

Risks of Surgery

Nerve Damage

Nerves running to the fingers can be damaged during the surgery and form painful spot in the scar (neuroma) or numbness. The most commonly involved areas are the heel of the hand or the space between the middle and ring fingers. This complication is rare (2%) but may require a further operation to correct.

Recurrence

If you continue to have attacks of tingling numbness, it might mean that not all the ligament has been cut. This is rare (1%) but the operation would need to be repeated to correct this.

Infection

Any operation can be followed by redness and tenderness which may indicate infection. Do not apply antiseptics. It would be treated with antibiotics.

Stiffness

About 5% (1 in 20) of people are sensitive to hand surgery and their hand may become swollen, painful and stiff after any operation. This problem cannot be predicted but will be watched for afterwards and treated with hand therapy.

Please call the Office or your Family Doctor if:

- the prescribed medication does not provide adequate pain relief
- the dressing/cast is too tight or uncomfortable
- numbness persists
- you have a fever

Carpal Tunnel Release

For more copies, go online at <http://vch.eduhealth.ca> or email pchem@vch.ca and quote Catalogue No. **FB.834.C223**
© Vancouver Coastal Health, February 2014

The information in this document is intended solely for the person to whom it was given by the health care team.
www.vch.ca

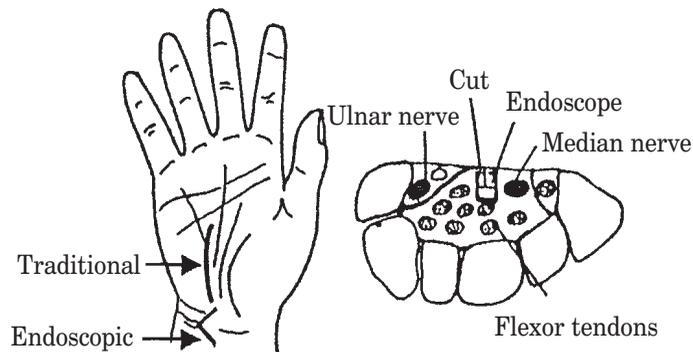
Introduction

Carpal tunnel syndrome is due to compression of the median nerve within a tunnel comprising a “U” shaped collection of bones with a tight ligament at the top. The nerve gradually diminishes in function if the condition is not treated. This may cause permanent loss of sensation and wasting of thumb muscles which, if severe, cannot be relieved by surgery.

The problem is corrected by cutting the compressing ligament to relieve the pressure within the tunnel. The ligament heals together again but it is slightly wider than before.

Carpal tunnel release can be achieved in two ways:

1) *Traditional technique* - A cut is made in the palm and the carpal ligament is reached by cutting through the under-lying tissues and muscle. The ligament is then cut under direct vision (outside-in).



2) *Endoscopic technique* - This new technique allows the carpal ligament to be reached from a small cut in the area of the wrist. The ligament is seen using a small telescope which provides a magnified image on a television screen that the surgeon watches whilst performing the surgery (inside-out).

Your hand is frozen for the operation. Local anaesthetic is injected around the cut at the end of the operation. It will wear off in about 2 hours. You may require a prescription for pain.

Choice

The endoscopic approach causes a smaller scar in a less sensitive area and allows the surgeon to be more selective as to which tissues are cut. It therefore shortens the time taken for you to get back to your normal activities.

However, it is not always possible to perform the operation with the endoscope and it may be necessary for the surgeon to convert to the traditional technique.

Post-Operative Care

- This area and possibly some of the fingers will remain numb for up to ten hours after surgery. As the effect of the anaesthetic wears off, it may be worth taking some mild pain-killers. Your pain at night should settle immediately but tingling in the fingers may take some weeks to disappear.
- Hand elevation is important to prevent swelling and stiffness of the fingers. Remember not to walk with your hand dangling, or to sit with your hand held in your lap. Hand movement should be continued and you **should** perform normal daily activities after the operation.
- Elevate the involved extremity on pillows at night. If instructed, wear your sling for approximately one week following surgery. At least every hour, raise the involved hand high above the head to prevent stiffness. Numbness, swelling and/or discoloration will occur in the exposed fingers. This is normal.
- You will be discharged with a light dressing consisting of gauze, a crepe-bandage. Keep the dressing clean and dry. Remove the entire dressing after 48 hours and inspect the wound.

There will be some swelling and bruising. At this time, after the endoscopic surgery, it is safe to get the hand wet in a bath or shower. Apply a small bandaid covering.

- Your stitches will be removed at 7–10 days after your operation. Timing of your return to work is variable according to your occupation and this should be discussed.
- You have a scar with either technique which will be somewhat firm to touch and tender for 6-8 weeks. This can be helped by firmly massaging the area with moisturizing cream (i.e. Aloe Vera and Vitamin E).
- You may be referred to a hand therapist for scar management, range of motion or strengthening.
- You will find that your grip is weaker than previously and slightly painful, causing discomfort in the heel of the hand. This will gradually improve over two months.
- You can drive a car after 5–7 days as long as you are comfortable and have regained full finger movements.