

# Cubital Tunnel Release



The ulnar nerve passing through the cubital tunnel at the inner elbow, freed by surgical decompression.

Kieran Hirpara 4.0

This protocol guides your recovery after surgical release of the ulnar nerve at the elbow (cubital tunnel release) with Dr Kieran Hirpara at Mater Private Hospital Rockhampton. It explains what to expect, the precautions for the early weeks, and the exercises that keep the nerve gliding freely while everything settles. Bring this page or its PDF to your physiotherapist or hand therapist so your rehabilitation stays coordinated. Your therapist may adjust the plan depending on how your recovery progresses.

If you have any concerns about your wound after surgery, get in touch with the rooms. It is often helpful to take a photo of the wound and email it for review.

*Two different operations, two slightly different recoveries. The ulnar nerve can be freed in two main ways, and which one you had changes your early precautions:*

- *In-situ (simple) decompression – the nerve is freed where it lies, without moving it. This is the standard operation Dr Hirpara performs, and recovery is quick: gentle full movement of the elbow begins early. No rigid brace is used.*
- *Anterior (submuscular) transposition (the nerve lifted and re-routed to a more protected position in front of the elbow) – done only in the less common situation where the nerve subluxes or dislocates over the bony bump (medial epicondyle) when the elbow bends. This needs a more careful early phase, avoiding end-range elbow bending and straightening for the first few weeks while the nerve and soft tissues settle in their new position. A simple sling may be worn for comfort only.*

*Follow the guidance below for the operation you had – in-situ in most cases, transposition where your nerve was unstable.*

## What to expect

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For wound, swelling and scar management, see the practice's [wound care](#) guidance.

The aim of the surgery is to take the pressure off the ulnar nerve – the nerve that supplies feeling to your little and ring fingers and powers many of the small muscles of the hand. Once the pressure is relieved, the nerve begins to recover, but nerves heal slowly.

How quickly your symptoms improve depends a lot on how long the nerve was compressed and how irritated it had become before surgery. Tingling and pins-and-needles often ease first, sometimes within days or weeks. Numbness and hand strength take longer – frequently months – and the final result can continue to improve for up to a year or more after the operation. Where the nerve was very irritated for a long time before surgery, some numbness or weakness may not fully recover; the operation is then aimed at stopping things getting worse and giving the nerve its best chance.

Comparing the two operations, large reviews of the published trials have found that simple in-situ decompression and anterior transposition give **similar overall results**, with simple decompression tending to have fewer wound and soft-tissue complications [1][2]. The choice between them is made by your surgeon based on your nerve and your elbow.

## Precautions and limitations

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Light functional use of your hand for everyday tasks such as self-care, feeding, dressing, writing and typing is encouraged from the start, within comfort.

The early limits depend on which operation you had:

- **After in-situ (simple) decompression (the usual operation):** gentle full elbow, forearm, wrist and hand movement is encouraged early to keep the nerve gliding. No brace is used. Keep lifting, gripping and weight-bearing through the arm light for about the first six weeks, then build up gradually.
- **After anterior transposition (only if your nerve was unstable):** the elbow is protected for the first few weeks – avoid forcing it fully bent or fully straight, and avoid holding it bent for long periods, while the nerve settles in its new position. A simple sling may be worn for comfort only. Nerve glides start a little later than after a simple release – usually around two to three weeks. As with an in-situ release, keep lifting and resistance light for about the first six weeks, then build up gradually.

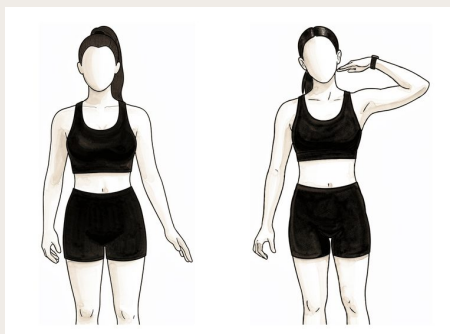
As a general guide, lifting and resistance strengthening are kept light until around **six weeks**, then built up gradually [3][4].

Leaning on the elbow (resting your elbow on a hard surface) puts pressure right over the nerve and should be avoided while it recovers.

Once your wound is healed, scar massage helps keep the skin and tissues supple over the nerve. The [wound care](#) page has more information on scar management.

These are the exercises from your handout, performed as described on each card. Start them as guided by Dr Hirpara and your therapist – the start date for the nerve glides, and any elbow range limit, depends on which operation you had.

