

## Carpal tunnel operation

Carpal tunnel syndrome is a result of compression of the median nerve (and the smaller ulnar nerve) as it passes through the wrist. Both these nerves cross at the front of the wrist within a passage known as the carpal tunnel. Many tendons pass through this carpal tunnel too and if any swelling occurs, the large median nerve can easily be compressed causing the carpal tunnel syndrome. The symptoms include pain, tingling and numbness in the index and middle finger, and numbness of the thumb. Carpal tunnel syndrome can often be alleviated with splinting and medications. If these treatments fail to bring relief, an operation may be required.

### People at higher risk

Some people are at higher risk of developing carpal tunnel syndrome, including:

- Women between the ages of 40 and 60 years
- Pregnant women
- People with certain types of arthritis
- Anyone who experiences a period of rapid weight gain
- People who use their hands for repetitive movements (such as typists).

### Medical issues to consider

Before undergoing the operation, you will need to discuss a range of issues with your doctor, including:

- Whether or not the operation will be performed under local or general anaesthetic.
- If you are having the operation performed under general anaesthetic, you may need to go into hospital the night before.
- Tell your doctor about any medications, herbs, vitamin or mineral supplements you take, as some preparations may interfere with surgical medications.

### Operation procedure

You may be given either local or general anaesthetic. The surgeon makes an incision (usually less than five centimetres long) into the palm of the affected hand. If the carpal tunnel syndrome is particularly severe, this incision may need to be longer. The exposed tissue beneath is then carefully cut through with a scalpel. This second incision reveals the transverse carpal ligament which is the structure responsible for the compression of the median nerve. The ligament is cut and the incision in the palm is sutured closed. (The body's healing process will rejoin the severed ends of the transverse carpal ligament and the resulting scar tissue shouldn't press so hard on the underlying nerve.) One or both wrists may be operated on at the one time.

### Immediately after the operation

After the operation you can expect:

- If you had a general anaesthetic, you have your temperature, pulse, breathing, blood pressure and wound site checked frequently.
- You should not be allowed to have anything to eat for at least four hours post-operative.
- You may have your wrist placed in a sling to help reduce swelling following the operation.
- You may find your wrist is quite uncomfortable for a couple of days. Analgesia (pain relief) is given as ordered by your doctor.
- Advice is given to exercise your hand and wrist as soon as possible.

## Possible complications

Some of the possible complications of a carpal tunnel operation include:

- Injury to the median nerve
- Damage to the ulnar nerve
- Injury to surrounding blood vessels
- The transverse carpal ligament isn't cut through completely which means a second operation is needed.

## Taking care of yourself at home

Be guided by your doctor or surgeon but general suggestions include:

- If you are discharged within a day or two of surgery, you will probably need some help around the house.
- Continue your medication as ordered by your doctor.
- Cold packs applied at regular intervals can help reduce post-operative swelling.
- Rest the hand as much as you can for at least four weeks following surgery.

## Long term outlook

The symptoms of carpal tunnel syndrome should ease dramatically after surgery. However, pain around the incision site may linger for some months. See your doctor if you are concerned about your degree of discomfort. Non-absorbable sutures will need to be removed by your doctor about two weeks or so after surgery. If you note any undue swelling, redness or heat in the operated area, see your doctor immediately, since these symptoms could indicate infection.

## Other forms of treatment

Other treatments for carpal tunnel syndrome can include:

- Plenty of rest for the affected hand
- Physiotherapy
- Splints on the affected wrist and hand worn at night
- Diuretic medications to increase the amount of urine passed and reduce the overall retention of fluid
- An injection of local anaesthetic and a corticosteroid into the affected area to reduce the swelling.

## Where to get help

- Your doctor

## Things to remember

- Carpal tunnel syndrome is a result of compression of the median nerve (and the smaller ulnar nerve) as it passes through the wrist.
- Carpal tunnel syndrome can be relieved with splinting and medications, but if these treatments fail to bring relief, an operation may be required.
- Rest the hand as much as you can for at least four weeks following surgery.

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