arise. This information sheet is a general guide for patients considering trigger finger/thumb treatment under the care of Dr Mackenzie. It should provide the answers to some questions that you may have. There are many factors that can affect your individual operation, your recovery and the long-term result. Some of these factors include your overall health, previous surgery, any bleeding tendencies that you have and your healing capabilities, some of which will be affected by smoking, alcohol and various medications. Such issues that are specific to you need to be discussed with Dr Mackenzie and are not covered here. Please feel free to ask her any further questions before you sign the consent form.

What is trigger finger/thumb?

Trigger finger is a condition in which the sheath for the flexor tendon of a finger or the thumb thickens and narrows. This causes the flexor tendon to lock or catch when the finger bends and straightens, leading to pain, intermittent snapping ("triggering") or actual locking of the affected finger/thumb.

Each of the flexor tendons passes through a tunnel in the palm and fingers that allows it to glide smoothly as the finger bends and straightens. This tunnel is called the "tendon sheath." Along the tendon sheath, bands of tissue called "pulleys" hold the flexor tendons closely to the finger bones. The tendons pass through the pulleys as the finger moves. The pulley at the base of the finger is called the "A1 pulley." This is the pulley that is most often involved in trigger finger.

In a patient with trigger finger, the A1 pulley becomes inflamed or thickened, making it harder for the flexor tendon to glide through it as the finger bends. Over time, the flexor tendon may also become inflamed and develop a small nodule on its surface. When the finger flexes and the nodule passes through the pulley, there is a sensation of catching or popping. This is often painful.

What are the symptoms of trigger finger/thumb?

Symptoms of trigger finger/thumb often start without a single injury. They may follow a period of heavy or extensive hand use, particularly pinching and grasping activities. They may include:

- Swelling, stiffness and pain with the grasp
- Tender lump at the base of the finger/thumb on the palm side of the hand
- Catching or locking sensation with finger movement
- Pain on bending or straightening of the finger
- In severe cases, involved finger may become locked in a bent position

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What are the risk factors for trigger finger/thumb?

In most cases it is not clear why trigger finger/thumb occurs. Several factors may increase the risk for developing the condition. It is often associated with:

- Older age
- Medical conditions such as diabetes, rheumatoid arthritis, kidney disease, gout
- Local trauma- it is known to occur after forceful use of the fingers and thumb
- There is little evidence that it is caused by work activities, but the pain can certainly be aggravated by hand use at work, at home, in the garden or at sport
- May develop following carpal tunnel decompression

How is trigger finger/thumb diagnosed?

Dr Mackenzie will take a detailed history including complete medical history, how the hands have been used, and any prior injuries.

That will be followed by examination of the hand. Dr Mackenzie will check the finger for stiffness, signs of locking, tenderness over the flexor sheath in the palm and thickening of the tendon. Diagnosis of triggering may need to be made by injection of lignocaine in to the flexor sheath to unlock the digit.

Why do I need surgery?

Trigger finger and trigger thumb are not harmful but can be a really painful nuisance. If your symptoms are constant, don't recover over a few weeks without treatment and are not relieved by non-surgical measures, surgery may be needed.

What is the treatment?

Non-surgical treatment

Non-surgical treatments are usually tried first. Treatment begins with:

- Wrist splint at night to keep the affected finger or thumb in a straight position while you sleep. A splint can be fitted by a hand therapist
- Resting your hand and avoiding activities that make it worse
- Taking nonsteroidal anti-inflammatory drugs, such as ibuprofen, to relieve pain and inflammation

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- Gentle stretching exercises can help decrease stiffness and improve range of motion in the involved digit
- Cortisone can be injected into the tendon sheath at the base of the trigger finger. A steroid injection may resolve the triggering over a period of one day to several weeks in 50-70% of cases. The risks of injection are small, but it very occasionally causes thinning or colour change in the skin at the site of injection, infection. If symptoms do not improve with time, a second injection may be given. If two injections do not help the problem, surgery may be considered. These are less effective in diabetic patients and blood glucose may be more variable and difficult to control for the next few weeks

Surgical treatment

When symptoms are severe or do not improve, surgery may be needed. The decision for surgery is based on how much pain or loss of function you have in your finger. If the finger or thumb is stuck in a flexed position, surgery is recommended to prevent permanent stiffness.

The goal of surgery is to release the A1 pulley that is blocking tendon movement, so the flexor tendon can glide more easily through the tendon sheath.

What happens during surgery?

Trigger finger release is done as a day case. The surgery can be done under regional anaesthesia, which numbs up your arm, or under local anaesthesia, which numbs just your hand. In some cases, you will also be given a light sedative through an intravenous line inserted into a vein in your arm.

Dr Mackenzie will make a small incision at the base of the finger to release the pulley causing problems with tendon glide. During the procedure Dr Mackenzie will cut through the A1 pulley to release it and will check that tendon and the finger move smoothly. In severe cases or rheumatoid arthritis, a slip of tendon may need to be cut out. Dr Mackenzie will protect the digital nerves. Wound will be closed and bulky dressing applied.

The surgery takes about 30 minutes.

What is the recovery after trigger finger/thumb surgery?

It is very important to elevate your hand as often as possible, following your operation as it helps to reduce the swelling. You will be encouraged to move your fingers to reduce swelling and prevent stiffness.

You can expect some mild pain, swelling, and stiffness after your procedure. It may take from 4 to 9 months for swelling and stiffness in your hand and fingers or thumb to go away completely. If stiffness,

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swelling, or pain persist after surgery, hand physiotherapy will be recommended. If a contracture or loss of motion was present before surgery, complete range of motion may not be restored.

Although the scar may be red and tender for several weeks, it is seldom troublesome in the longer term.

You can have a bath or shower 24 hours after your operation, but keep your wounds dry until they have healed. It is helpful to wear a large plastic bag over your arm for showering or bathing.

You can drive a car when your hand feels comfortable and strong. It usually takes at least 1 week before you can drive a car.

Stiches are removed 10 to 14 days after surgery.

Self-care activities, light lifting, and gripping may be permitted soon after surgery.

If you have another condition that causes pain or stiffness in your hand or wrist, such as arthritis or tendonitis, it may slow your overall recovery.

Recovery may take several months.

When can I return to work?

This will depend on the type of work you do, but it may be one to two weeks after your operation. Office workers may need a few days away from work. Heavier activities with the affected hand are restricted for 4 to 6 weeks.

What are the risks of surgery?

Complications associated with this surgery are rare, but can include:

- Infection – this can be settled by taking antibiotics
- Swelling-may last for a few months
- Stiffness can last from weeks to months. Hand physiotherapy may be required
- Inability to straighten the involved finger. If you were not able to straighten your finger completely before surgery, you might not be able to do so afterward
- Persistent locking or clicking. This may indicate that more of the pulley needs to be released or may be caused by another problem in your finger
- Painful scar
- Wound healing problems

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- Bleeding
- Damage to the digital nerves which results in either a painful spot in the scar or some loss of feeling in the hand
- Blood vessel injury- damage to the vessel is very rare and can be immediately repaired
- Recurrence
- Incomplete resolution of symptoms
- CRPS-complex regional pain syndrome-5%