



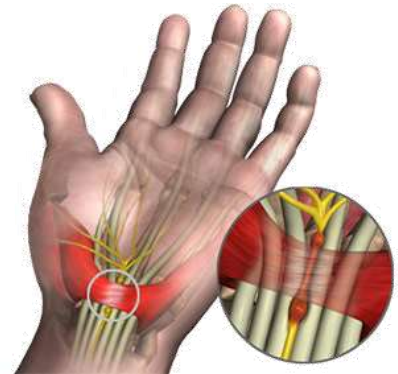
## Operation Information

### Carpal Tunnel Release

#### Introduction

Carpal tunnel syndrome is a condition in which pressure on the median nerve in the wrist causing numbness, weakness, and pain in the hand and wrist. In most patients, carpal tunnel syndrome gets worse over time. If nonsurgical treatment does not relieve your symptoms after a period of time, your doctor may recommend a surgery.

The surgical procedure performed for carpal tunnel syndrome is called "Carpal Tunnel Release". There are two different surgical techniques for doing this: Open Carpal Tunnel Release and Endoscopic Carpal Tunnel Release. The goal of both is to relieve pressure on your median nerve by cutting the ligament that forms the roof of the tunnel, and thus to increase the size of the tunnel and decrease pressure on the median nerve.



Source:  
<https://www.sydneyorthopaedic.com.au/carpal-tunnel-syndrome.html>

#### Outcomes

It is expected that the pressure on the median nerve is released and the symptoms including numbness, tingling, pain, weakness and loss of proprioception of the affected upper limb subside.

#### Procedures

1. The operation can be performed under general anaesthesia or local anaesthesia with intravenous sedation.
2. An incision is made in the palm of the hand
  - Open technique: An incision is made.
  - Endoscopic technique: One or two smaller incision(s) is/are made and the endoscope and fine instruments are inserted through the incision(s) into the wrist.
3. The roof of the carpal tunnel (transverse carpal ligament) is divided to relieve the pressure on the median nerve.
4. Tissue around the nerve may also be removed.
5. The wound is closed with stitches and covered with a waterproof dressing.

#### Possible Risks and Complications

Complications are not common after either open or endoscopic carpal tunnel release.

1. Common but mild complications include
  - Open technique: loss of grip strength and tenderness of scars, which tend to resolve with time
  - Endoscopic technique: incomplete release of the ligament
2. Serious complications
  - Wound dehiscence
  - Wound infection
  - Tendon injury
  - Neurovascular injury

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

### **Pre-operative Preparations**

1. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
2. Please inform your doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia.
3. Various test such as physical examination, electrophysiological test (nerve condition studies/ electromyogram), ultrasound, X-Ray or MRI scan may require before the operation.
4. Nurse may give you surgical soap to clean the incision site as necessary.
5. No food or drink six hours before operation.
6. Please change into a surgical gown after removing all clothing including undergarments, dentures, jewellery and contact lenses.
7. Please empty your bladder before the operation.

### **Post-operative Instructions**

#### **General**

1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anaesthesia includes feeling tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
3. You can be discharged on the same day of the operation.

#### **Wound Care**

1. The wound is covered with a sterile dressing. Keep the wound dry and clean. Follow doctor's and nurse's advice on wound care.
2. Stitches will be removed or dissolved in 2 weeks.

#### **Diet**

1. In general, diet is allowed gradually after full recovery from anaesthesia.

### **Advices on Discharge**

1. Please comply with the medication regime as prescribed by your doctor.
2. Keep the affected hand raised above your heart and bandaged for the first couple of days. It helps to reduce swelling and pain.
3. Wear the splint or wrist brace for weeks as prescribed. It keeps your wrist in a neutral position to reduce pressure on the nerve.
4. Gentle fingers, elbow and shoulder exercises are strongly advised to prevent stiffness. Your doctor may advise you to start these exercises just after the operation.
5. Heavy lifting and vigorous exercises should be avoided until the hand has completely healed.
6. The symptoms such as pain, numbness, tingling sensation and weakness may gradually improve for up to six months.
7. To prevent recurrence, you are advised to avoid keeping your wrist flexed or extended in the same position for too long.
8. The stitches will be removed or dissolve in 2 weeks. Do not remove the waterproof dressing unless you are told to do so. Keep the wound clean and dry.

9. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain or swelling, drainage of pus, massive bleeding, shivering, fever over 38°C or 100°F, or increased numbness and weakness of the affected hand.
10. Any follow-up consultations should be attended as scheduled.

### **Non-surgical Treatments**

1. Oral medication such as anti-inflammatory drugs
2. Corticosteroid injections
3. Physiotherapy
4. Wrist splint or brace
5. Appropriate rest and activities
6. Nerve gliding exercises

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details  
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification