

# Carpal Tunnel Decompression

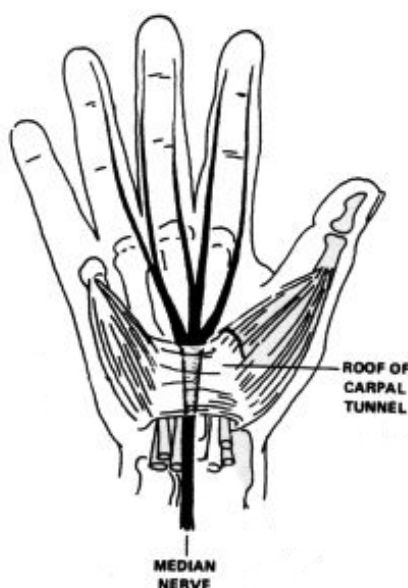
Orthopaedics

## The purpose of this leaflet

Before you agree to any treatment it is advisable to obtain information about your condition. This means understanding what the problem is, the treatments that are available and if there are any risks or alternatives. This leaflet should help you to make a decision alongside discussion with your Doctor. Do mention any particular worries that you may have and ask for more information at any time.

## What is Carpal Tunnel Syndrome?

You have a condition called Carpal Tunnel Syndrome. This occurs when one of the nerves (the median nerve) running to the hand is trapped as it passes through the wrist. This causes symptoms that irritate the nerve such as pain, pins and needles, and tingling; also symptoms of the nerve not working properly such as numb fingers and weakening of the muscle at the base of the thumb causing a weakness of grip.



The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

## What causes Carpal Tunnel Syndrome?

The cause is not fully understood but it happens when pressure is put on the median nerve. In the majority of cases the cause is not known, but it may be associated with the following:

- changes as part of the ageing process
- hormonal changes such as around menopause
- arthritis of the wrist
- fractures of the wrist
- diabetes
- fluid retention for example, during pregnancy
- thyroid problems.

## How is a diagnosis made?

Your Doctor will examine your wrist and ask questions about your general health. Sometimes a nerve test is required to confirm the diagnosis. You may therefore be sent an appointment to attend the hospital for a test called Nerve Conduction Studies. The test takes about 30 to 45 minutes. Small sticky pads are placed on the skin above the wrist and brief electrical impulses are given to test the nerve. It is quite normal to feel a 'quick, mild tingling feeling in the part of the hand or fingers that are being tested. The impulses can be measured to help make a diagnosis.

## How is Carpal Tunnel Syndrome treated?

The choice about which treatment is best for you will be made together with your Doctor. This will be based on the risks and benefits of the treatment and your individual circumstances. You may be offered an operation called Carpal Tunnel Decompression. Alternatively, particularly if your symptoms are not severe, other treatments may be suggested.

## What is a Carpal Tunnel Decompression?

This operation involves making a cut into the band of tissue (the Carpal ligament that surrounds the nerve), and thus relieves the pressure on the nerve.

## Consent

We must seek your consent for any procedure or treatment beforehand. Your doctor will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information.

## What are the benefits of having this surgery?

Releasing the pressure on the nerve is likely to greatly improve your symptoms. It should also prevent further deterioration or progression of the symptoms.

## What are the risks of surgery?

- **Scar tenderness and wrist pain**

Whilst the wound should be healed after 2 weeks (for example, stitches out and waterproof), most patients will experience some discomfort around the scar including some swelling, firmness and tenderness in the area of the scar for approximately 2 - 3 months following surgery. This generally settles down during this time in the vast majority of patients however a small number of patients do develop a more deep seated wrist pain (known as pillar pain), that can last several months, but again generally settles down on its own.

- **Infection**

Infection of the wound can occur. The chance of this is around 1 in 100. Please note that infection prevention is taken very seriously in hospital. All staff, patients and visitors are encouraged to wash or clean their hands frequently. Hand wash gels are available on the wards for this purpose. Please encourage anyone visiting you, or staff making direct contact with you, to use the hand gel. If you smoke or are diabetic you have a slightly increased risk of wound infection. Stopping smoking prior to surgery is advisable, as is good control of your blood sugar where possible if diabetic.

- **Nerve or blood vessel damage**

Nerves close to the operation site could be damaged during surgery causing numbness and pain in the heel of the hand. The chances of this happening are less than 1 in 250. Bleeding following this surgery is usually not significant. If you take medications such as aspirin / clopidogrel / warfarin or any other anticoagulant medication, you should mention this to your surgeon as this may influence bleeding or bruising post operatively. Damage to major blood vessels in the hand during surgery is extremely rare.

- **Stiffness / Pain Syndrome**

Some patients may develop stiffness of the fingers following any hand surgery. You will be encouraged to get your fingers moving as quickly as possible post operatively to try to minimise this risk. There is a very rare complication called a Pain Syndrome that involves the development of a painful stiff hand which can be severe and debilitating.

- **Persistent symptoms**

Depending on how badly the nerve has been trapped before surgery, some patients may still have some symptoms post operatively. Once the surgery has been performed the pressure is no longer on the nerve and in the vast majority of cases this relieves the symptoms of nerve irritation very well (for example, pins and needles and pain). However, if the nerve has been significantly damaged by the Carpal Tunnel Syndrome then, once the pressure has been taken off the nerve, it may still not fully recover and some patients may still experience some numbness or weakness of the hand.