## Your exercises

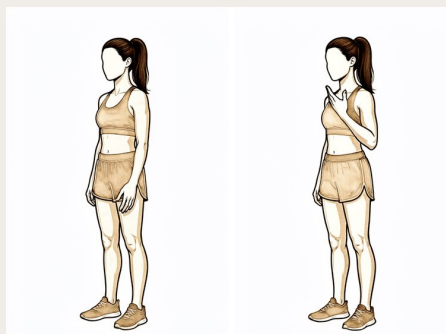


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### Ulnar nerve glides

These gentle movements keep the ulnar nerve sliding freely so it does not become stuck to the healing tissue. Move smoothly through each position only as far as is comfortable – a light pull or tingle is normal, but stop short of any sharp or strong pins-and-needles. Never force the stretch. Begin only when your surgeon or therapist tells you to (this is usually later if you have had a transposition – see the precautions below).

**5 slow repetitions, 2–3 times daily**

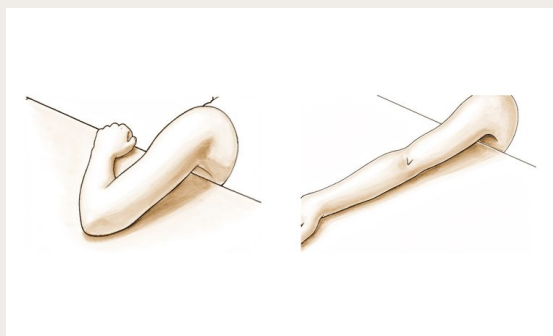


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### Elbow bends (flexion)

With your upper arm supported, gently bend your elbow to bring your hand towards your shoulder, then lower it again. Move within a comfortable range. If you have had a transposition, your surgeon may ask you to avoid bending the elbow all the way up for the first few weeks – follow the limit you have been given.

**10 repetitions, 3–4 times daily, within your allowed range**

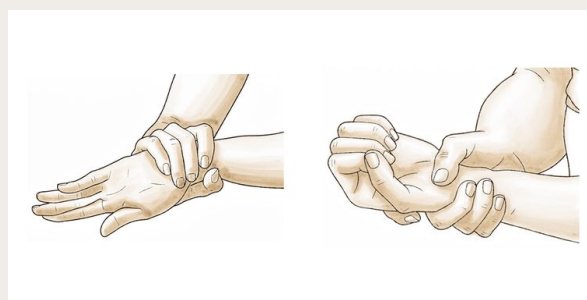


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### Elbow straightening (extension)

From a bent position, gently straighten your elbow as far as is comfortable, then return. If you have had a transposition, avoid forcing the elbow fully straight in the early weeks if you have been asked to – settle for the comfortable range your surgeon has set.

**10 repetitions, 3–4 times daily, within your allowed range**



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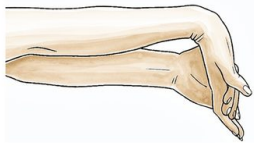
### Forearm rotation

With your elbow tucked by your side and bent to a right angle, slowly turn your palm up towards the ceiling, then down towards the floor. Keep your elbow against your body throughout.

**10 times each way, 3–4 times daily**

## CQ HAND + UPPER LIMB

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### Wrist and finger movement

Gently bend your wrist up and down, and open and close your fingers fully, making a loose fist and then spreading the fingers. This keeps the whole limb moving and helps reduce swelling and stiffness while the elbow settles.

**10 of each, several times daily**

## Getting back to work and activity

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Most people return to desk-based or light work within one to two weeks, while heavier, repetitive or manual roles usually take about four to eight weeks. You are ready for a particular task when your wound tolerates the contact and pressure it involves, and you can do it comfortably within the precautions above. If your work is heavy, involves leaning on the elbow, or uses vibrating tools, raise it at your post-operative review so a plan – including any modified duties – can be made.

Driving usually resumes around two to three weeks, once you are out of any sling and can control the vehicle and react in an emergency without pain. Return to sport and overhead activity is generally around three to six months.

Nerve recovery runs on a slower timeline of its own. Tingling often settles first, within days to weeks, while numbness and strength continue to improve over many months and can keep getting better for up to about a year. Where the nerve was very compressed for a long time, some numbness or weakness may not fully recover, and the operation then aims to stop things progressing.

## After your protocol

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This protocol works alongside the practice's general recovery advice – see [managing post-operative pain](#), [wound care](#) and [hand therapy basics](#). The phased plan above is consistent with published evidence on decompression of the ulnar nerve at the elbow, and your ongoing recovery is guided individually by your physiotherapist or hand therapist according to how your nerve and elbow progress.

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## REFERENCES

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2. Macadam SA, Gandhi R, Bezuhly M, Lefaivre KA. Simple decompression versus anterior subcutaneous and submuscular transposition of the ulnar nerve for cubital tunnel syndrome: a meta-analysis. *J Hand Surg Am*. 2008;33(8):1314.e1–12.
3. Caliendo P, La Torre G, Padua R, Giannini F, Padua L. Treatment for ulnar neuropathy at the elbow. *Cochrane Database Syst Rev*. 2016;11:CD006839.
4. Andrews K, Rowland A, Pranjali A, Ebraheim N. Cubital tunnel syndrome: anatomy, clinical presentation, and management. *J Orthop*. 2018;15(3):832–836.