Carpal Tunnel Decompression Surgery

(Minor procedure in Primary Care)

Information for Patients

Gateshead Upper Limb Unit
What is carpal tunnel syndrome?
Carpal tunnel syndrome is a common condition characterised by decreased sensation and pain in the palm of the hand, index fingers, middle fingers and thumb. This is due to the median nerve being compressed by the carpal ligament as it passes through the channel in the wrist.

Diagram showing carpal tunnel Syndrome

The main reason why treatment is necessary is that as the median nerve becomes compressed the useful function of the hand becomes restricted. This results in reduced mobility of the hand and loss of sensation in the fingers, many people suffer severe symptoms and sleep loss. Not only does this become a nuisance but it can prove dangerous in some occupations and activities. It is a condition that can be diagnosed by clinical examination only, although it is often confirmed by nerve conduction studies. Carpal tunnel syndrome may be as a result of arthritis or injury although the cause is often unknown.

Why do I need an operation?
You will be offered surgery if you have failed to respond to other treatments; including rest, splintage and steroid injections.

What does the operation involve?
The operation consists of having an anaesthetic, usually a local anaesthetic, which “numbs” the affected hand. This involves an injection of anaesthetic at the wrist, which is the site of the surgery. The surgical procedure involves dividing the strong carpal ligament at the wrist where it covers the median nerve and tendons of the fingers and thumb. You will have a small incision of approximately 2 inches on the palm side of the wrist. After surgery for the first 48 hours the affected hand will have a bulky bandage and is elevated in a high sling, to reduce the risk of bleeding or swelling. Finger movements are encouraged to promote circulation and reduce swelling.
What happens before the operation?
You will have already completed the pre-operative assessment, to ensure that you are suitable for this type of surgery. You should bath or shower before coming to hospital. On arrival at the Primary Care Centre a member of the nursing staff will welcome you. The nurses will look after you and answer any questions you may have. You will be asked to change into a theatre gown.

The surgeon will discuss the operation with you and answer any questions that you have. You will be asked to sign a consent form. A nurse will go with you to the minor procedures room and stay with you throughout the procedure. A cuff will be put on your arm, and a clip attached to your finger. This will allow the surgeon to check your heart rate and oxygen levels during the operation.

How long will I be in the Primary Care Centre

What happens next?
This operation is carried out as a minor procedure. This means that you will usually spend no more than half a day at the Primary Care Centre. You will need to make an appointment to attend your GP surgery to have your stitches removed 10-14 days after your surgery. On the day after your operation, please remove the outer dressings until you come to a small dressing at the level of your wrist. Please leave this dressing alone and do not allow it to get wet. If you feel your dressing needs changing before your stitches are removed, please contact your GP or practice nurse. You must keep the hand dry until the stitches are removed.

What complications can occur?
Only serious or more common complications are mentioned here. Following any invasive procedure there is always the possibility of an infection. Therefore it is very important to keep the dressings clean and dry and/or renew them when necessary until the stitches are removed. Please note that the recovery of nerve function following surgery may be a slow steady process and it may be weeks or months before your symptoms improve greatly. Nerve recovery may continue for up to 2 years following surgery although after this length of time further recovery is unlikely. Both the speed of your recovery and how much your symptoms will improve are difficult to predict, and in some cases recovery may not be complete. Although most patients will notice an improvement in their condition with time following surgery.

The operation involves working very close to a nerve known as the median nerve. It is a known risk of this operation that the nerve or one of its branches may sustain accidental injury or damage. Injured nerves can be surgically repaired and can recover although the rate and extent of recovery are not predictable. Nerve injury may affect finger or thumb sensations or thumb movements, however, this complication is rare. Despite there being some risk attached to having carpal tunnel decompression, it is for the majority of people a successful operation.

What symptoms may I experience after my operation?
After the operation you may find that a little swelling or bruising occurs around the wound and that some bleeding may occur. It is therefore important to keep your hand elevated for the first few days following surgery to minimise any swelling. You should also monitor the wound for any excessive bleeding. There may be some discomfort and/or pain following surgery to the wrist but this can
usually be controlled with simple painkillers. However, if your pain is severe and continuous you should contact your GP.

After surgery you may experience stiffness and scar tenderness. With time and gentle use the stiffness should disappear, this is usually over 6 weeks to 3 months. The scar will remain pink for some time and gradually fade to a fine white line.

**When can I resume normal activities?**
You may start to use your hand for light activities 48 hours after your operation providing these activities are comfortable and you don’t get your wound wet.

**Lifting**
You should not attempt to lift anything heavy until directed by your Doctor; this is usually about 3 months after your operation.

**Driving**
Generally you are safe to drive when your wound is healed and you are free of dressings, providing you have a good range of movement in your fingers, and you hand is not too painful or tender.

**Work**
Manual workers will be unable to return to work for a period of 6-8 weeks following the operation. Sedentary or office workers should be able to return within 1-4 weeks. This should be discussed with your Consultant.

**Swimming**
If you are going on holiday then avoid swimming, especially in the sea, until the wound is fully healed. It is important to resume normal function as soon as possible; however, you should be aware that your hand will feel weak and uncomfortable initially.

**Exercises**
It is important that you practice the following exercises for approximately 5 minutes every hour during the day in order for your hand to heal with maximum movement following the operation.

Slow, controlled exercises are more effective and more comfortable than quick movements.

**Follow up appointment**
An appointment will be provided for you to see the surgeon for a follow up appointment. This will be held at the Primary Care Centre.

The exercises should be started as soon after your operation as possible.

1) stretch your arm above your head

2) bend and straighten your elbow
3) bend your wrist backwards and forwards

4) stretch your fingers and thumb as far apart as possible

5) bend your fingers to touch the palm of your hand as if to make a fist

6) try to touch the tip of each finger with your thumb

**Where can I get further information?**
Your Consultant and GP will be able to answer most of your questions, as will the physiotherapists who will see you prior to your surgery.

### Telephone numbers

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<tr>
<th>Time Frame</th>
<th>Contact Information</th>
<th>Phone Number</th>
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<tbody>
<tr>
<td>During the hours of 8am -5pm</td>
<td>contact the Physiotherapy Department, Upper Limb Team, Queen Elizabeth Hospital</td>
<td>0191 4452320</td>
</tr>
<tr>
<td>During the hours of 8pm -8am</td>
<td>contact Level 1, North East NHS Surgery Centre, Queen Elizabeth Hospital</td>
<td>0191 4453005</td>
</tr>
<tr>
<td>Main switchboard</td>
<td></td>
<td>0191 4820000</td>
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</tbody>
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**Data Protection**

Any personal information is kept confidential. There may be occasions where your information needs to be shared with other care professionals to ensure you receive the best care possible. In order to assist us improve the services available your information may be used for clinical audit, research, teaching and anonymised for National NHS Reviews. Further information is available in the leaflet Disclosure of Confidential Information IL137, via Gateshead Health NHS Foundation Trust website or the PALS Service.

**This leaflet can be made available in other languages and formats upon request**