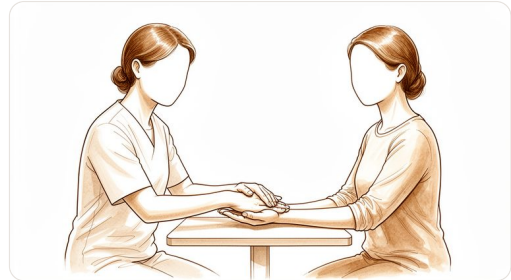


Carpal Tunnel Release



The carpal tunnel: a narrow space at the wrist where the median nerve runs alongside nine flexor tendons under a tight ligament. Carpal tunnel release surgery cuts that ligament to relieve pressure on the nerve.

Kieran Hirpara 4.0

At-a-glance recovery. Pooled from 80 published studies — your own pace will vary.

LIGHT DUTIES	MOST EVERYDAY ACTIVITIES	FINAL OUTCOME PLATEAU
desk work, driving, daily tasks	manual work, sport, gym	pain and strength
2-6 weeks	3-6 months	6-12 months
Return to light activities and desk work typically occurs within 2 to 6 weeks, with endoscopic release offering faster initial relief.	Full functional recovery and return to manual work or sport typically takes 3 to 6 months, with some patients reporting full recovery at nearly 6 months.	Complete resolution of symptoms and plateau of patient-reported outcomes generally occurs by 6 to 12 months post-surgery.

Why this operation has been suggested

Your surgeon has suggested carpal tunnel release because you likely have carpal tunnel syndrome, a condition where pressure on a nerve in your wrist causes pain and numbness. This surgery is typically offered when non-operative options like splints or injections have not provided enough relief. It is the standard treatment to relieve pressure on the median nerve, which runs through a tight tunnel in your wrist.

The main goal of this operation is to relieve your symptoms and improve hand function. Evidence shows that 97% of patients experience complete or partial relief after this procedure. While full recovery takes an average of nearly 6 months, most people see significant improvements in pain and hand use. This surgery is highly effective and is rarely needed again, offering a lasting solution to the pressure causing your discomfort.

Before the operation

You will need to fast before your surgery and arrange for someone to drive you home. Please bring a list of all your current medications to your appointment. Your surgeon may order tests like X-rays, MRI, or blood work to check your health and plan the procedure. These tests help ensure you are ready for the operation. You should wear comfortable clothing on the day of surgery. Your surgeon will give you specific instructions about stopping any medicines before the date. This open surgery uses a single incision over your wrist to release the pressure on your nerve.

On the day

You will arrive at the hospital and meet your anaesthetist to discuss how you will be asleep or awake during the procedure. This operation can be done under local anaesthetic (an injection that numbs just the area of surgery, with you awake) or under general anaesthetic (fully asleep). Most people choose local – recovery is quicker and you can go home soon after. If you'd prefer to be asleep, that's also a reasonable choice – discuss it with your surgeon and anaesthetist.

You will then go to the operating theatre where your surgeon makes a single incision over the wrist to release the pressure on your nerve. Afterward, you will wake up in recovery with a light dressing and a splint on your hand. You can usually remove the dressing at home two or three days after surgery to gently wash the area. Sutures are removed after 10 to 14 days, and you may continue using the splint for comfort for 14 to 21 days.

What the operation involves

Your surgeon will make a single cut along the palm side of your wrist. This incision is angled toward the ulnar side to avoid cutting a small sensory branch of the nerve. If this branch is cut, it can cause a painful lump in the scar that might need removal later. The surgeon splits the tough skin layer to find the thick band of tissue squeezing your nerve.

Inside, your surgeon cuts through this band, known as the transverse carpal ligament or flexor retinaculum. This releases the trapped median nerve from the tunnel of tissue. The surgeon ensures all parts of this tight band are divided to fully relieve the pressure. After the release, the cut is closed with stitches that are removed after 10 to 14 days. You will leave with a light compression dressing and a splint for comfort.

After the operation

You will wake up in a recovery ward where your pain is managed with standard medication. Your hand will have a light compression dressing and a volar splint for comfort. You can gently move your fingers and hand as soon as possible after surgery. Most patients go home the same day, but you must have someone stay with you for the first 24 hours. You can usually remove the dressing at home in 2 or 3 days to wash gently. Sutures are removed after 10 to 14 days. You may keep the splint on for comfort for 14 to 21 days.

Recovery

You will likely feel pain and swelling in your hand and wrist right after the surgery. This is normal as your body heals. Your surgeon may recommend a light compression dressing and a splint to keep your wrist comfortable. You can usually remove the dressing at home after a few days to gently wash your hand.

As the swelling settles, you will start moving your fingers and wrist again. Your surgeon will guide you on when it is safe to grip objects without pain. You may need to wear a splint for extra comfort for a few weeks while your hand regains strength. Most people find that symptoms in areas outside the main nerve distribution also improve significantly.

Full recovery takes time, and you may not feel completely back to normal for several months. Your timeline depends on your job type and how your body responds. Your surgeon and physiotherapist will help you navigate these changes and guide your return to daily activities.

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.

You might notice that your symptoms do not fully go away. Some people do not feel they have fully recovered until nearly 6 months after surgery. If your pain or numbness stays the same or gets worse after this time, tell your surgeon.

It is rare for this surgery to need to be done again. If you do have a repeat surgery, it usually does not help. However, if you have a blood clot in a vein in your hand, you may feel sudden swelling and tenderness. If this happens, seek medical help right away so it can be treated quickly.

You might worry that your age or work status affects your recovery. While older patients may have a harder time in the short term, most people still see big improvements in their hand function and pain. If you are on workers' compensation, you might find your recovery takes longer or is harder than for others.

The long-term results are usually good. Most people get complete or partial relief from their symptoms. However, a small number of people might find their symptoms come back or stay the same. If you feel your hand is not getting better, or if you have new pain, bring it up at your next review.

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 incision. Go to emergency if you feel sudden severe pain, notice calf swelling, or have trouble breathing. Contact your surgeon immediately if you lose sensation in your hand or cannot move your fingers. While most patients feel better within three weeks, full recovery takes nearly six months. If symptoms do not improve or return, let us know.

CQ HAND + UPPER LIMB

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Carpal Tunnel Release

Complication rates from published literature

Pooled from 80 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Reduced grip strength	10-20%	Temporary grip weakness for 2-3 months; returns to normal.
Pillar pain	7.0-14.4%	Aching and tenderness at the base of the palm in the thenar and hypothenar areas, occurring in approximately 48% at 4 weeks and resolving to 7-9% at 12 months.
Incomplete symptom relief or persistent numbness	5-10%	Numbness may persist if nerve damage is longstanding; symptoms improve over 6-12 months.
Recurrent carpal tunnel syndrome	2.5-8.4%	Carpal tunnel syndrome can recur, with 0.3-3% of patients requiring revision release, typically many years after initial surgery.
Complex regional pain syndrome	1.7-2.6%	Causes disproportionate pain, stiffness, swelling, and sometimes skin changes in the hand, requiring specialized pain management and intensive physiotherapy.
Wound dehiscence	1.1-3.0%	The wound may split open requiring resuturing, more common with open carpal tunnel release than endoscopic techniques.
Incomplete release	1-2%	Rarely the transverse carpal ligament may not be completely divided, resulting in persistent symptoms requiring revision surgery.
Scar tenderness	0.8-12.9%	Tenderness along the surgical scar is common and usually improves over 3-6 months with scar massage and hand therapy.
Sensory nerve injury	0.7-4.9%	Damage to the palmar cutaneous branch of the median nerve or digital sensory nerves may cause numbness, altered sensation, or painful neuromas.
Revision surgery	0.5-5.0%	Revision rates are generally low, though higher in workers' compensation populations and those with persistent symptoms.

COMPLICATION	REPORTED RATE	NOTES
Infection	0.2-2.4%	Wound infection may require oral antibiotics and wound care, with deep infections rarely (0.1-0.2%) requiring surgical washout.
Motor branch nerve injury	0.02-0.2%	Very small risk of damage to the thenar motor branch of the median nerve, occurring in approximately 1 in 500-5000 cases, which may result in weakness of thumb opposition and grip.
Vascular injury	Rare	Injury to the palmar arch is extremely rare.

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