Carpal Tunnel Decompression

Other formats
If you need this information in another format such as audio tape or computer disk, Braille, large print, high contrast, British Sign Language or translated into another language, please telephone the PALS desk on 01271 314090.

Why is it needed?
Carpal Tunnel Decompression (or Release) is a surgical procedure to relieve symptoms caused by pressure on one of the nerves of the hand – a condition known as Carpal Tunnel Syndrome. It causes pain, discomfort, numbness and/or a burning or tingling sensation in the hand, affecting the thumb, index, middle and part of the ring finger. Symptoms are typically more pronounced during the night and both hands might be affected.

Why does it develop?
The carpal tunnel is a space at the base of the palm through which the tendons to the fingers and the median nerve (1) run. It is formed by the shape of the bones of the wrist on three sides and covered by a firm band under the skin, called the flexor retinaculum (2). The median nerve provides feeling to about two-thirds of the palm of the hand and fingers, as well as function of some of the small muscles of the hand. Individual differences in the size of the carpal tunnel might make some individuals more vulnerable to develop Carpal Tunnel Syndrome. Certain medical conditions might also contribute to the development of the condition.

What does it involve?
The operation is performed under local anaesthetic as a day-case procedure. A skin incision is made over the base of the palm and the band over the nerve is divided. The skin is closed with nylon sutures and a soft dressing is applied.

What are the risks?
An allergic reaction to the local anaesthetic is possible, but rare. Injury to the nerve at the time of surgery is possible, but very uncommon.
There is, as with any operation, always a small risk that the wound might become infected, but this usually resolves on antibiotic treatment. Recurrence of Carpal Tunnel Syndrome after a successful decompression is possible, but very uncommon.

**What are the alternatives?**

Symptoms caused by Carpal Tunnel Syndrome might come and go and often resolve spontaneously over time, especially when it presents during pregnancy, as it often does. Water tablets (diuretics) and/or nonsteroidal anti-inflammatory drugs might give symptomatic relief in cases with mild or moderate intermittent symptoms. Removable splints might give some relief, especially at night. Steroid injections in the carpal tunnel might be useful, but it does not always cure the condition and are not without risk. Patients with more severe and/or prolonged symptoms might benefit more from surgery.

**Pre-operative arrangements**

You will be contacted by our Pre-operative Assessment Clinic staff before your operation to help with any problems or concerns, and to advise you on how to take any regular medication you might be on before and after the operation.

You will be admitted on the day of the operation and can expect to spend a few hours at the hospital. You will need someone to take you home after the procedure, for you will be unable to drive.

**How will I feel during the procedure?**

As the procedure is performed under local anaesthetic, you can expect to feel movement and pressure, but you should not experience any significant pain or discomfort. If you do, more local anaesthetic can be administered. A blood pressure cuff will be applied to your upper arm and will be inflated for the duration of the operation to prevent bleeding. The pressure might be a bit uncomfortable, but it is normally well-tolerated and the procedure usually only takes a few minutes.

**How will I feel afterwards?**

The local anaesthetic should control pain and discomfort for the first few hours after the operation. We will also provide you with painkillers, unless you have your own. Do not take more painkillers than prescribed. Please contact us or your GP if the prescribed dosage does not adequately control your pain.

**What happens after the procedure?**

You will be able to go home within about an hour after the procedure, provided that you are feeling well. You will be provided with an arm support and asked to keep your hand elevated. Regular active movement of the fingers are encouraged.
Aftercare

Significant pain after this procedure is uncommon, but you might need painkillers for a few days. Elevation of the hand will decrease the risk of bleeding during the first day or two, and swelling over the first week or two. Swelling can cause pain, discomfort and stiffness, and should be minimised.

Once the wound is fully healed, personal gentle massage of the scar with an oily substance is safe and might help to prevent or treat local tenderness. Physiotherapy is not routinely prescribed.

Follow-up

Arrangements will be made with your GP Practice Nurse to help with your after-care and the removal of the sutures. Review in our orthopaedic clinic at the hospital will be arranged for about six weeks after the operation. Your practice nurse or GP will refer you back to us if we need to see you sooner.

Recovery

Most patients experience early improvement in symptoms, but there may be tenderness of the scar and/or some weakness of grip strength for several weeks. Altered sensation in the fingers might take weeks or months to recover, depending on the severity and duration of the symptoms before surgery. Most of the recovery can be expected during the first six months, but some further improvement for a year or more is not uncommon. Although a small minority of patients unfortunately do not make a full recovery, their symptoms are usually improved.

Employment

The amount of time you might be unable to work depends on several factors. The following general guidelines might be useful:

- Supervisory or managerial – 1 to 2 weeks
- Light manual (clerical or secretarial work) – 2 to 4 weeks
- Medium manual (cleaner, carer, nurse, check-out operative) – 4 to 6 weeks
- Heavy manual, custodial or rescue services – 6 to 10 weeks

Please ask if you need a ‘Fitness to Work’ certificate.

Activities of daily life

It should be possible to manage with most activities of daily life by about three to six weeks, but you might experience difficulty or discomfort with certain more strenuous and/or repetitive activities for longer.
Driving

You should not drive until you are able to control your vehicle safely and effectively, usually about a week or two. You are advised to check with your insurance company. Your doctor can’t declare you fit to drive, it is your personal responsibility.

Further information

There is a wealth of information on Carpal Tunnel Syndrome and Carpal Tunnel Decompression available on the internet. Our medical library at the North Devon District Hospital can also provide you with material for further reading.

PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or e-mail: ndht.pals@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple. Alternatively, it may be possible for us to arrange an appointment in your area.

Have your say

Northern Devon Healthcare NHS Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of the ward staff or the PALS team in the first instance.

‘Patient Opinion’ comments forms are on all wards or online at www.patientopinion.org.uk.