



CUBITAL TUNNEL RELEASE

Patient Information, Consent and Recovery Guide



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*This leaflet is designed to support, not replace, your conversation with Miss Edwards.
There is a list of questions you may find it useful to ask later in this leaflet.*

Written by Miss Alison Edwards, Consultant Hand Surgeon. Published: September 2026. Next review due: September 2028.

About the condition

Cubital tunnel syndrome is caused by increased pressure on the ulnar nerve at the elbow. The ulnar nerve is one of the major nerves of the arm: it supplies sensation to the little and ring fingers, and controls many of the small muscles in the hand that give you fine control and pinch strength. As it passes around the inside of the elbow it travels through a narrow space called the cubital tunnel, where it is vulnerable to pressure — which is why symptoms are often worse when the elbow is bent for long periods, such as overnight or while holding a phone.

Typical symptoms include:

- Numbness and tingling in the little and ring fingers
- Pain at the elbow, sometimes radiating up the arm or down into the hand
- Weakness of the hand, particularly grip and pinch
- Clumsiness, and difficulty with fine tasks such as buttons, coins and keys
- In more severe cases, visible wasting of the small muscles of the hand

Diagnosis is made from your history and a physical examination of the elbow and hand, with specific tests of nerve function. **Nerve conduction studies and EMG** measure the electrical activity of the nerve and muscles, and help establish how severe the compression is and exactly where it lies — they are used more often here than in carpal tunnel syndrome, because the nerve can be compressed at more than one point. An X-ray is sometimes taken to rule out arthritis or bone spurs at the elbow, and occasionally an MRI scan is used to look at the nerve and the tissues around it.

Your treatment options

You have a genuine choice here, and it is important you understand all of the options, including doing nothing, before deciding.

Non-surgical treatment helps a good number of people, particularly when symptoms are mild or intermittent. It centres on keeping pressure off the nerve: avoiding leaning on the elbow, avoiding sustained bending of the elbow, a splint or soft brace worn at night to stop the elbow curling up while you sleep, and hand therapy or physiotherapy.

Doing nothing (watchful waiting) is reasonable where symptoms are mild and not troubling you, and some people's symptoms settle. It is important to understand the trade-off, though, and it is a more serious one than for carpal tunnel syndrome. If the nerve stays compressed, the damage can become permanent, leaving lasting numbness, weakness and wasting of the hand muscles that surgery cannot then reverse. **Where there is already weakness or muscle wasting, waiting is not usually a good idea.**

Surgery relieves the pressure on the nerve directly, and is covered below. It is generally recommended if symptoms are severe, if there is weakness or wasting, or if several months of non-surgical treatment have not helped.

The surgery — what it involves

There are two main operations:

Ulnar nerve decompression (release) — the roof of the cubital tunnel is divided to open up the space and take the pressure off the nerve, leaving the nerve where it lies. This can be done through an open incision, or endoscopically using small incisions and a camera. Miss Edwards performs it **open**.

Ulnar nerve transposition — the nerve is moved from behind the elbow to a new position in front of it, where it is under less tension and less exposed. This is generally reserved for cases where the nerve is unstable and slips over the bony point of the elbow as you bend it, or where it has been injured before.

Which operation is right for you depends on how severe the compression is, on your own anatomy, and on whether the nerve is stable — this is something to discuss at your consultation.

The operation is a **day case** under general anaesthetic and takes 30–45 minutes.

Benefits of surgery

- Pressure is taken off the nerve, which stops further damage occurring
- **Numbness and tingling usually improve first**, often within weeks
- **Pain and weakness improve next**, more gradually
- Most people get significant improvement in their symptoms

It is worth being realistic about what surgery can and cannot do. Releasing the nerve stops the damage progressing and gives the nerve the best chance to recover, but nerve recovery is slow — often taking several months — and where the nerve has been compressed severely or for a long time, some numbness or weakness can be permanent. This is the main reason not to leave the condition too long.

Risks and possible complications

As with any surgery, there are risks, and they are generally low:

- **Infection at the wound, which may need antibiotics — reported in around 2% of cases in a large database study, although this is likely to overstate the risk for a straightforward decompression (Camp et al., 2018)**
- **Nerve injury** — to the ulnar nerve itself, or to the small skin nerves around the elbow, which can leave a patch of numbness near the scar. Numbness of this kind is

one of the more frequent effects of the operation rather than a rare one, and it usually settles (Khalid and Carlton, 2018)

- **Incomplete relief of symptoms — surgery may not resolve everything, particularly where nerve damage was advanced beforehand. In a UK series, 86% of patients were satisfied with the result, and satisfaction was significantly lower in those who already had weakness or muscle wasting before surgery (Yeoman et al., 2020)**
- **Pain and stiffness** at the elbow, which may need physiotherapy
- **Scar tenderness — along with numbness near the scar, this is among the most frequent effects of the operation, and it usually settles (Khalid and Carlton, 2018)**
- **Recurrence** of symptoms — uncommon
- **Nerve instability** after a decompression, where the nerve begins to slip over the bony point of the elbow, occasionally requiring a further operation to transpose it

Everyone's circumstances are different, and something that seems minor to one person may matter a great deal to another. Please tell Miss Edwards about anything on this list — or anything else — that particularly concerns you, so your discussion covers what matters most to you personally.

