

Carpal Tunnel Decompression

Patient Information

What is Carpal Tunnel Syndrome?

“Carpal” is a medical term that refers to the wrist. The carpal tunnel is a tunnel on the front of the wrist formed by bones at the back and a thick ligament on the front, which forms a roof over the tunnel. Sitting in the tunnel are the tendons (guiders) that bend the fingers and the thumb. On top of these tendons but under the thick ligament lies a large nerve called the median nerve. This large nerve causes the thumb to move away from the palm and also allows feeling in the thumb and the three fingers nearest to it (not the little finger). Carpal tunnel syndrome is a collection of symptoms that you feel as the patient and also various things that your doctor finds out by talking to you about your symptoms and examining you. Sometimes, but not always, you may be sent to have electrical tests done to see how well the nerves in your arm are working. The usual symptoms involve pins and needles in the fingers and hand. These are often worst at night and may wake you up. Pins and needles may also be felt in the day. Some patients feel that

the hands are becoming clumsy and weak.

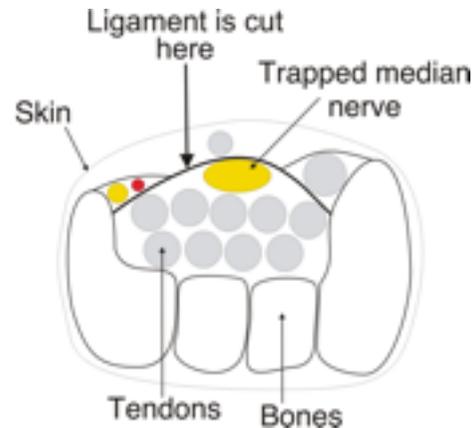


Fig 1. Cross Section of the Carpal Tunnel

Carpal tunnel syndrome is caused by the large median nerve being squashed between the tendons in the carpal tunnel and the thick ligament forming the roof of the tunnel over the top of it. The squashing of the nerve reduces the blood flow around the nerve, which brings on the pins and needles. This is the same reason that you get pins and needles if you sit on your hand for a while. If the nerve is squashed for a very long time then the nerve may become per-

manently damaged. This may cause constant pins and needles and loss of feeling. There may also be wasting of the muscles at the base of the thumb. The outcome of treatment in this case may not be as good. The operation for carpal tunnel syndrome releases the pressure on the nerve by cutting the ligament that is squashing it. This allows better blood flow around the nerve, improving the symptoms.

The Carpal Tunnel

Decompression Operation

After your surgeon has recommended an operation to help your carpal tunnel syndrome, you will be placed on a waiting list for surgery. The vast majority of these operations are done under a local anaesthetic (a numbing injection) with you awake. It is also usually done as a day case operation. That means you will normally only have to be in the hospital for half a day and not over night. Do not drive to the hospital yourself. You will need a responsible adult to pick you up after your surgery. Rarely, people are admitted to the hospital

over night. This is usually planned before the surgery and is for medical or social reasons. You will be given a gown to wear on the ward before the operation is carried out. It is recommended that you wash your hands with soap and water before the operation. Make sure your nails are clean. You will be taken to the anaesthetic room, just off the operating theatre, where your surgeon will give you the local anaesthetic injection. This will be where the intended cut will be made. It will feel like a bee sting initially. The injection does not numb your whole hand, only the bit where the operation is to take place. It is normal to feel some pushing during surgery but you should not feel any pain. You will then have a tourniquet placed around your upper arm. This is blown up when the operation starts so that the wound does not bleed and the surgeon can see what he is doing. It will feel tight around the top of your arm. The surgery only takes around 10 minutes, after which time the tourniquet will be released and you will feel bad pins and needles in your hand. This will only last a few



Fig 2. Site of the surgical scar
minutes and is due to the tourniquet.

After the Operation

You will find that there is a large bandage on your hand. It is important to move your fingers and thumb after the operation to stop them stiffening. Remove the heavy bandage after 2-3 days to allow better movement but keep the stitches covered and dry. They will be removed 10-14 days after the surgery and you will be asked to start massaging the scar with a moisturiser.

You may get back to driving after the stitches are out and can consider going back to

work although people doing heavy manual jobs may need up to 6-12 weeks off.

Risks of Surgery

Generally, this procedure is considered to be very effective and low risk. However some people may have problems. The commonest of these is tenderness of the scar, which is usually temporary and is helped by scar massage. Other problems are swelling and stiffness of the hand, which if severe is called reflex sympathetic dystrophy and is rare. Infection is also rare. Occasionally the symptoms return after a period of time and occasionally they do not completely disappear after the surgery, particularly if the nerve has been trapped for a very long time. Occasionally discomfort may be experienced for a few months on the side of the hand and very rarely the median nerve may be damaged by the surgery.

One-Handed Living

Do not forget that you will not be able to use the hand that has been operated on fully for a short while after surgery. Make life easy for

yourself at home by planning ahead, particularly if you are alone at home or if you will be alone at home for long periods in the day.

Get enough shopping in to last for a week or two after your surgery, as you will not be able to drive. Loosen the tight caps of jars (but don't forget the contents will go off more quickly). Ready-meals might be useful for a few days after surgery or do some cooking before and freeze it. Wear slip-on shoes so you don't have to tie laces etc.