



Cubital tunnel syndrome

Information for patients

This leaflet will help you to understand cubital tunnel syndrome. It gives advice and will help you manage and treat your symptoms. It also explains what will happen if surgery is appropriate for you. If after reading this leaflet you have any questions, please speak to your therapist.

What is cubital tunnel syndrome and why do I have it?

The ulnar nerve is one of three main nerves which runs from your spine to your hand. It provides feeling to your little finger and ring finger and powers the small muscles of your hand. It is vital for hand function.

Cubital tunnel syndrome is when your ulnar nerve gets compressed (squeezed) or irritated within the tunnel found on the inside of your elbow (where your 'funny bone' is). This compression or irritation stops the nerve from working correctly.



Diagram showing where the ulnar nerve can be compressed on the inside of the elbow



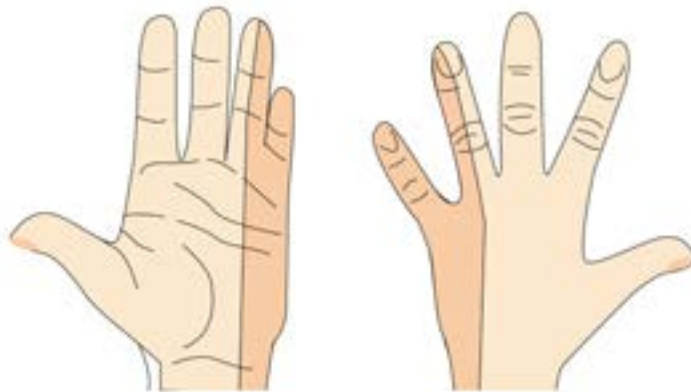
What are the symptoms?

Early symptoms can include:

- pins and needles or numbness, that comes and goes, mainly in your little and ring fingers; and
- pain on the inside of your elbow.

You may find most of your symptoms happen overnight or first thing in the morning. Later these symptoms can start to happen more often.

In more severe cases, you may notice some muscle wasting in some of your muscles between your fingers. You will see this on the back of your hand between your thumb and index finger. You may notice a loss of grip strength, for example you may find it harder to open jars or use door handles.



Shaded areas show where altered sensation can occur in cubital tunnel syndrome

What causes cubital tunnel syndrome?

There is no obvious cause in most cases of cubital tunnel syndrome. However there are different factors that can contribute to cubital tunnel syndrome, including the following.

- Repeatedly bending your elbow (this could be due to your job or a hobby).
- Resting with your elbow bent for long periods of time, for example when sleeping.
- Direct trauma (injury) to your elbow.
- A previous elbow fracture.
- Patients who are obese or already have osteoarthritis, diabetes, or hypothyroidism, are at increased risk of cubital tunnel syndrome.

How is it diagnosed?

Your doctor or therapist will carry out a physical examination to see if they can reproduce your symptoms. The results of this examination and your symptoms are often enough to diagnose the condition.

Nerve conduction studies (NCS) may be needed to check the signals passing along your ulnar nerve. A NCS is where small metal wires called electrodes are placed on your skin. These electrodes release tiny electric shocks to stimulate your nerves. This can help your doctor or therapist see how bad your nerve compression is.

What are my treatment options?

If you have been told you have mild to moderate cubital tunnel syndrome, this can often be treated with advice and guidance from your therapist or doctor.

The following are some key points to help you self-manage your symptoms.

- Avoiding or modifying (changing) any activity which aggravates your symptoms is the main treatment in the early stages and may significantly reduce the pressure on your nerve. This may include a workstation assessment. Changes could include wearing a headset when using the telephone, placing computer keyboards at the edge of your desk, and using a chair that does not have an arm rest.
- Avoid bending your elbow for long periods of time. For example when you are on the phone, or leaning your head on your hand, or resting your elbow on a firm surface.
- Take regular breaks from repetitive tasks, and rest with your elbow in a comfortable position.
- Wearing an elbow splint at night can keep your elbow when it is in a neutral or slightly bent position. This reduces the pressure on your nerve (see below for more information on splints).

