



CARPAL TUNNEL RELEASE

Patient Information, Consent and Recovery Guide



Alison T J Edwards, FRCS (Tr & Orth) Consultant Orthopaedic and Hand Surgeon,
GMC Specialist Register since 2003

*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

Carpal tunnel syndrome (CTS) is a common condition causing pain, numbness and tingling in the hand and arm. It happens when the median nerve, which runs from your forearm into your hand, becomes compressed as it passes through the carpal tunnel — a narrow passageway on the palm side of your wrist formed by bones and a ligament.

Typical symptoms include:

- Numbness and tingling, mainly in the thumb, index, middle and ring fingers
- Pain, which can radiate up the arm towards the shoulder
- Weakness or reduced grip, and a tendency to drop things
- Shock-like sensations moving into the fingers
- Symptoms that are often worse at night, or during activities such as driving

Diagnosis is usually made from your history and a physical examination, testing sensation and grip strength. Nerve conduction studies (which measure how well electrical signals travel along the median nerve) are only needed if the diagnosis is unclear, or if symptoms have come back after previous surgery. Miss Edwards sometimes uses a point-of-care ultrasound scan in clinic to check whether the nerve is physically compressed, or to look for anatomical variants or other conditions.

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 options can include a wrist splint (particularly worn at night), and avoiding or modifying activities that bring symptoms on.

Miss Edwards also offers, at Shepton Mallet:

- **Corticosteroid injection** into the carpal tunnel, to settle inflammation around the nerve.

- **Shockwave therapy, a non-invasive treatment using targeted sound-wave pulses. Small studies suggest it may improve pain and function in mild to moderate carpal tunnel syndrome in the short term, and it appears safe. However, the trials are small, their results are inconsistent, and reviewers rate the quality of the evidence as low (Zhang et al., 2023; Faderani et al., 2026). It has not been shown to work better, or to last longer, than a steroid injection (Tan et al., 2020). It is not available on the NHS.**

Doing nothing (watchful waiting) is a reasonable choice for many people, especially with mild or intermittent symptoms — some people's symptoms stay stable or even settle on their own. However, if the nerve compression is more severe or long-standing, symptoms can gradually worsen, and in some cases this can lead to permanent numbness or wasting of the small muscles at the base of the thumb. This is why it's worth discussing your particular situation rather than assuming surgery is automatically the right next step.

Surgery (carpal tunnel release) relieves the pressure on the nerve directly and is covered in detail below.

The surgery — what it involves

Carpal tunnel release surgery divides the ligament forming the roof of the carpal tunnel, increasing the space available for the nerve and relieving the pressure on it. There are two ways this is done:

Open release — a traditional approach using a small (2–3cm) incision in the palm, closed with 3 or 4 stitches, giving Miss Edwards direct sight of the structures involved.

Ultrasound-guided minimal access release — a minimally invasive approach using a small instrument, about the width of a large needle, guided by real-time ultrasound imaging rather than a camera. This leaves only a pinprick-sized mark, usually needs no stitches, and tends to mean less scar tissue and a potentially quicker recovery. Which approach suits you best depends on your individual anatomy and circumstances, and this is something to discuss at your consultation.

The operation is carried out as a **day case under local anaesthetic** — you stay awake throughout. You do not need to starve beforehand; you can eat, drink and take your usual medications as normal on the day. The anaesthetic is injected at your wrist and the base of your hand, which stings for a few seconds as it goes in. Miss Edwards checks the area is properly numb before starting, and a member of staff stays with you throughout. The procedure itself takes around 10–30 minutes; allow 2–3 hours at the hospital in total once checks, positioning and preparation are included.

Benefits of surgery

- Most people experience significant relief from pain within the first few days
- Tingling and pins and needles usually settle within days, though this can take some weeks
- Grip strength typically returns to normal by around 6 weeks
- Numbness often resolves, though this can take several months, particularly if it was present for a long time before surgery

Risks and possible complications

As with any surgery, there are risks, although they are generally low. The figures below come from published series of open carpal tunnel release; there is less published information on complications after the ultrasound-guided technique:

- **Infection at the incision site** — around 1 in 270 people (0.4%) develop a wound infection, and fewer than 1 in 10,000 need admission to hospital or further surgery for it (Harness et al., 2010; Lane et al., 2021)
- **Nerve injury** — damage to the median nerve or its branches. Injury needing surgical repair occurs in around 1 in 2,500 open releases (Trehan et al., 2019)
- **Bleeding**, either during or after surgery
- **Return of symptoms needing further surgery** — around 3 in 100 people have a further carpal tunnel operation over the years that follow (Lane et al., 2021)
- **Scar tenderness** (“pillar pain”) — the most common problem, but it almost always settles with time and scar management
- **Stiffness** in the hand or wrist
- **Complex regional pain syndrome (CRPS)** — an uncommon but recognised chronic pain condition
- **Incomplete release** — rarely, the ligament isn’t fully divided and further surgery is needed

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 non-surgical treatment 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 it helpful to bring some of these along:

- What would happen if I chose to do nothing, or tried non-surgical treatment first?
- Which technique — open or ultrasound-guided — would you recommend for me, and why?
- What are the chances my symptoms will fully resolve?
- What can I do to prepare, and what should I arrange for afterwards?
- What symptoms would mean I need to contact you or the hospital urgently?
- How and when will I see you again after surgery?

