

Carpal Tunnel Decompression

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Who has this operation?

Carpal tunnel decompression is one of our most commonly performed operations. It is usually done to relieve the complaint of "carpal tunnel syndrome", the condition where one of the main nerves is squeezed on the front of the wrist. (We have a leaflet available for that condition, please ask for it if we have not given you a copy).

Before the operation

Your name is placed on the waiting list as part of your consultation. When your turn comes around, you will receive two letters from us. The first letter gives you details of what to do, such as where to be and at what time.

The second letter is an appointment to attend a 'Pre-Operative Assessment': this is where a nurse checks your health, and includes taking swabs to screen you for MRSA: you have to be free of MRSA to allow your admission.

This assessment will take place about one to two weeks before the date of your operation. You should not need to stop any tablets you are taking for other conditions before the operation.

What does it involve?

For us, the operation is a simple and common procedure. You will be admitted to the hospital as a 'Day Case', which means that you should only need to stay with us for either a morning or an afternoon.

The operation takes place under a local anaesthetic, so you will be awake whilst it takes place.

However, the operation is usually quick, so it normally takes about ten minutes.

Because you are having a local anaesthetic, you do not need to be starved before the operation, but we recommend that you have only a light amount of food before you come in on the day of the operation.

The local anaesthetic is injected into the front of the wrist. It is like a small bee sting. It will numb the place where the operation is done, but does not numb the whole hand.

You will have a tourniquet on the upper arm during the operation. This prevents any bleeding taking place, and is necessary for the surgeon to see what is being done. The tourniquet is quite tight.

Once the tourniquet is in place, the hand, wrist and lower forearm are painted with antiseptics. The whole area is then protected with a large blue paper/plastic sheet, which keeps everything sterile and safe.

You will not be able to see the operation, because of the sheet. You will not feel any pain during the operation. All you should feel is a pressing/pulling type of sensation for a few minutes.

There is not much to do in the operation. The skin is cut – the cut is about one inch long. Under the skin is fat, which is pushed aside, so that a ligament can be seen.

The ligament is then cut. The ligament is what puts the pressure on the nerve. (The hand will work normally without this ligament, which in any case heals very

quickly). Three or four stitches are put in the skin, and that is the operation finished.

A large dressing and bandage are applied to the hand, wrist and lower forearm at the end of the operation. You should be able to freely move your thumb and fingers in this bandage, but your wrist will be held firmly: this helps control discomfort

When the operation is finished, you will be taken to a recovery ward until you are ready to be collected (it is recommended that someone takes you home). You will be given a hot drink and a small snack (biscuit or toast) before you go home.

The local anaesthetic will last for several hours after the operation. This length of time should allow you to get home comfortably before it wears off: this means that the journey home should not be painful.

After the operation

The bandage is kept on until you come back to clinic to have the stitches removed (there are usually three or four stitches). This visit is made about ten days after the operation.

You **must** keep the bandage dry. Do **not** allow water or other fluid anywhere near the bandage, because a damp bandage is the main cause of infection.

Your hand and wrist will feel better if lifted up after the operation. For the first two or three days after the operation you should put a cushion or pillow on the arm of your chair, so that your hand is kept a little higher than the elbow. This is not normally necessary after that time.

Each hour after the operation you should stretch your fingers and thumb out fully, and then close them fully (making a fist). This will stop the hand becoming stiff: it will be a little uncomfortable to do this in the first few days, but it should not be very painful.

You should only need to do this once each hour or so. Once this becomes easy and

pain free, you can stop this exercise, so it would not normally be necessary for more than the first three or four days after the operation.

At about ten days after the operation we will see you to take out your stitches, and apply a small plaster for a further few days, which you can remove yourself once all is well. You need to keep the wound fully dry until it is healed up.

It is normal for the area of the operation at the base of the hand to feel uncomfortable, especially when doing heavier tasks, for about six weeks after the operation. By the end of that six weeks you should be able to use the hand properly, although there might still be a few twinges in the wrist for a few weeks more.

When can I use my hand again?

You should make a point of using every part of you that is not in the bandage as soon as the operation is finished. If we want you to keep a part still, it will be held firmly by the bandage. You should therefore be moving the fingers, thumb, forearm, elbow and shoulder straightaway.

The wrist will be held firmly by the bandage. You should therefore be capable of doing all normal activities straightaway, except for anything that might get the wrist wet.

What are the risks of the operation?

