Carpal Tunnel Release Surgery

What is carpal tunnel release surgery?
Carpal tunnel release is surgery to treat carpal tunnel syndrome. Carpal tunnel syndrome is pain, weakness, tingling, and numbness in the thumb and fingers. It’s caused by pressure on the median nerve in the wrist.

In carpal tunnel release surgery, the surgeon cuts the transverse carpal ligament, a band of tissue on the palm side of the carpal tunnel. This takes pressure off the median nerve and relieves symptoms. You will still be able to use your wrist and hand, and in time, they should work as if you never had a problem.

Why do I need it?
Most cases of carpal tunnel syndrome are treated without surgery. Your doctor may recommend surgery if:

• You have tried nonsurgical treatments for several weeks or months and your symptoms have not improved.
• Your symptoms are severe and interfere with your daily activities.
• Your median nerve is damaged.
• Other tissue, such as a tumor, is putting pressure on the median nerve.

Talking with your doctor
The table below lists the most common potential benefits, risks, and alternatives for carpal tunnel release surgery. There may be other benefits or risks in your unique medical situation. Talking with your doctor is the most important part of learning about these risks and benefits. If you have questions, be sure to ask.

<table>
<thead>
<tr>
<th>Potential benefits</th>
<th>Risks and potential complications</th>
<th>Alternatives</th>
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<tbody>
<tr>
<td>• Decreased pain</td>
<td>Risks that can be related to any surgery include allergic reaction to medicines, bleeding, and infection.</td>
<td>Surgery is considered after nonsurgical treatments have been tried and not helped. These may include:</td>
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<tr>
<td>• Decreased nerve tingling</td>
<td>Risks related to carpal tunnel release surgery include:</td>
<td>• Bracing or splinting</td>
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<tr>
<td>• Decreased numbness</td>
<td>• Injury to a blood vessel</td>
<td>• Anti-inflammatory medicines</td>
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<td>• Restored muscle strength</td>
<td>• Return of pain and numbness in the hand</td>
<td>• Activity changes</td>
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<td>• Injury to the median nerve or the nerves that branch off it (very rare)</td>
<td>• Steroid injections</td>
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How is it done?
Carpal tunnel surgery is usually performed by a surgeon who specializes in treating the bones and tissues of the hands. These are some of the steps of your surgery:

- **Anesthesia.** You may receive local anesthesia only in the area of the surgery, which lets you remain awake. You will also receive other medicine to help you relax.
  - Some patients receive intravenous (IV) anesthesia. This allows you to stay awake and communicate, but you won’t feel or remember the surgery.

- **Cutting the transverse carpal ligament.** The surgeon will cut the transverse carpal tunnel ligament to decrease pressure on the median nerve. This may be done in one of two ways:
  - With **open surgery,** the surgeon makes an incision in the skin of your palm. This provides a view of the transverse carpal ligament and other tissues. Then the surgeon will cut the ligament. Open surgery leaves a bigger scar, and may require a longer recovery.
  - With **endoscopic surgery,** the surgeon makes one small incision near the wrist. A tiny camera (an endoscope) is inserted and displays images of the inside of your wrist on a monitor. The transverse carpal ligament is cut from underneath. Endoscopic surgery may have a faster recovery.

- **Closing the skin.** The surgeon will close the skin with sutures (stitches).

What happens after surgery?
You will stay in the surgery facility until your surgeon decides that it is safe for you to go home. Most patients go home the same day they have surgery.

- After surgery, your wrist may be in a splint or heavy bandage.
- You will still be able to use your wrist and hand.
- Your stitches will dissolve on their own or be removed by your surgeon. Be sure to make a follow-up appointment.

How do I care for myself at home?
When you go home, do these things to help you heal:

- **Elevate your hand** above the level of your heart and move your fingers. Do this during the first 48 hours after surgery to reduce swelling.
- **Use ice packs** over the bandages regularly to help with pain and swelling.
- **Control your pain.** Take the pain medicine your doctor prescribes as needed, but do not take more than recommended.
- **Wear your brace or splint.** If your doctor recommended a brace or splint, wear it as directed.
- **Do your recovery exercises.** Your doctor may recommend exercises after the surgery. If so, it’s important that you do them as directed.
- **Use your hand for light tasks.** As soon as you feel comfortable, you can drive, brush your teeth, and do normal daily activities. Let pain be your guide as you carefully increase your activity level.

What can I expect?
You can expect the following during recovery:

- In most patients, pain, numbness, and tingling will be relieved shortly after surgery. Grip and pinch strength usually return after about 2 months.
- You may have some soreness and weakness in your hand for up to 6 months after surgery. If you still have pain or weakness after 2 months, your doctor may recommend that you see a hand therapist.
- Complete recovery may take 6 months to a year or more if your carpal tunnel syndrome was severe.

When should I call my doctor?
Call your doctor if you have:

- Fever higher than 100.5°F (38°C)
- Redness or swelling in the area of the surgery
- Pain that is not relieved by your medicine