

Ulnar Nerve Decompression

This information has been produced to help you gain the maximum benefit and understanding of your condition and its treatment.

It includes the following information:

- Key points
- About your elbow
- What is ulnar neuritis
- Treatment options
- About the operation including the risks and alternative solutions
- Frequently asked questions
- Exercises
- Contact details
- Useful links

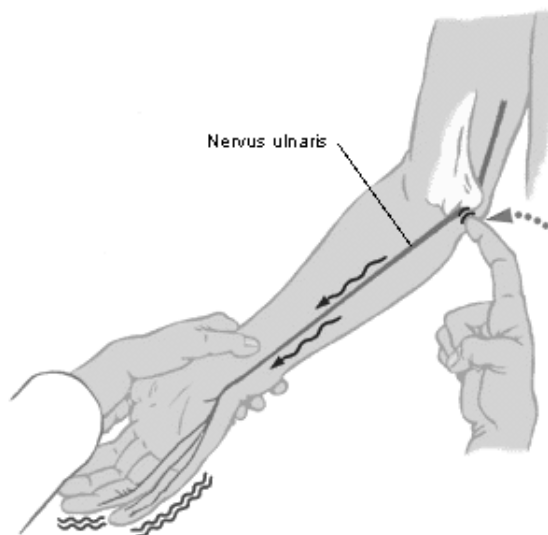
Key Points

If you are considering having an ulnar nerve decompression remember these key points

1. nearly all are done as day case surgery (home the same day)
2. you will have a general anaesthetic
3. you will be in a sling for just the first 2 or 3 days
4. you will not be driving for 1 to 2 weeks
5. you will return to work about 1-2 weeks after the operation or longer if you are a manual worker
6. you can return to sport in a progressive fashion
7. this is a safe, reliable and effective operation for 90% of people
8. this is not a quick fix operation - improvement in symptoms may take many months to occur
9. www.shoulderdoc.co.uk is a reputable and useful British website for further information

The Ulnar Nerve

The ulnar nerve (or nervus ulnaris) runs around the inner side of the elbow in a groove just behind a bony prominence (medial epicondyle). The nerve, where it lies in the groove, is covered by a tough layer of tissue which forms a tunnel (cubital tunnel). It is important as it controls the small muscles in the hand which are particularly important for fine movements such as doing up buttons and it is also responsible for normal feeling in the little and ring fingers.



Ulnar neuritis (cubital tunnel syndrome)

This is painful irritation of the ulnar nerve as it winds around the back of the inner part of the elbow (the funny bone).

It is very common. Almost everyone will have experienced episodes of pins and needles or a 'dead arm' after having slept awkwardly. Lots of people have minor symptoms when in bed at night. A few people have more persistent and intrusive symptoms which are continuous.

It can cause pain behind the elbow as well as tingling, pins and needles or even numbness in the little and ring fingers. If it has been a problem for a long time or is particularly severe it can lead to weakness of the hand and fingers.

There are a number of different reasons why the ulnar nerve can become irritable (ulnar neuritis). Most often it occurs because of leaning on or sleeping with a bent elbow for long periods. Sometimes the nerve can be pinched by bands of muscle or fibrous tissue usually in the tunnel behind the elbow. Occasionally, the nerve becomes squashed by underlying arthritis of the elbow or the nerve can be stretched if the elbow becomes misshapen as a result of a fracture or arthritis. Some conditions, like diabetes, can affect the way all nerves work.

Treatment options

This is a common condition which for most people is a self-limiting condition, meaning that it will get better on its own eventually. How long this takes is extremely variable and can range from a few weeks to several months. The trick is to find ways of keeping the symptoms under control until it gets better. There are several things you can do:

1. **Activity modification.** Find ways of avoiding the positions which make the problem worse. For example keep changing positions and take regular breaks when driving or when on the phone. For people who have a lot of night-time symptoms try wrapping a towel loosely around your elbow before you go to sleep. This will stop you being able to bend your elbow up completely and hopefully overcome a habit of sleeping in the very bent position. You may need to adjust the way you do your job.
2. **Anti-inflammatory tablets.** Obtain these from your chemist or GP and take a 2 week course when the symptoms are really bad.
3. **Physiotherapy.** This helps some but not all people and could be tried if the other suggestions have not helped.

If all the above have been tried and the symptoms have been going on a long time and are causing a lot of problems then an operation may be required.

