

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.

Kieran Hirpara 4.0

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
2-6 weeks	3-6 months	12-24 months
Return to desk work and light activities typically occurs within 2 to 6 weeks, with immediate mobilization accelerating return to occupation.	Full return to manual work and sporting activity is typically achieved by 3 to 6 months, with overhead athletes often returning to sport by mid-term follow-up.	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

Your surgeon has suggested this operation because you likely have cubital tunnel syndrome, a condition where the ulnar nerve is compressed at the elbow. This causes numbness in your ring and little fingers, weakness in your hand, and sometimes pain in your elbow. While non-operative options like activity changes and therapy are tried first, surgery is recommended when these methods do not provide enough relief.

This procedure involves cutting a small incision to release the tight tissue around your ulnar nerve. It is typically offered to patients with worsening numbness, muscle weakness, or hand atrophy that has not improved with conservative care. The main goal is to stop the nerve damage from getting worse and to relieve your symptoms. Most patients experience significant improvement in pain and hand function after this surgery.

Before the operation

You will need to fast for several hours before your surgery and stop certain medications as your surgeon advises. Please arrange for someone to drive you home and bring a list of all your current medicines. You may need blood tests, an X-ray, or an MRI scan to check your elbow and plan the procedure. Your surgeon will perform an open cubital tunnel release using a single conventional incision over the operative site. This approach allows direct access to the ulnar nerve to relieve pressure. Wear comfortable clothing to your appointment and arrive ready for a brief anaesthetic review.

On the day

You will arrive at the hospital and meet your anaesthetist to discuss your care plan. 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.

Your surgeon will then take you to the operating theatre. The procedure is performed through a single conventional incision over the operative site. Afterward, you will wake up in recovery where your team will monitor your comfort and healing. Most patients experience low short-term complication rates of 5.6% with this approach. You will be able to go home once you are stable and comfortable.

What the operation involves

Your surgeon will make a single cut over the front of your elbow to reach the ulnar nerve. This nerve is often squeezed inside a tunnel of tissue. During the operation, your surgeon will release this trapped nerve from the tight tunnel that is pressing on it.

In some cases, the nerve may slip out of place when you bend your elbow. If this happens, your surgeon may move the nerve to a new position under the muscle to keep it safe. This step is called anterior transposition. The surgeon ensures the nerve sits comfortably in its new spot before closing the cut.

Your surgeon will close the incision with stitches. You will have a dressing over the area once the procedure is finished. While some techniques use small keyhole cuts, your surgeon uses this open method to ensure clear access to the nerve and surrounding tissue.

After the operation

You will wake up in the recovery ward. Your surgeon uses an open approach with a single conventional incision over the elbow. You will have dressings and a sling or brace on your arm. Pain is managed with general medication. Most patients go home the same day, though an overnight stay is possible if needed. You must have

someone stay with you for the first 24 hours. You can start moving your elbow immediately after surgery. This helps you return to work sooner. The wound will be cared for as you heal at home.

Recovery

You will likely feel some pain and swelling in your elbow and hand during the first few days. This is normal as your body heals. Your surgeon may recommend keeping your arm elevated to help reduce the swelling. You might notice relief of symptoms both in your hand and in areas outside the nerve's path as you recover.

Your surgeon will guide you on when to start moving your elbow. Moving your elbow immediately after surgery can help you return to work sooner. You may use a sling or brace for comfort, but your physiotherapist will teach you gentle exercises to restore movement. Once the swelling settles and you can grip without pain, you will gradually return to daily tasks.

Recovery varies for everyone. Your timeline may differ based on your preoperative symptoms and how your body heals. Your surgeon and physiotherapist will guide you through each step to ensure the best outcome.

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 pain or numbness you feel might not go away completely. In rare cases, symptoms can appear in areas outside where the nerve was trapped. If your symptoms do not improve or get worse after surgery, tell your surgeon right away.

Infection is uncommon, but it can happen. You might notice redness spreading from your cut, warmth, or a deep throbbing pain that does not ease with simple painkillers. If you see these signs, call the clinic immediately.

Your ulnar nerve might move out of place after surgery. You could feel a clicking or grinding sensation in your elbow, or the nerve might feel like it is slipping under your skin. Report this feeling to your surgeon so they can check it.

You might also feel numbness or tingling on the inner side of your forearm. This happens if a small skin nerve near the incision gets irritated. Let your surgeon know if this sensation persists or bothers you.

If you need a second surgery because the first one did not work, the results are less predictable. You might feel some relief from pain, but you may not get your full strength or sensation back if the damage was severe. If you have recurrent symptoms, tell your surgeon so they can discuss your options.

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

When to call us

Call us if you develop a fever, increasing redness, or discharge from your wound. Contact your surgeon immediately if you feel sudden severe pain, new numbness, or cannot move your hand. Go to emergency care if you notice calf swelling or trouble breathing. These signs could mean infection or a blood clot. Even if your surgery went well, report any new weakness or loss of feeling right away.

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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