Wearing an elbow splint

We may recommend keeping your elbow a little straighter at night time when sleeping. This will reduce the stretch on your ulnar nerve, which can happen when your elbow and arm are curled up at night.

You can make your own splint or buy a neoprene type elbow splint either from your local chemist or online.

To make your own splint, fold a hand towel in half and wrap it around your elbow, securing it in place with tape. Make sure that it is not too tight, or cutting off circulation. This will be comfortable enough and will stop your elbow from bending too much.

The splint can be worn every night for six to eight weeks. It may take several weeks before you notice a difference in your symptoms. If your symptoms are getting better but have not stopped completely, you can continue to wear your splint at night for up to 12 weeks.

Photos showing a neoprene type elbow splint in use



Nerve gliding exercises

Ulnar nerve gliding exercises can also be helpful to move the ulnar nerve through the cubital tunnel. When you do these exercises, you may feel a pulling into your little finger, but doing this exercise should not be painful or make your symptoms worse.

If your symptoms do get worse, cut down how many times you do each exercise or stop them altogether.



(1)

1. Begin with your arm out to your side, with your palm facing down.



(2)

2. Bend your wrist backwards, so your fingers point to the ceiling. Hold for 10 seconds.



(3)

3. Bend your elbow, so your hand points towards your head. Hold for 10 seconds.



(4)

4. Straighten your elbow and wrist back to the starting position.

- Repeat three times.
- Increase to five times when the stretch starts to feel easy and the pins and needles are getting better, maybe after a week or two.
- Repeat up to three times every day, increasing the exercises as your symptoms get better.

Why has surgery been recommended?

In severe cases or when the non-surgical treatments listed on the previous pages have not worked, an operation to relieve the pressure on your nerve may be needed. This surgery is called decompression.

The benefits of the operation depend on how bad your compression is. Your numbness will often improve after surgery, but this can be a very slow recovery. Occasionally in the most severe cases the feeling in your fingers may not completely recover. The operation generally prevents worsening of the muscle weakness, but improvements in muscle strength are often slow and incomplete.

What happens during surgery?

The surgery will involve a cut around the inside of your elbow about 10cm long. The tight tissues squeezing your nerve will be released.

Will I have an anaesthetic?

The surgery is usually performed either with local anaesthetic (numbing only the area around your elbow) or a regional anaesthetic (numbing the whole arm). You are awake during the surgery. This will be discussed with you in your clinic appointment.

What happens if I choose not to have the operation?

If you choose not to have the operation, your hand may become weaker, it may be difficult to grip items tight with your thumb, and you may develop complete numbness in the little and ring fingers.

What are the risks with surgery?

Serious complications are uncommon. However, a small number of patients can have complications, some of which resolve with time. These include:

- **Delayed wound healing or infection.** A small number of patients will develop an infection and may need antibiotics. Very rarely they may need a further small operation to clean out their wound, called a washout procedure. This is more common in patients with diabetes.
- **The scar may be tender for a number of months.** If it does not resolve with time and regular scar massage a course of therapy may help.
- **Aching and pain around the elbow;** this usually subsides with time.
- **Reduced feeling in little and ring fingers** can continue even after surgery.
- **Nerve damage** can happen during your surgery. This may result in either a painful spot in your scar (neuroma), or some numbness around the scar or into your thumb. This often settles within a couple of months.
- **Complex Regional Pain Syndrome (CRPS).** This is a very rare condition but can cause severe pain, swelling, and stiffness in the hand which can take several months to improve or may even continue. The onset of CRPS can often be gradual and may not be noticeable for four to six weeks. If you have ongoing persistent pain and swelling throughout your whole hand after this period of time, please contact the consultant you were under for the surgery for a review, or visit your GP.

Please remember that most patients have an uncomplicated routine operation and are happy with their recovery and outcomes. If you have any further questions or concerns about the risks/ complications listed above, please speak to your consultant or therapist before your surgery.

What happens before my operation?