On the day of surgery

- The operation is a day case, done under local anaesthetic — no general anaesthetic and no need to fast beforehand.
- Take your usual medications as normal unless you've been told otherwise; do let Miss Edwards know in advance if you take blood-thinning medication.
- Remove rings and nail varnish from the operated hand before you arrive.
- Your hand will be cleaned with antiseptic and covered with a sterile drape before starting.
- You'll have a padded bandage protecting your hand for the first 2 days.
- Because your hand will be bandaged, Miss Edwards recommends that you arrange for somebody to drive you home on the day.

Recovery and rehabilitation

The first few days

Expect some swelling, bruising and discomfort, and your fingers may feel stiff, weak, numb or tingly. The local anaesthetic gives good pain relief for around 18 hours. Pre-existing pain, pins and needles usually disappear quickly; longstanding numbness may take much longer, over months. Paracetamol and ibuprofen are usually enough for pain relief. Keep your hand elevated above heart level, and use an ice pack wrapped in a towel for 10–15 minutes at a time. Keep the wound covered with a dressing for at least 5 days; avoid soaking the hand (no baths or swimming), though after 5–7 days it's fine to pat it dry if it gets wet. Begin gentle finger movements as soon as possible — bend and straighten your fingers, touch your thumb to each fingertip, and make a gentle fist and release, several times a day.

1–2 weeks

Stitches, if you have any, are usually removed at 10–14 days. Once the wound has healed, start gentle washing and moisturising, and begin gently massaging the scar with a non-perfumed moisturiser, vitamin E oil, Bio-oil or silicone gel, in circular motions for a few minutes, 2–3 times a day, to soften it and help prevent adhesions. You can usually start driving once you can grip the steering wheel comfortably and perform an emergency stop safely — typically 1–2 weeks after surgery.

2–6 weeks

Light activities such as eating, dressing and typing can usually resume within 2 weeks. Tenderness around the scar (“pillar pain”) is common at this stage and settles with time and scar massage. For work: desk-based or light duties are usually manageable at 2–3 weeks; manual or heavy work typically needs 6–8 weeks, depending on your job and recovery — do discuss your specific role with Miss Edwards. Add gentle resistance exercises (a soft ball or putty) and wrist flexion/extension exercises.

6–12 weeks

Most people regain significant movement and strength by 6–8 weeks, though some residual weakness or discomfort with heavy use is normal. Gradually increase your activity, resuming hobbies and sport as comfort allows, avoiding high-impact or repetitive activities until you’re confident. Continue scar massage and protect the scar from sun exposure to stop it darkening.

3–6 months

Most people are back to all normal activities, including sport and manual work, by 3 months. Full strength and sensation can take up to 6 months to return completely, and some persistent numbness or weakness can occur if the nerve compression was severe or long-standing before surgery.

When to seek help

Contact the clinic promptly if you notice:

- Increasing redness, swelling, warmth or discharge from the wound (signs of infection)
- Pain that is uncontrolled by the painkillers you’ve been given
- New numbness, weakness, or a change in your symptoms that concerns you

Summary Table: Recovery Milestones

Time after surgery	What to expect
0–2 weeks	Wound care, pain management, gentle finger movement; stitches (if any) out at 10–14 days
2–3 weeks	Resume light activities, gentle wrist movement, driving if safe, desk-based work
3–6 weeks	Gradually increase activity, start grip strengthening, manual work returning
6–12 weeks	Most movement and strength return; resume most activities; continue exercises
3–6 months	Full recovery for most people; return to all activities; persistent symptoms reviewed if needed

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

Harness NG, Inacio MC, Pfeil FF, Paxton LW. Rate of infection after carpal tunnel release surgery and effect of antibiotic prophylaxis. *Journal of Hand Surgery (American Volume)*, 2010.

Lane JCE, Craig RS, Rees JL, Gardiner M, Green J, Prieto-Alhambra D, Furniss D. Serious postoperative complications and reoperation after carpal tunnel decompression surgery in England: a nationwide cohort analysis. *Lancet Rheumatology*, 2021;3(1):e49–e57.

Trehan SK, Lyman S, Ge Y, Do HT, Daluiski A. Incidence of nerve repair following endoscopic carpal tunnel release is higher compared to open release in New York State. *HSS Journal*, 2019.

Tan MS, et al. Extracorporeal shock wave therapy versus local corticosteroid injection for the treatment of carpal tunnel syndrome: a meta-analysis. *Journal of Orthopaedic Surgery and Research*, 2020;15:556.

Zhang L, Yang T, Pang L, et al. Effects of extracorporeal shock wave therapy in patients with mild-to-moderate carpal tunnel syndrome: an updated systematic review with meta-analysis. *Journal of Clinical Medicine*, 2023;12(23):7363.

Faderani R, Wong ZY, Adegboye O, Kanapathy M, Nikkhah D, Mosahebi A. Systematic mapping review of applications of extracorporeal shockwave therapy in hand surgery. *JPRAS Open*, 2026.