

Trigger Finger

Trigger finger: the finger catches or locks as it bends.

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What you're feeling

You may notice pain and tenderness at the base of your finger or thumb, right in the palm. This spot is where the tendon sheath begins. You might also feel a small lump or knot there. Sometimes, pain travels up to the knuckle or the middle joint of the finger. This happens because long-term irritation affects the joint itself.

The most distinct sign is catching or locking. Your finger may bend easily but then get stuck when you try to straighten it. You might have to use your other hand to force it open. In severe cases, the finger stays locked in a bent position. This often feels worse in the morning or after resting your hands. It can make simple tasks difficult, like gripping a coffee mug, turning a doorknob, or shaking hands.

Triggering is more common in women and usually starts after age 45. It often affects the thumb, ring finger, or middle finger. If you have diabetes, you are more likely to experience this condition. You might also notice that both hands are affected, or that you have symptoms of carpal tunnel syndrome at the same time.

What's actually happening

Your finger moves because long, rope-like tendons slide through a tunnel in your palm. This tunnel is held together by strong bands called pulleys. These pulleys keep the tendons close to your bone so your grip stays strong. In trigger finger, the band closest to your palm becomes thickened and tight. This narrows the tunnel.

As you bend your finger, a small knot on the tendon tries to pass through this narrow opening. The knot catches on the tight band. This creates a snapping sensation or a sudden lock. You might feel a lump in your palm where this thickening occurs. The problem is often worse in the morning because the tissues stiffen while you sleep.

In severe cases, the knot gets stuck completely. You may need to use your other hand to straighten the finger. This happens because the tendon simply cannot slide back through the narrowed tunnel on its own. The

condition is more common in women over 50 and those with diabetes. It can also occur alongside other conditions like rheumatoid arthritis or Dupuytren's disease, which cause further thickening of the tissues.

When the tendon and pulley thicken, they no longer glide smoothly. The friction causes pain and tenderness at the base of the finger. If left untreated, the finger may remain bent. This is not a joint problem but a mechanical issue with the tendon's path. The goal of treatment is to widen that narrow tunnel so the tendon can slide freely again.

What we can do about it

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, approaches this condition in our clinic by starting with the least invasive options. You can begin by changing how you use your hand. Avoid repetitive grasping or forceful gripping that aggravates the finger. Rest and gentle movement help reduce irritation. Our hand therapists can guide you through simple exercises to keep the tendon gliding smoothly. We often recommend wearing a splint to keep the finger straight, especially at night. Give these measures a few weeks to work. Many people find their symptoms improve with this basic care alone.

If rest and splinting do not bring enough relief, we discuss medical management. The most common next step is a corticosteroid injection into the tendon sheath. This medicine reduces swelling and inflammation, allowing the tendon to slide freely again. About 60% of patients achieve success after one injection. For those without diabetes, one or two injections provide relief in 65% to 90% of cases. The effect can last for a year or more in half of patients who need a repeat injection. Please note that diabetic patients are generally less responsive to these injections. Injections may also temporarily raise blood sugar levels for five days or more. We monitor your response closely to decide if further injections are appropriate or if it is time to consider surgery.

Surgery is considered when conservative care has not given enough improvement, or if your finger is locked and cannot straighten on its own. Our surgical option involves a small release of the tight band around the tendon. This procedure is short, safe, and effective. Approximately 97% of patients have complete resolution after operative treatment. We discuss this option with you as a shared decision, ensuring you understand the benefits and the small risks involved. If you have rheumatoid arthritis, our approach may differ slightly to protect your finger alignment. We tailor every plan to your specific needs and health history.

What to expect

Trigger finger is a condition where your finger or thumb catches or locks when you bend it. Without treatment, symptoms often persist or worsen over time. Many people find that the locking becomes more frequent and difficult to straighten. While some cases may settle on their own, leaving it alone usually means the problem remains or grows more uncomfortable.

When managed well with surgery, the outlook is generally positive. Open trigger finger release is a low-risk procedure. It effectively stops the catching and locking for most patients. About 1 in 20 fingers will experience a mild, temporary side effect after surgery. These might include minor wound issues or slight stiffness. These usually resolve with time. Major complications are rare. About 1 in 200 fingers require a second surgery.

Recovery feels straightforward for most people. You can typically use your hand normally soon after the procedure. Your surgeon will guide you on gentle movement to keep the joint flexible. Some patients notice that pain in the finger joint itself does not fully go away if they had symptoms for a long time before surgery. This is because the joint may have changed over time.

If you have diabetes, surgery in the clinic is often the most cost-effective option if steroid injections do not work. Steroid injections can also help. About 39% of second or third injections provide long-term relief. However, having an injection shortly before surgery slightly increases the risk of infection.