Before the day of your operation, you will be contacted by the preassessment clinic. At this appointment a nurse will discuss your operation with you. You may need to have some routine tests before your operation such as a blood test. Please feel free to ask questions and raise any concerns that you may have about your operation. Remember that you can withdraw your consent for treatment at any time.

You will be asked some questions about your general health at your preassessment appointment. It would be helpful if you bring your usual medicines with you. The nurse will need to know their names and the strengths. This includes non-prescription medicines such as herbal/complementary medicines.

If you need to stop eating or drinking before your surgery, this will be explained to you at this appointment.

Stopping smoking

Compared to non-smokers, smokers are more likely to have complications in tissue healing and infections after injuries or surgery. For free friendly support and medication to help you stop smoking, contact:

- One You Kent Smokefree
Telephone: 0300 12 31 22 0
Email: oneyoukent@nhs.net
Web: www.oneyoukent.org.uk

How long will I be in hospital?

The operation is carried out as a day case, so you will go home on the same day as your operation. Plan to be in the hospital for up to six hours.

You cannot drive after your surgery. Please make sure you arrange for someone to take you home after your operation.

How will I feel after my operation?

You may be in a little discomfort after your surgery and this is quite normal. It is not common to be in large amounts of pain. You may take simple painkillers such as paracetamol if you feel it necessary and you are able to take this kind of medication.

What should I do if I am concerned about my hand?

You should contact your GP or local Urgent Treatment Centre if you have any of the following.

- Loss of feeling in your hand or fingers.
- Discoloration of your hand or fingers.
- Your fingers become hot or cold all the time.
- Increased swelling or tenderness.
- Increase in pain.
- You are worried about an infection.

When can I drive and go back to work?

You will need someone to drive you home after your surgery. We recommend you return to driving when your arm feels comfortable when using it for general daily activities. This is often around one to two weeks after your surgery.

When you can return to work depends on the work you do. For example, if your job involves light duties you can return one to two weeks after your surgery, but if your job involves more demanding work you may not be able to return for around three to six weeks. If you are unsure, please speak to your GP or therapist.

When can I return to my normal activities?

You should return to normal everyday activities as your pain allows, often around one to two weeks after your surgery.

Will I need a follow-up appointment?

Before leaving hospital, you may be offered a follow-up appointment at the hospital's therapy-led discharge clinic. If we feel that you do not need this appointment, you will be given details on how to organise a review yourself should you have any concerns once you return home.

When will my dressing and stitches be removed?

You can remove your bulky arm dressing 48 to 72 hours after your surgery, leaving the small dressing over your wound for a further seven days. It is very important to keep this small dressing clean and dry.

If you have excessive pain, swelling, or tenderness around your wound you may have an infection. If this happens, please go to your GP or Urgent Treatment Centre to have your wound checked.

Avoid any excessive weight bearing activities for the first four weeks following your surgery, such as pushing up from a chair or heavy gripping.

In most cases dissolvable stitches are used and these will start to fall out 10 to 14 days after your surgery. Occasionally the stitch knots at either end of your scar can take a little longer to dissolve.

If you had non-dissolvable stitches these will need to be removed by your GP, practice nurse, or consultant. You will be told which type of stitch you had before you leave hospital.

How do I care for my scar?

The length of the scar will vary between patients. The number of stitches also varies but the surgeons aim to make the scar look as good as possible.

Your scar may become sensitive to touch while it heals, so it is very important to start to massage your scar around two weeks after surgery. You do this with a small amount of water-based hand cream for up to eight weeks after surgery. This will help to soften the scar tissue and reduce its sensitivity.

For more information on scar massage, please ask a member of staff for a copy of the Trust's **Scar Massage** leaflet or download a copy yourself from the Trust web site www.ekhufft.nhs.uk/handtherapyleaflets/

Further information

If you have any further questions, please ask your consultant or therapist.

This leaflet has been produced with and for patients

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email ekh-tr.pals@nhs.net

Patients should not bring in large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals web site www.ekhufft.nhs.uk/patientinformation