Patient information

Carpal Tunnel Release – (under local anaesthetic)

What is carpal tunnel syndrome?
Carpal tunnel syndrome is a condition where there is increased pressure on the nerve that crosses the front of the wrist (the median nerve). This nerve runs in a tight tunnel together with the tendons that bend the fingers. If the tunnel becomes too tight, this can compress the nerve usually causing pain, tingling or numbness in the thumb, index and middle fingers. These symptoms can be worse at night.

Carpal tunnel syndrome is usually more common in women and can be associated with other factors such as arthritis, pregnancy, wrist fractures, diabetes or thyroid problems. Most sufferers have no underlying cause, but if your symptoms are less clear, your doctor may recommend further tests to confirm the diagnosis.

Your consultant has recommended an operation called a Carpal Tunnel Release. It is your decision to go ahead with the surgery or not. This document will give you enough information about the benefits and risks so that you can make an informed decision. If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

What are the benefits?
The main benefit is to relieve the pain, tingling and numbness in the hand.
Are there alternatives to the surgery?
If the symptoms are mild a wrist support worn at night can help. Also a small injection of steroid in the tunnel may help to reduce some of the symptoms on a temporary basis. If the symptoms are severe and these measures have failed, then surgery is usually recommended

What will happen if I don’t have the surgery?
Symptoms may improve if there is an underlying cause that is treated. In those with no underlying cause, symptoms usually continue, but can get better or worse for no known reason. If the pressure on the nerve is severe and the condition is left untreated the nerve can be permanently damaged. This can result in weakness of the thumb muscles and permanent numbness. Surgery done at this stage may not be able to reverse the damage already caused

What does the operation involve?
This involves a small cut in the palm of your hand. They will then cut the tight carpal ligament (flexor retinaculum) that forms the roof of the carpal tunnel. This relieves the pressure in the tunnel and stops the nerve being compressed. The wound is then closed and a firm dressing put on. If you have the surgery under local anaesthetic, then you will be able to leave within an hour or two after the surgery

What complications can happen?
The healthcare team will try to make your operation as safe as possible, however some complications can happen.

1. Complications of local anaesthesia
Local anesthetic is a drug that is injected into the tissues to make them numb. This temporarily stops the nerves working so that you do not feel the pain of the surgery. This can sting or burn for a few seconds and then the area goes numb. You may still feel pressure or touch. The local anesthetic works for a few hours and then the area returns to normal. If you are unsure about a local anesthetic you need to discuss options with your surgeon. These are possible complications:-

- Not enough pain relief – this is corrected by injection some more around the area.
- Allergy – this is rare, but let someone know if you have had problems in the past.
- Bleeding – the needle can touch a small blood vessel, so a small bruise may occur.
- Permanent nerve damage – rare, but the anaesthetic can have a longer effect that expected.
- Absorption into the blood stream – if the local anesthetic is accidentally injected into the blood stream, then there may be stronger reactions temporarily affecting the heart and brain which can be serious – the dose is always limited to limit these risks.

2. Complications of any operation
- Pain – this happens with any surgery. This will be controlled with medication and it is important that you take this. However the cut is small and usually not very painful.
- Infection in the wound – this usually settles with antibiotics, but may require further surgery.
- Scarring – the cut is usually lies within one of the wrist creases and usually becomes invisible over time.
3. Specific complications

- Numbness in the fingers or palm – caused by damage to the median nerve. This can be temporary (1 in 100) or permanent (1 in 600)
- Tenderness of the scar – this is very common and usually settles in about six weeks. However, mild tenderness can last for a long time (1 in 5)
- Aching in your wrist when using your hand (1 in 25)
- Continued mild numbness (1 in 4)

4. Even though the operation is usually a success, the nerve may have been damaged by pressure. There may be some return of the numbness and pain which is caused by scar tissue (1 in 17). You may need another operation to release the nerve again. Occasionally there may be severe pain, stiffness and loss of use of the hand (complex regional pain syndrome) – this is rare and the cause is not known. Further treatment may be required including pain relief and physiotherapy, but can take months or years to get better.

How soon will I recover?
After the operation you will be transferred to a recovery waiting area. If you are worried about anything before you go home ask a member of the healthcare team.

At home you should keep your hand elevated and bandaged for the first few days. It is important to exercise your fingers, elbow and shoulders to prevent stiffness. After the first few days the dressing can be reduced, but keep the wound area dry and clean until the stitches are removed.
Do not drive until you are confident of controlling your vehicle – always check with your insurance company first.
You should be reviewed by the consultant approximately 6 -10 weeks after your surgery – you can discuss any issues at this time.

Will I have further problems?
In 3 out of 4 people symptoms of carpal tunnel syndrome recover quickly after the operation – for others recovery is slower or less complete. Your symptoms may continue to improve for up to six months or even longer. If you had wasting of your hand muscles before the operation, this is unlikely to get better. However, the procedure should improve the pain and prevent further nerve damage.
Overall, the operation is a success in 7 out of 8 people.

Summary
Carpal tunnel syndrome is a troublesome condition which usually gets better with an operation. This is a monitor procedure performed under local anaesthetic. Surgery is usually safe and effective. However, complications can happen and you need to know about them to help you make an informed decision. Knowing about them will also help to detect and treat any problems early.
Further information
The Patient Advice and Liaison Service (PALS) would be please to hear any comments or suggestions that you may have about our services. They can offer confidential advice and support.
They can be contacted on 01782 552814 or via email at patient.advice@uhns.nhs.uk

You can also get further information from:

- [www.aboutmyhealth.org](http://www.aboutmyhealth.org) – for support and information
- Arthritis research campaign at [www.arc.org.uk](http://www.arc.org.uk), or 0870 850500
- NHS direct on 0845 46 47

If you have any other concerns or queries then please contact a member of our clinical Governance team on 01782 555155