

# CUBITAL TUNNEL SYNDROME

## Patient Information



### What is Cubital Tunnel Syndrome?

“Cubital” is a medical term that refers to the elbow. The “cubital tunnel” is a groove in the arm bone, with a thick ligament over the top of it, which forms a roof over the tunnel. Sitting in the tunnel is the ulnar nerve with some small blood vessels. This large nerve causes the fingers to move to make a fist and to move away and towards each other. It also allows the fingers to cross and uncross. It also gives feeling to the little finger and part of the ring finger. The ulnar nerve behind the elbow in the cubital tunnel is also known as the “funny bone”. Cubital 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. Usually, but not always, you will 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 little and ring fingers and hand. These may be worse at night and may wake you up. Pins and needles may also be felt in the day. Many patients feel that the

hands are becoming clumsy and weak. The symptoms may be there all of the time or may come and go.

The large ulnar nerve being squashed behind the elbow, in its groove, causes cubital tunnel syndrome. The nerve may also slip out of its groove, causing it to be stretched. This is known as a subluxing ulnar nerve. 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 it may become permanently damaged. This may cause constant pins and needles and loss of feeling. There may also be wasting of the small muscles in the hand. The outcome of treatment in this case may be not be as good. The operation for cubital tunnel syndrome releases the pressure on the nerve by cutting the ligament that is squashing it or moving the nerve out of its groove. This allows better blood flow around the nerve, reducing the risk of ongoing nerve damage and frequently, but not always, improving the symptoms.

### Operations for cubital tunnel syndrome

Two main types of operation are routinely performed for cubital tunnel syndrome:

- 1) Decompression. This is the simplest procedure in which the ligament that forms the roof of the cubital tunnel is cut to allow more room for the nerve.
- 2) Transposition. In this procedure the nerve is moved out of its groove and placed to the front of the elbow. It may be put just under the skin or deeper, under the muscles at the front of the elbow. It is usually done when the nerve is slipping out of its groove.
- 3) Revision surgery. Sometimes the symptoms start again after a previous operation. In this case, further surgery may be advised. This may be either a re-do decompression or a transposition.

The vast majority of these operations are done under a general anaesthetic (with you asleep) or under a regional block- a numbing

injection around the shoulder, which freezes the arm, leaving you awake for the surgery. It is also usually done as a day case operation. That means you will have to be in the hospital for the day and not over night. Do not drive to the hospital yourself. You will need someone 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 before the operation. Wash your hands with soap and water before the operation. Make sure your nails are clean. You will be taken to the anaesthetic room where the anaesthetist will give you the anaesthetic. The surgery usually takes between 30 and 60 minutes.

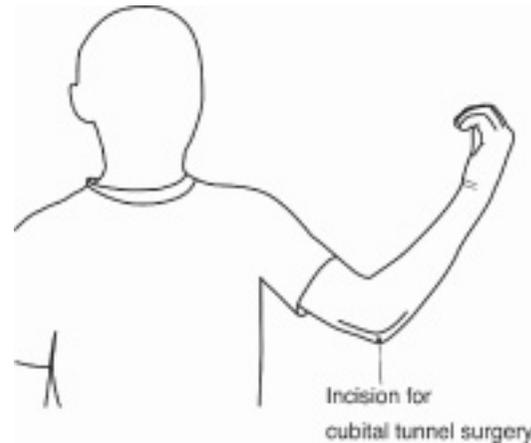


Fig 1. Site of the surgical scar

### After the Operation

You will find a large bandage on your elbow. It is important to move your arm including the shoulder, elbows and hand after the operation to stop them stiffening. Remove the heavy bandage after 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 weeks off.

### Risks of Surgery

Generally, this procedure is considered to be 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. Occasionally the symptoms do not completely go after the surgery, particularly if the nerve has been trapped for a very long time. The main aim of the surgery is to prevent further deterioration of nerve function and it should be accepted that the symptoms in the hand might continue after surgery. This does not necessarily mean that the procedure has been unsuccessful. Occasionally a pool of blood- called a haematoma- may collect under the wound, which can slow wound healing and, very rarely, the ulnar nerve may be damaged by the surgery.

### **One-Handed Living**

Please be aware that you will not fully be able to use the operated hand 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; don't forget the contents will go off more quickly! You may wish to eat ready-meals for a few days after surgery or do some cooking beforehand and freeze it. Wear slip-on shoes so you don't have to tie laces etc.