Your consent

Before you have surgery, Miss Edwards wants to be sure you have been able to make a properly informed decision, in line with GMC guidance on decision making and consent. This means:

- You have the right to be as involved as you want in decisions about your care, and to be given the time and support you need to understand your options.
- The alternatives to surgery — including splinting, activity modification, physiotherapy and doing nothing — and their benefits and risks, should have been discussed with you.
- Miss Edwards will try to understand what matters to you personally, not just the clinical facts.
- You can ask questions at any point, and you are welcome to bring someone with you to appointments.
- **You can change your mind at any time** — including after signing a consent form — right up until the moment surgery begins, without needing to give a reason.
- Your discussion and decision will be recorded in your notes, and you will be asked to sign a consent form on the day of surgery.
- You have the right to seek a second opinion if you would like one.

Questions you may want to ask your surgeon

It's easy to forget questions in the moment, so you may find some of these useful:

- What did my nerve conduction studies show, and how severe is the compression?
- Do I already have any permanent nerve damage?
- Would decompression or transposition be better for me, and why?
- How much of my numbness and weakness should I expect to recover, and over what timescale?

- What happens if I wait — how quickly might things get worse?
- How long will I be off work, given what my job involves?

On the day of surgery

- The operation is a day case. If it is under local anaesthetic you do not need to starve beforehand and can eat, drink and take your usual medications as normal; if you are having a general or regional anaesthetic the hospital will send you fasting instructions, which you should follow carefully.
- Do let Miss Edwards know in advance if you take blood-thinning medication.
- Remove rings and nail varnish (including false nails) from the operated hand before you arrive. You may be asked to change into a gown.
- Your arm will be cleaned with antiseptic and covered with a sterile drape before starting.
- You will have a bandage on the elbow afterwards. There is no splint, and you can use the arm within the limits of comfort.
- Miss Edwards recommends that you arrange for somebody to drive you home on the day.

Recovery and rehabilitation

Nerve recovery is slower than wound healing, and the two run on different timescales. The wound settles in a couple of weeks; the nerve carries on improving for months.

The first few days

Your bandage stays on for two weeks and needs to be kept dry. There is no splint: you can use the arm from the start, within the limits of comfort. Keep your arm elevated where you can, to limit swelling, and keep your fingers, wrist and shoulder moving freely from the outset. Paracetamol and ibuprofen are usually enough for pain relief. Avoid leaning on the elbow.

2 weeks

The bandage comes off at two weeks and your stitches are removed at around the same time. Most people can drive from two weeks, and can go back to work as soon as comfort allows. Once the wound has healed, begin scar management: massage the scar with an unscented moisturiser, vitamin E oil or silicone gel — small circles over the scar, then strokes along and across it — for a few minutes, 2–3 times a day, and keep it out of the sun. Tingling and pins and needles often start to settle around this stage, and this is a good sign.

2–6 weeks

Work on getting full movement back at the elbow — straightening it fully matters as much as bending it — and build up what you use the arm for. Physiotherapy or hand therapy is sometimes needed to restore movement and strength, and Miss Edwards will arrange this if it would help you. Avoid heavy lifting for now.

6 weeks to 6 months

This is the period over which nerve recovery mostly happens. Sensation usually returns before strength, and the small hand muscles are the slowest of all to recover —

improvement can continue for six months or more, and sometimes up to a year. Continue using the hand normally; the muscles recover better when they are being used.

When to seek help

Contact the clinic promptly if you notice:

- Increasing redness, swelling, warmth, discharge or fever (signs of infection) — please contact us before anyone starts you on antibiotics
- Pain that is uncontrolled by the painkillers you've been given
- New or worsening numbness or weakness in the hand
- A sensation of the nerve snapping or clicking over the point of the elbow as you bend it
- A feeling that you are not recovering at the pace described here — we can arrange for you to see the hand therapist or Miss Edwards quickly

Summary Table: Recovery Milestones

Time after surgery	What to expect
First 2 weeks	Bandage on and kept dry; no splint; arm used within comfort; no leaning on the elbow
2 weeks	Bandage off and stitches out; driving; back to work as comfort allows; scar massage begins; tingling often starts to settle
2–6 weeks	Full elbow movement regained; arm use built up; therapy if needed; no heavy lifting yet
6 weeks–6 months	Nerve recovery continues; sensation returns before strength; hand muscles slowest of all

Contact details

Mendip Hand Clinic Practice Plus Group Hospital, Old Wells Road, Shepton Mallet, Somerset BA4 4LP

Bookings: 0330 818 8981

If you think anything in this leaflet is unclear or needs updating, please tell us using the contact details above. For further background on this condition, the British Society for Surgery of the Hand also publishes patient information at bssh.ac.uk/patients.

A final note

This leaflet is general information and does not replace individual advice. Your own risks, alternatives and expected recovery should be discussed personally with Miss Edwards, in line with GMC guidance on decision making and consent.

References

Camp CL, Tebo CC, Degen RM, Dines JS, Altchek DW, Werner BC. Patient-related risk factors for infection following ulnar nerve release at the cubital tunnel: an analysis of 15,188 cases. *Orthopaedic Journal of Sports Medicine*, 2018.

Yeoman TFM, Stirling PHC, Lowdon A, Jenkins PJ, McEachan JE. Patient-reported outcomes after in situ cubital tunnel decompression: a report in 77 patients. *Journal of Hand Surgery (European Volume)*, 2020;45(1):51–55.

Khalid SI, Carlton A. Surgical approaches and their outcomes in the treatment of cubital tunnel syndrome. *Frontiers in Surgery*, 2018;5:48.

Note: reliable published rates were not found for several of the risks listed above, including nerve instability after decompression and recurrence of symptoms, so these are described in words rather than numbers.