

Trapeziectomy

Trapeziectomy: the worn trapezium is removed and the thumb supported with a tendon.

Kieran Hirpara © ⓘ ⓘ 4.0



At-a-glance recovery. Pooled from 80 published studies — your own pace will vary.

LIGHT DUTIES desk work, driving, daily tasks	MOST EVERYDAY ACTIVITIES manual work, sport, gym	FINAL OUTCOME PLATEAU pain and strength
2-6 weeks	3-6 months	12 months
Return to light activities and desk work typically occurs within 2 to 6 weeks, with some patients returning to work by 3 months.	Return to manual work and full daily activities is generally achieved by 3 months, with most patients returning to baseline by 3 months.	Maximum improvement in pain and function is typically observed within the first post-operative year, with sustained results at 5 years.

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At your appointment we take a history, examine your hand, and arrange imaging if it is needed to confirm the diagnosis.

This operation is called a trapeziectomy. It means removing one small bone at the base of the thumb, the trapezium, which is where wear-and-tear arthritis has worn out the joint surface. We usually try non-operative care first, such as changing how you use your hand, hand therapy, and splinting. Surgery comes into the picture when those steps have not given you enough improvement.

We may have suggested this operation because your thumb pain is limiting what you can do, or because the joint changes seen on your scans line up with your symptoms. Removing the worn-out bone takes away the

painful surfaces that rub together. The aim is lasting relief from pain and a thumb you can use with more confidence in daily tasks.

Before the operation

Before your operation, we will give you clear instructions to follow. You will need to stop eating and drinking seven hours before your operation. We ask for seven hours rather than six so that we can bring you forward if the theatre list runs early. Your surgeon will tell you which of your regular medicines to stop and when. Bring a written list of everything you take. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing on the day. We will already have imaging such as X-rays, and sometimes an MRI or ultrasound, to plan the operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist.

On the day

On the day of your operation, you come to the hospital's surgical admissions unit. There, staff check you in and prepare you for theatre. You will then meet the anaesthetist, the doctor who looks after your anaesthetic and pain relief during surgery. After that, you are taken into the operating theatre, where the operation is performed.

This operation is done under general anaesthetic. You will be fully asleep for the operation. Some patients may also have a regional nerve block for post-operative pain relief; the anaesthetist decides on the day based on your individual circumstances.

When the operation is finished, you wake up in the recovery area. Nurses stay with you and keep an eye on you while the anaesthetic wears off. Once you are stable, you either go to the ward or go home, depending on the procedure and how your recovery is going.

What the operation involves

A trapeziectomy is done as an open operation through a single cut over the area being operated on, at the base of your thumb. Through that cut, your surgeon removes the trapezium, the small worn-out bone that sits between your thumb and your wrist. Taking the bone out removes the rough, painful surfaces that have been rubbing together.

Once the bone is gone, the space it leaves fills in with your own scar tissue over time, and the thumb settles onto a cushioned pad instead of a worn-out joint. Your surgeon does not put in any artificial joint or implant. The wound is closed with stitches, and a dressing is placed over the top.

The operation itself is straightforward, and it is done as day surgery, so you go home the same day.

After the operation

You may go home the same day or stay one night in hospital after this operation. Both are common, and your team will talk with you about which suits you. Your hand will be in a splint with dressings over the wound, and a sling can help you rest your arm comfortably in the first day or two. Nurses will show you how to manage the dressings and keep your hand raised to help with swelling. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you. Pain relief will be arranged before you leave, and the nurses will explain how to take it. Ask someone to stay with you for the first 24 hours after you get home.

Recovery

For the first few days your hand will be sore and swollen, and the wound area may throb. Keeping your hand raised on pillows, even when you are resting or asleep, helps the swelling settle. Take the pain relief as prescribed rather than waiting for the pain to build.

Your thumb will rest in a splint while the wound heals. A hand therapist will show you gentle exercises to keep your fingers moving and stop stiffness setting in. You will be able to manage light daily tasks around the home using your other hand, but you will not grip, pinch or lift with the operated thumb while it is protected. You cannot drive while the splint is on, because it stops you holding the wheel safely. Once the splint is removed and your surgeon clears you, driving can resume; see our page on [Driving after upper-limb surgery](#).

