Local anaesthetic decompression of carpal tunnel
Information for patients

This leaflet tells you about the condition known as carpal tunnel syndrome. It explains what is involved in treating it and the common complications associated with this condition. It is not meant to replace the discussion between you and your doctor but as a helpful guide you can refer to after your consultation.

What is carpal tunnel syndrome?
Carpal tunnel syndrome is a set of symptoms caused by compression (squashing) of the median nerve in the carpal tunnel. The carpal tunnel is a narrow space at the front of the wrist; the tendons that bend the fingers and wrist pass through it. This space is roofed over by a tough ligament that prevents the tendons from pulling away from the wrist when it is bent.

The median nerve, one of the two nerves that allow feeling in the hand, also passes through the carpal tunnel, and there is little or no room for expansion. Any swelling in the area, from any cause, tends to compress the median nerve and interfere with nerve impulses.

What are the symptoms?
Carpal tunnel syndrome causes tingling, ‘pins and needles’ and sometimes pain in the thumb, index and middle finger, and up the forearm. It might also lead to numbness in the hand and a weakened grip in the affected hand. Symptoms vary depending on how squashed the median nerve becomes.

What causes it?

The problem is caused by conditions such as:

- A thickening of the overlying ligament, as in rheumatoid arthritis
- Body overgrowth because of an excess of growth hormone from the pituitary gland (acromegaly)
- Swelling due to diabetes mellitus
- Joint fracture
- Inflammation of wrist tendons
- An underactive thyroid gland (myxoedema)
- Pregnancy (usually disappears after childbirth)

How is it diagnosed?
The area affected by the tingling is the area served by the median nerve. Other disorders of this nerve could cause similar symptoms but this is the most common cause. Examination by a neurologist who can test the working of this nerve higher up the arm by nerve conduction studies can eliminate other causes and confirm the diagnosis. However clinical assessment and diagnosis may be from a variety of doctors i.e. rheumatologist, orthopaedic surgeon etc., and nerve conduction studies are not always needed.

How is it treated?
A small cut (five centimetres or two inches long) is made across the base of the palm through the strong band of tissue that is affecting the nerve. The skin is closed with fine stitches which will need to be removed in around seven to 10 days.

Will I have to sign a consent form?
Yes. The consultant will explain the procedure to you and you will be asked for your written consent before the procedure takes place. Please ask our staff any questions you may have regarding your treatment.

Will I need an anaesthetic?
In the majority of cases the procedure is carried out under a local anaesthetic i.e. you will not be asleep. If you have any concerns regarding anaesthetic, please speak to your consultant.

Risks and complications
You may find you are left with a tender scar for up to three months. Your wrist may ache for up to three months.

What are the alternatives to surgery?
The use of a splint and rest for several weeks may alleviate the symptoms.

Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen may help to reduce swelling and inflammation.

Failing this, relief of symptoms may be obtained by an injection of a corticosteroid drug into the carpal tunnel. This is highly effective against inflammation and reduces swelling.

When all else fails, the syndrome may be relieved by a surgical operation to cut the ligament overlying the tunnel.

After the operation - general advice
- You will need to be collected from the hospital after the operation
- Ensure somebody is with you to care for you at least for 48 hours following your operation. Relax as much as you can and take plenty of rest.
- Avoid smoking, drinking alcohol and taking sleeping tablets for 48 hours after your operation.
- Keep your arm supported on a pillow when sitting for the first one to two days
- Keep your hand elevated. Do not allow your hand to hang down as it may increase the swelling

Pain control
The operation is not usually painful. Simple painkillers such as paracetamol or anti-inflammatories such as ibuprofen should be enough for the first few days.

Taking care of your wound
- Following your surgery your wound will be sutured using dissolvable sutures
- Leave your dressing on for two weeks and keep it clean and dry
- After two weeks you can remove your dressing
- After the stitches have dissolved you can massage the scar area gently.

- If you experience any loss of feeling, loss of movement or discoloration of your fingers contact the orthopaedic secretaries urgently who will be able to arrange an appointment with your consultant. The telephone number is at the bottom of this leaflet.

Exercise

Do these sets of exercises at least three times a day as your bandages allow. Repeat each exercise 10 times.

- Lift your whole arm above your shoulder. This will prevent your shoulder from becoming stiff.
- Rest your forearm on a firm surface (chair arm or table) palm downwards. Then without moving your elbow, turn your palm upwards as far as you can (as if you are receiving money) and then turn your palm down again.
- Touch your thumb to each finger if you are able.
- Keeping your fingers straight, move them apart then bring them back together again.
- Make a tight fist then stretch your fingers out straight as much as you can.
- Straighten your fingers out and bend them down at the knuckles.

Work

- You will need to take at least two weeks off work until your stitches are out. Usually you can self certify for one week and your GP can provide a sick note after that. Check the requirements of your employer
- Light manual workers can return to duty in two-three weeks
- Heavy manual workers should not exert maximal grip for six weeks
- You cannot drive until your stiches have dissolved and your dressing is removed.

Driving

Do not drive until your sutures have dissolved and your dressing is removed at two weeks. Your insurance company should be informed about your operation. Some companies will not insure drivers for a number of weeks after surgery, so it's important to check what your policy says.

Before resuming driving, you should be free from the sedative effects of any painkillers you may be taking. Before you go out on the road, it's worth sitting in the driving seat, without putting the key in the ignition, and testing how comfortable you are in the driving position. In particular, you should be able to control the steering wheel comfortably. It is advisable not to restart driving with a long journey. You must be able to safely control your car, including freely performing an emergency stop. Your doctor is not allowed to say you are safe to drive; that is your responsibility alone.

Sex

Sexual activity may be resumed when you feel it is comfortable for you to do so.

Further outpatient appointments

You will only be given another appointment to come to the outpatient department if your consultant considers this to be necessary.

Contact details

If you are going to have an operation you may be asked to attend the hospital for a pre-

operative assessment. If you require any assistance post-operatively, please contact your consultant's secretary by contacting the hospital switchboard on 0121424 2000 and asking for your named consultant's secretary.