The operation

Ulnar nerve decompression (also known as cubital tunnel release) with or without transposition of the ulnar nerve

This is very much a last resort and is reserved for people who have persistent symptoms despite trying all other treatments.

Most people are given a full general anaesthetic (i.e. you will be asleep) although it can be done by numbing the whole arm. A long incision is made over the back of the elbow. The ulnar nerve is identified and followed both up into the arm and down into the forearm. Any tissues which are seen to be squashing the nerve are released; this might include bands of muscle or fibrous tissue or protrusions of bone.

Usually, the nerve is left to lie in its own track but sometimes the nerve is moved away from the area of scarring and compression across to the front of the elbow where a new loose tunnel is made for it (transposition). Any bleeding points will be cauterised (sealed by heat) and the skin wound is closed with one long absorbable stitch.

Risks of the operation

All operations involve an element of risk. We do not wish to over-emphasise them but feel that you should be aware of them before and after your operation.

Generally, this is a very safe and reliable operation. The rate of improvement in feeling in the hand is very variable and depends on a number of factors, including your age, the cause of the problems and the length of time that the problem has been there. Your surgeon will give you an estimated recovery before you embark on surgery.

The risks include:

- a) **Anaesthetic** complications such as sickness and nausea or rarely cardiac, respiratory or neurological (less than 1% each, i.e. less than one person out of one hundred).
- b) **Infection**. This is usually a superficial wound problem. Occasionally deep infection may occur many months after the operation (rare; less than 1%).
- c) **Pain and stiffness** around the elbow (uncommon less than 10%).
- d) **Failure** to cure the problem (uncommon, less than 10%).
- e) **Revision surgery**; the need to re-do the surgery is uncommon (less than 10%).
- f) **Permanent damage** to the nerve (rare, less than 1%).

Please discuss these issues with the doctors if you would like further information.

Questions that we are often asked about the operation

Will it be painful?

Please purchase packets of tablets such as paracetamol (painkillers) and anti-inflammatories (e.g. nurofen, ibuprofen, diclofenac) before coming into hospital.

- During the operation local anaesthetic will be put around the elbow wound to help reduce the pain.
- Be prepared to take your tablets as soon as you start to feel pain.
- If needed take the tablets regularly for the first 2 weeks and after this time only as required.
- If stronger tablets are required or if you know you cannot take paracetamol or anti-inflammatories talk to your GP.
- The use of ice packs or heat may also help relieve pain in your elbow.
- The amount of pain you will experience will vary and each person is different. Therefore take whatever pain relief **you** need.

Do I need to wear a sling?

You will need to wear a sling for a few days after the operation while getting over the operation pain. However resting the elbow for more than a few days (3 or 4) is not helpful and can lead to stiffness.

When can I go home?

You can usually go home the same day.

Do I need to do exercises?

You will be shown exercises by the physiotherapist and you will need to continue with the exercises once you go home. To get you started do the exercises at the end of this leaflet which will stop your elbow getting stiff.

What do I do about the wound?

You will have one long dissolving stitch which does not need to be removed. The two ends, which look like fine fishing line, will fall off naturally after a couple of weeks.

Unwind the bulky bandage 48 hours after the operation but leave on the dressing covering the wound for 14 days. Put on the tubigrip dressing to apply gentle compression during the day.

Keep the wound dry until it is healed, which is normally within 14 days. You must keep it covered when showering or bathing for the first 2 weeks.

When do I return to the outpatient clinic?

This is usually arranged for between 3 and 6 weeks after your operation to check on your progress. Please discuss any queries or worries you may have when you are at the clinic.

Are there things that I should avoid?

Yes, you must avoid heavy, strenuous and repetitive tasks for 3 weeks after the operation. However do not be frightened to start moving the elbow and in particular remember to keep stretching the elbow out straight several times a day from as soon as you get home.

Gradually the movements will become less painful.

How am I likely to progress?

It is important to recognise that improvement is slow and that this is not a quick fix operation. By 3 weeks after operation you will not have noticed much improvement and it is common for people to wonder whether they made the right decision about having the operation done. However, you should have recovered nearly full movement. By 3 months after operation most people are pleased and have noticed an improvement in their symptoms. Everything continues to improve slowly and by 9 to 12 months after the operation your arm should be really good.

When can I drive?

You can drive as soon as you feel able to comfortably control the vehicle when you are not wearing a sling. This is normally about 2 weeks. It is advisable to start with short journeys.

When can I return to work?