As the weeks pass, the swelling settles and movement returns bit by bit. Hand therapy continues, and your therapist will gradually build up how much you use the thumb. Grip and pinch strength come back slowly, and many people notice their thumb feels less strong than before even once daily activities feel normal. The full benefit builds over time, and it is common for pain and strength to keep improving for up to a year.

Your timeline may differ from someone else's. Your surgeon and your hand therapist will guide you at each step.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

Sometimes a nerve near the thumb becomes irritated after surgery. This can feel like tingling, burning or numbness on the back of the hand or thumb. If this happens, it usually settles completely within a year. Mention it at your next review so we can keep an eye on it.

The wires sometimes used to hold the bones in place can cause problems. The skin around the wire may become sore or irritated, or the wire can loosen or shift. A wire that moves usually needs to be taken out early, and this has not been found to harm the final result. Tell us at a review if the wire site becomes painful or the skin looks inflamed around it.

Infection is uncommon but can happen in any wound. Watch for redness that spreads out from the wound, fluid or pus leaking from it, or fever. Call the clinic the same day if you notice any of these. Pain that keeps getting worse despite your pain medicines also needs a same-day call to the clinic.

Very rarely, the blood supply to the thumb can be affected. Go to the emergency department if your thumb, fingers or hand turn pale, cold, white, blue or dark.

If a tendon cushion is used to fill the space where the bone was, it can occasionally bulge under the skin. You might notice a soft lump or a tender, inflamed area near the thumb. This can usually be treated with a small operation to remove it, which relieves the pain.

Some rarer problems are linked to more complex versions of this operation, such as artificial joint implants. These carry more risks than a simple trapeziectomy, which is one reason we favour the simpler option. If a first operation needs correcting later, the results tend to be less reliable than the first time around. We will talk through any of this with you before you decide.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Most problems show up in the first few weeks, so it helps to know what to watch for. Go to the emergency department if you have swelling or pain in your calf, shortness of breath or chest pain, because these can be signs of a blood clot. Go to the emergency department if your thumb, fingers or hand turn pale, cold, white, blue or dark. Call the clinic the same day if you have a fever, spreading redness around the wound, or fluid or pus leaking from it. Call the clinic the same day if pain keeps getting worse despite your pain medicines. Numbness or weakness in the first 24 hours after a nerve block is expected. Once the block has worn off, call the clinic if you cannot feel or move your arm, hand or fingers. If you cannot reach the clinic, go to your nearest emergency department.

Where to read more about the condition

This page is about the operation itself. The condition it treats, including what the evidence shows about when surgery helps and when it does not, is covered in more detail on the [Basal Thumb Arthritis](#) page.

COMPLICATIONS & CONSENT

Trapeziectomy

Complication rates from published literature

Pooled from 80 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
scaphotrapeziotrapezoid arthritis	11.8-52.0%	Radiographic changes or symptomatic arthritis in the adjacent STT joint are common long-term findings.
flexor carpi radialis tendinitis	10.0-25.0%	High incidence reported with APL suspensionplasty due to tendon attrition or impingement.
symptomatic subsidence	9.0-18.0%	Metacarpal collapse or subsidence causing pain may occur, particularly in suspensionplasty techniques.
persistent pain	7.0-72.7%	Variable rates of persistent pain reported, with some studies showing high rates in specific arthroscopic cohorts.
superficial radial nerve neuritis	4.0-13.2%	Transient paresthesias or neuritis of the superficial radial nerve are common, often resolving within 3 months.
implant failure	3.4-33.3%	High variability in failure rates depending on implant type (pyrocarbon, silicone, metal) and technique.
revision surgery	3.2-19.0%	Revision rates vary by technique; higher rates seen in arthroplasty or suspensionplasty compared to simple excision.
MCP joint hyperextension	1.3-3.0%	Thumb metacarpophalangeal joint hyperextension deformity may develop, sometimes requiring arthrodesis.
infection	0.8-2.6%	Superficial wound infections occur in less than 3% of cases; deep infections are rare.
wound dehiscence	0.0-0.6%	Wound healing issues are generally rare in this procedure.
index metacarpal fracture	Rare	Fracture through a bone tunnel; rare with modern techniques.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

_____	_____	_____
PATIENT – PRINT NAME	SIGNATURE	DATE