- **Recurrence**

Carpal Tunnel Syndrome can recur over time, but this is rare. Should symptoms recur, rarely is further surgery required.

## What are the alternatives to surgery?

Your doctor may suggest the following:

Wrist splints; a splint will help to hold your wrist in a position that helps to prevent the nerve from being stretched or compressed. The splint is usually worn at night but some people wear the splint during the day as well.

Painkiller and anti - inflammatory drugs can help to relieve symptoms. Injections into the Carpal Tunnel: These can help to relieve inflammation of the nerve relating to Carpal Tunnel Syndrome and hence improve the pain and pins and needles. In cases of mild Carpal Tunnel Syndrome they can be helpful but the effects are often temporary and many patients go on to require surgery. They may be useful if the diagnosis of Carpal Tunnel Syndrome is not certain.

These treatments are not a permanent cure but may help to relieve your symptoms.

## What would happen if I decided not to have any treatment?

If the nerve is definitely or significantly trapped and you do not have treatment, your symptoms could possibly get worse. Over time the nerve can sometimes become permanently damaged.

## What happens if I decide to have the operation?

You will be asked to attend the pre-assessment clinic to check your general health prior to your operation. You will be given information about coming into hospital. All patients are screened for MRSA (a swab taken from your nose) prior to surgery.

## What happens during the operation?

This operation is usually done under local anaesthetic. This means that you will be awake but will have been given injections just above the palm of your hand to ensure that your hand and wrist are numb. The injection may sting for a few seconds but following this you should not feel any pain.

A tourniquet, which is similar to a blood pressure cuff, is then put around the top of your arm. This helps to stop bleeding and is a little tight for approximately 5 minutes. The skin to your hand and arm is cleaned with antiseptic lotion.

A small cut about 4-5cm is made in your palm just beyond your wrist. The band that forms the roof of the Carpal Tunnel is cut to free the nerve. The wound is closed with stitches. A dressing and a bandage is applied around your hand and wrist.

## Will I have any pain after the operation?

You will probably feel some discomfort particularly once the effect of the local anaesthetic has worn off after the first few hours. You are advised to take painkillers if you need them. You must keep your hand elevated to prevent pain and swelling. If you have been given a sling this will help.

Try to regularly move your fingers as this will help your circulation. If you are sitting for any length of time, support your wrist on the arm of the chair preferably raised on a pillow.

## When can I go home?

We would expect you to go home on the same day as your operation. Please make sure that a responsible adult collects you from hospital.

## How should I care for the bandage and dressings?

Keep the bandage clean and dry. If you want to use the bath or shower, wrap a plastic bag securely over your hand and wrist to keep the bandage dry.

You should not remove the bandage and dressings. However, if the bandage becomes loose this can be re-applied but do not disturb the dressing next to your skin. The wound should be kept clean, dry and covered until the stitches are removed.

## When are the stitches removed?

The stitches will need to be removed at around 2 weeks after your operation. This can be done either at your General Practitioners [GP's] or at the hospital. These arrangements will be discussed with you before you leave hospital.

## When can I return to work?

This depends on the type of work that you do. For example, if you do any heavy lifting as part of your job it could be around 2-3 months before you can return to work. If your job does not require any heavy manual lifting you may be able to work within 4-6 weeks. Please check with your Doctor about when it is advisable for you to start work again.

## When do I return to the hospital?

You will be given an appointment to return to the hospital at around 6 weeks after your operation.

## When should I contact the hospital?

You should contact the hospital for advice if you experience any of the following:

- Bleeding or discharge which soaks through the bandage
- Any sudden altered sensation to your hand such as numbness, or pins and needles; your fingers should remain pink in colour, warm and sensitive to touch
- Any sudden discolouration of your fingers or hand
- Severe pain that is not relieved by painkillers

If you have any other problems that you feel may be related to your operation

## Contact Numbers

### New Cross Hospital

**Main Hospital Switchboard**

01902 307999

**Waiting List Co-ordinator**

01902 694092

Monday to Friday 9.00 - 16.30

**Orthopaedic / Fracture Clinic**

01902 695380

Monday to Friday 8.30 - 16.30

**Pre-Admission Clinic**

Monday to Friday 8.30 - 16.00

01902 695587

**Ward A5**

01902 695005

**Ward A6**

01902 695006

**Beynon Short Stay Unit**

01902 694049

**Appleby Suite**

01902 695588

### Cannock Chase Hospital

**Main Hospital Switchboard**

01902 307999

**Orthopaedic Pre-admission Clinic**

01543 576589

**Holly Bank Ward**

01543 576742

**Hilton Main Ward**

01543 576580

## Glossary of Terms:

**Arthritis:** Inflammation of a joint which causes pain, swelling and stiffness.

**Thyroid:** A gland found at the front of the neck. This gland helps to regulate the body.

**Ligament:** A band of tough tissue that joins bone to bone.

## References:

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Isle of Wight Healthcare NHS Trust., 2004. Carpal Tunnel Release [online]. Isle of Wight Healthcare NHS Trust. Available from: <http://www.iow.nhs.uk/uploads/DSV/pdfs/Carpal Tunnel v2pdf>. Accessed August 2007.

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਆਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。