There is no operation for anything which is entirely without risk. This operation has risks, but the risks of harm are small. The following are the main issues:

Failure: All operations have a failure rate. This operation is no different. This operation is our most successful operation, with about 90% of patients being very happy that they had the operation.

Sometimes we have to do the operation as a test to see if you have carpal tunnel syndrome: there is no better investigation.

Therefore, there will be some patients who do not get better after the operation.

Infection: Infection is normally caused by getting the bandage wet, or tampering with the dressing. Infection is very rare – less than 1%.

Scarring: The scar from the operation usually heals to be a barely visible mark, about one inch long, in the centre of the base of the hand. Occasionally the scar will spread a little, but that doesn't normally happen.

Inadvertent injury of nerve or tendon: Like all operations on the hand, there are a number of important structures immediately next door to the site of the operation. The skill of the surgeon is to avoid injuring these structures. Unfortunately, these structures can get cut accidentally, but the risk is small: perhaps less than 1 in 500.

Bleeding: This should not be a problem, as the bandage will prevent any untoward bleeding.

Recurrence: It is very rare for the condition of carpal tunnel syndrome to recur after a successful carpal tunnel decompression, less than 1 in 1000.

Work

You can go to work after the operation as soon you want, providing that you can travel to and from your job.

Most people would automatically take three or four days off work, but there are so many different factors involved, it is not possible to lay down any rules. You should discuss this with the surgeon, and your employer.

In general terms, heavy manual workers will be off for six to twelve weeks, whereas light office workers can get back after three to four days. The limiting factors are the need to keep the bandage dry, and the degree of pain with activity.

Driving

The Road Traffic Act requires that any driver is in charge (control) of the vehicle at all times. You are therefore allowed to drive if you can operate the steering wheel well enough to do an emergency swerve, as well as steer normally.

For most patients, this will take at least one week after the operation. It is not illegal to drive whilst wearing a bandage, provided that you are in control of your vehicle.

Riding bikes, scooters or motorbikes is more uncomfortable after the operation than for car drivers, because of the need to lean on the hand/wrist for control, so this would normally take until at least two weeks after the operation.

Will I need physiotherapy after the operation?

Normally, no. Normal use of the arm, and a good result from the operation, should prevent any need for physio.

If you are one of the small number of patients who would benefit from such treatment, this will be arranged by the doctor in the clinic.

Do I need to use a splint after the operation?

No. The operation does away with the need for the splint. Using the splint after the operation might make your wrist and hand become stiff.

How will I know if the operation has worked?

Most patients who benefit from this operation will know of that success within a short time of the operation, so that for many people the symptoms will be better within a few days of the procedure. However, improvement is possible for up to about nine months after the operation.

The rate of recovery of the nerve varies according to what has been wrong. A little continuous pressure on the nerve for a short period of time ought not do any long term harm, but heavy pressure over a long time could damage the nerve too much for recovery to take place.

Should I have the operation?

This is a simple and effective operation. It is one of the most successful operations we do for any condition.

If we are happy that you have carpal tunnel syndrome, and the complaints are not just trivial and intermittent, the main choice for you is between an injection and the operation.

The injection (of cortisone, which is a "steroid") is used for milder cases, and the injection is used for the more advanced condition.

'Mild' cases are where there is an intermittent tingle (which can be painful at times), but there is at least a part of the day where the hand and wrist are quite normal.

'More advanced' is where there is no part of the day or night when there is completely normal sensation in the affected hand.

The injection is simple, but is only done once, because if it is needed more than once, and is effective, it is not fair to deprive the patient of the operation (especially because the operation is very effective, safe and quick).

About 60% of patients with mild carpal tunnel syndrome will get better with one injection, but a proportion of the patients will get recurrent complaint.

The operation is simple for the surgeon, but is more intrusive than the injection, because it takes longer to get over it than the injection, and will involve a disruption to work and personal life.

We usually decide which choice to pick based on what is wrong with you, so that if your hand is not numb we will offer one injection, but if the hand is continually numb, we will usually suggest the operation.

If we think that your symptoms are coming, at least in part, from your neck, we will suggest physiotherapy treatment before treatment of the carpal tunnel by operation or injection.

Your surgeon is the person best placed to advise you on your decision, having full training in the matter. However, if you want to talk the matter over with your GP or family before coming to a decision, we prefer that you do so.

If you change your mind about having the operation, or want a further discussion before going ahead, please ring us on **0151 529 2548**. We won't have time for any discussion on the day of the operation.



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact the Equality and Diversity Department on:

0151 529 4969

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