

Cubital Tunnel Release

Cubital tunnel release decompresses the ulnar nerve where it is pinched on the inside of the elbow — relieving the pressure shown here.

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At-a-glance recovery. Pooled from 45 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
1-3 weeks Light daily tasks can start in the first few days. Most people go back to desk work within one to two weeks. Driving is usually possible at two to three weeks, once pain has settled.	6-12 weeks Lifting and gripping stay light for the first six weeks and are then built up step by step. Most people go back to heavier work at about six to eight weeks, and sport and full grip strength can take up to about three months.	12-24 months Maximum functional improvement and symptom resolution typically plateau between 12 and 24 months post-surgery, particularly for severe cases.

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 arm, and arrange imaging or nerve tests where needed. Cubital tunnel syndrome is the name for pressure on a nerve at the inside of your elbow. This pressure causes numbness or tingling in your little finger and the ring finger side of your hand, and it can worsen when your elbow is bent for long periods. For a long-standing problem like this we usually try non-operative care first: activity change, physiotherapy or hand therapy, and splinting. We consider surgery when those steps have not given you enough improvement.

The operation is called cubital tunnel release. It eases the pressure on the nerve so your symptoms can settle. More than 90% of people who have this surgery are cured or show improvement. We will talk through what matters to you and decide together whether it is the right next step.

Before the operation

Once surgery is booked, we will give you clear instructions to follow. You will need to stop eating and drinking for seven hours before your operation. We ask for seven hours rather than six so your surgery time can be brought forward if the theatre list runs early. Some medications may need to be paused before surgery, and your surgeon will tell you which ones and when. Bring a list of everything you take, including tablets, injections and creams. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing with a sleeve that is easy to remove. Imaging such as X-rays, ultrasound or MRI scans may have been arranged to help plan your operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist, but most people do not.

On the day

You arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will meet the anaesthetist, a doctor who looks after your comfort and safety during the operation. 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. You are then taken into the operating theatre, where the operation is performed.

You will wake up in the recovery area, where nurses watch over you while the anaesthetic wears off. Once you are stable, you either go to the ward or go home, depending on the procedure and your recovery. Many people go home the same day. Before you leave, we will explain how to care for your arm and what to expect over the coming days.

What the operation involves

The operation is called a cubital tunnel release. Your surgeon makes one cut on the inner side of your elbow, just behind the bony bump you can feel there. Through this cut, your surgeon finds the ulnar nerve, the nerve that has been squeezed and is causing the tingling in your little and ring fingers. The nerve runs through a tunnel of tissue near the elbow, a bit like a cable running through a narrow conduit. Your surgeon opens that tunnel so the nerve is no longer pinched. This is called a decompression, which means taking pressure off the nerve.

Sometimes the nerve also needs to be moved to a new position at the front of the elbow so it stays out of trouble when you bend your arm. Your surgeon will decide during the operation whether releasing the tunnel alone is enough, or whether moving the nerve will serve you better. The choice depends on your examination and what your surgeon finds.

Once the nerve is free, your surgeon closes the cut. A fine self-adhesive mesh is laid over the wound first, holding the skin edges together. A liquid skin glue is then painted over the mesh, where it sets and seals everything as one closure. It stays on for roughly one to two weeks, then lifts and peels away by itself, so there is nothing to take out.

After the operation

You will wake up in the recovery area, where nurses watch over you while the anaesthetic wears off. This is a day case, so you will go home the same day. Pain is usually mild to moderate and can be managed with simple pain relief; we will explain what to take before you leave. Your arm will have a soft dressing over the wound, and you can move your fingers, hand and shoulder as comfort allows. There is no cast or brace, and you will not need a sling unless we advise one. Please arrange for someone to stay with you for the first 24 hours after you get home. 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.

Recovery

Most people notice the tingling in their little and ring fingers settles quickly after surgery. Many report sleeping better within days, because the night-time discomfort eases early. If your symptoms were severe, the numbness or weakness may take longer to fade. Feeling can return gradually, and that can take weeks, months or longer depending on how much the nerve was squeezed. Most people with severe symptoms still improve, even if the recovery is slow.