It is common for other fingers to develop triggering later. You might need treatment in the same or a different finger in the future. This is not a failure of the first treatment, but a natural progression of the condition. Your surgeon will discuss the best path for you based on your specific symptoms and health history.

When to see someone

See your GP if you notice pain or a lump in your palm, or if your finger catches or locks when you bend it. Symptoms often feel worse in the morning. You may need to use your other hand to straighten the finger. Ask for a specialist review if the locking becomes fixed, or if pain interferes with sleep or work. Trigger finger is common, affecting 2% to 3% of people. Women are more often affected. It is also more likely if you have diabetes or rheumatoid arthritis. Early assessment helps manage symptoms before they worsen.

In more depth

This section goes further than you need for your own treatment decisions. Trigger finger is worth the extra reading because the first-line treatment works a little over half the time – a figure rarely quoted – and because in children the same clinical picture means something different enough to change the investigation.

THE INJECTION WORKS, AND THE HONEST NUMBER IS 57%

Corticosteroid injection is the standard first intervention, and it is usually described simply as effective. The pooled figure from level I and II studies is more specific: **corticosteroid injections are effective in 57% of patients** with trigger finger. Despite the limitations of the included studies, it remains a recommended first-line treatment on the basis of its simplicity and symptom relief [1].

Fifty-seven percent is worth knowing before you have one. It reframes a second injection, or a decision to proceed to surgery, as the expected path for a substantial minority rather than as something having gone wrong.

SPLINTING IS A REAL ALTERNATIVE, AND THE DURATION IS LONGER THAN MOST EXPECT

Where injection is unsuitable – in diabetes, for instance, where injections can disturb glycaemic control – orthotic management has a reasonable evidence base. The consistent finding across studies is that results were similar **regardless of which joint was immobilised**, with a recommendation that a **single joint be immobilised for 6 to 10 weeks** [2].

That duration is the part people underestimate. A splint worn for a fortnight is not a trial of splinting.

SURGICAL RELEASE: THE TECHNIQUE DEBATE IS SETTLED, THE APPROACH QUESTION IS NOT

Release of the A1 pulley can be done open, through a small incision under direct vision, or percutaneously with a needle or blade. Pooling **548** patients, there was **no significant difference between open and percutaneous techniques** in the need for revision, complications, or post-operative pain – so **both are appropriate** [3].

The larger analysis of percutaneous release across **2,114** digits found it effective and safe, and added two useful details: **ultrasound guidance may improve success**, while success rates were **not affected by the instrument used or by whether cortisone was given alongside** [4]. A 2025 review of **685** patients found combining percutaneous release with corticosteroid injection was well tolerated with a low complication rate [5].

Taken together: the pulley needs dividing, and how that is achieved matters less than that it is achieved completely. The instrument does not determine the result.

IN A CHILD, THE SAME FINDING WARRANTS A DIFFERENT RESPONSE

Paediatric trigger finger is not simply the adult condition arriving early. The presence of **bilateral or multiple trigger digits, or concurrent carpal tunnel syndrome, should raise suspicion of an atypical underlying pathology such as mucopolysaccharidosis** [6].

This is the single most clinically consequential item in this section. A child with more than one triggering digit, or with triggering plus nerve symptoms, warrants investigation for a systemic storage disorder rather than a straightforward release – because the hand finding may be the presenting sign of a diagnosis that has implications well beyond the hand. A single triggering thumb in an otherwise well child is a different and far more common situation.

REFERENCES

1. Fleisch SB, Spindler KP, Lee DH. Corticosteroid injections in the treatment of trigger finger: a level I and II systematic review. J Am Acad Orthop Surg. 2007;15(3):166-71.
2. Lunsford D, Valdes K, Hengy S. Conservative management of trigger finger: a systematic review. J Hand Ther. 2019;32(2):212-21.
3. Casey JC, Daher M, Dworkin M, Cusano J, Garavito J, Gil JA. Open versus percutaneous fixation of trigger finger: meta-analysis of clinical outcomes. J Hand Surg Am. 2024;49(6):570-5.
4. Zhao J, Kan S, Zhao L, Wang Z, Long L, Wang J, et al. Percutaneous first annular pulley release for trigger digits: a systematic review and meta-analysis of current evidence. J Hand Surg Am. 2014;39(11):2192-202.
5. Wen J, Syed B, Khalil R, Shehabat M, Alam M, Sedighi R, et al. Percutaneous A1 pulley with corticosteroid injection for trigger finger release: a systematic review and meta-analysis. J Orthop Surg Res. 2025;20(1).
6. Wong AL, Wong MJ, Parker R, Wheelock ME. Presentation and aetiology of paediatric trigger finger: a systematic review. J Hand Surg Eur Vol. 2021;47(2):192-6.