Your arm will have a soft dressing, which we leave on for about 10 days. You can move your fingers, hand and shoulder as comfort allows. Keep the wound dry and follow the care instructions we give you before you go home. Hand therapy after surgery is with Ruby Doolan at Extend Rehabilitation. Your hand therapist will guide your exercises and make a splint for you if one is needed. Gentle movement helps the nerve glide and keeps your elbow from stiffening.

You can do most daily tasks at home as soon as it feels comfortable, using your other arm where needed. Once the dressing comes off and the wound has settled, you can return to light activities. You can usually drive once any splint is off and you can hold the wheel and react quickly without pain; see our page on [Driving after upper-limb surgery](#). Return to work and sport depends on what your job and hobbies involve, and the table above gives typical timeframes.

Recovery varies between individuals. Your timeline may differ, and we will guide you along the way.

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 the original symptoms do not settle, or they come back after a period of relief. You might notice the tingling or numbness in your little and ring fingers returning, or aching on the inner side of your elbow that will not go away. If this happens, bring it up at your next review. Further surgery to release the nerve again is possible, and many people still gain improvement from it, though results are less predictable than the first operation.

The wound can become infected. Watch for increasing pain around the cut, redness that spreads out from it, swelling, or discharge. If you notice any of these, contact the clinic promptly. Infections are usually treated with antibiotics and wound care, so early review matters.

A small nerve that runs near the inner elbow can be irritated during surgery. This can leave an area of numbness or a tender spot on the inner side of your forearm, or occasionally a small painful lump where the nerve has healed into scar tissue. If you notice new numbness or tenderness in that area, mention it at your review appointment.

The ulnar nerve itself can occasionally become unstable after release, shifting backwards and forwards over the bony bump as you bend your elbow. You might feel or see a flicking at the inner elbow. Tell your surgeon if you notice this.

Smoking can affect how well your recovery goes, so it is worth raising this with us before surgery. A previous fracture or dislocation of the same elbow can also make further surgery more likely, which we will discuss when planning your operation.

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

When to call us

Most problems show up early, and we would rather hear about them sooner than later. Call us if you have a fever, if the redness around the wound is spreading, or if there is discharge from it. Call us too if your pain keeps getting worse rather than easing, or if new numbness appears in your hand. Go to emergency if you have calf swelling or pain, shortness of breath, sudden severe pain in your arm, or you cannot move your arm at all.

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 [Cubital Tunnel Syndrome](#) page.

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Complication rates from published literature

Pooled from 45 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Persistent pain	11.8%	Mild medial elbow pain reported in posterior oblique medial epicondylectomy studies.
Incisional numbness	5-10%	Numbness around the incision from medial antebrachial cutaneous nerve branches; usually improves.
Transient nerve dysfunction	5-15%	Temporary worsening of ulnar nerve symptoms in the early postoperative period; typically resolves within weeks.
Hematoma	5.0%	Hematoma rate reported in prospective cohort studies of cubital tunnel surgery.
Persistent or recurrent symptoms	3.6%	Symptoms may persist for 3+ months or recur, with in situ release having 25% long-term reoperation rate versus 12% for nerve transposition; success varies with disease severity.
Wound dehiscence or seroma	2.5%	The wound may split open or develop fluid collection, typically managed conservatively.
Infection	2.17%	Wound infection may require antibiotics and wound care, with deep infections potentially requiring surgical debridement; risk is higher in patients with diabetes, chronic kidney disease, and obesity.
Ulnar nerve instability or subluxation	1.9%	The ulnar nerve may become unstable and sublux over the medial epicondyle during elbow flexion, causing painful clicking; this only occurs after in situ release and requires revision to nerve transposition.
Delayed healing	1.9%	Delayed wound healing reported in endoscopic neurolysis series.
Reoperation rate	1.4%	Approximately 2.5-11.1% of patients require revision surgery, with most revisions (78%) occurring within 3 years.

COMPLICATION	REPORTED RATE	NOTES
Medial antebrachial cutaneous nerve injury	1.1%	This sensory nerve may be damaged during surgery, causing numbness in the medial forearm, painful neuroma, or tender scar.
Incomplete symptom relief	Rare	Incomplete relief may occur if ulnar nerve damage is longstanding.
Main ulnar nerve injury	Rare	Direct injury to the main ulnar nerve trunk is rare with careful technique.
Elbow stiffness	Rare	Usually resolves with physiotherapy.

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