This will depend on the type of work you do. If you have a job involving arm movements close to your body you may be able to return within 3 weeks. Most people return within a month of the operation but if you have a heavy lifting job or one with sustained overhead arm movement you may require a longer period of rehabilitation. Please discuss this further with the doctors or physiotherapist if you feel unsure.

When can I participate in my leisure activities?

Your ability to start these activities will be dependent on pain, range of movement and strength that you have in your elbow. You must avoid heavy, strenuous and repetitive tasks for 6 weeks after the operation. It is best to start with short sessions involving little effort and then gradually increase the effort or time for the activity. However, be aware that sustained or powerful overhead movements (e.g. trimming a hedge, some DIY, racket sports etc) will put stress on the elbow and may take longer to become comfortable.

Exercises

Use painkillers and/or ice packs to reduce the pain before you exercise.

It is normal for you to feel aching, discomfort or stretching sensations when doing these exercises. However, if you experience intense and lasting pain (e.g. more than 30 minutes) reduce the exercises by doing them less forcefully or less often. If this does not help, discuss the problem with the physiotherapist.

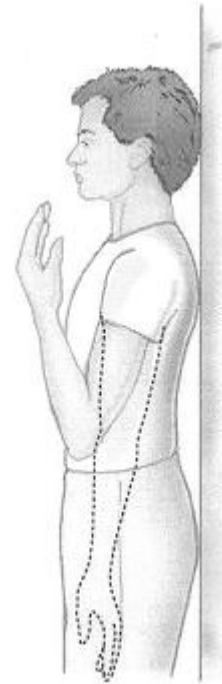
Certain exercises may be changed or added for your particular elbow.

Do short frequent sessions (e.g. 5-10 minutes, 4 times a day) rather than one long session.

Gradually increase the number of repetitions you do. Aim for the repetitions that your therapist advises, the numbers states here are rough guidelines.

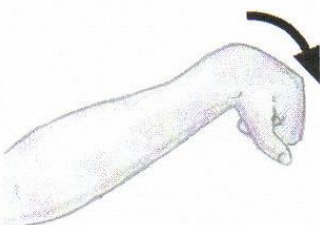
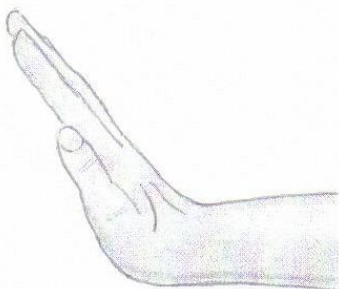
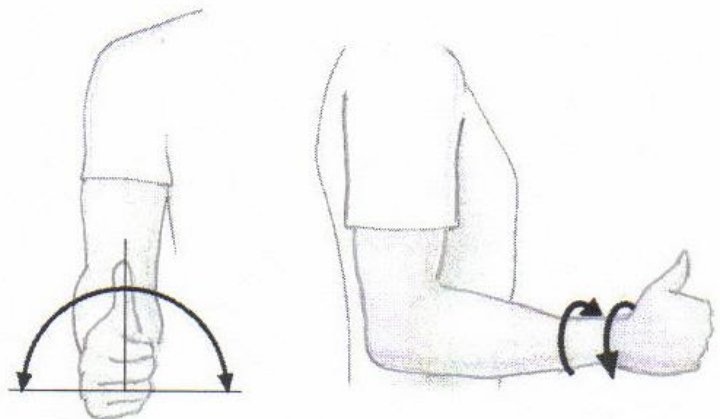
Standing

Let your arm relax down straight.
Repeat 5 times.



Rotating

Rest your forearm on a flat surface.
Try and turn your palm up towards the ceiling.
Then turn palm down.
Repeat each movement 5 times.



Wrist exercises

Keep your arm in the sling or rest your forearm on a flat surface.
Keeping your forearm still, move your hand up and down, bending at the wrist.
Do this with your fingers straight and then with them bent (i.e. with a fist and without). Repeat each 5 times.

Contact details

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www.readingorthopaediccentre.com

Useful links

www.readingorthopaediccentre.com

[Cubital tunnel patient information sheet USA](http://www.orthogate.org/patient-education/elbow/cubital-tunnel-syndrome.html) (<http://www.orthogate.org/patient-education/elbow/cubital-tunnel-syndrome.html>)

This information sheet is not a substitute for professional medical care and should be used in association with treatment at your hospital. Individual variations requiring specific instructions not mentioned here might be required. It was compiled by Mr Harry Brownlow (Consultant Orthopaedic Surgeon) and Catherine Anderson (Specialist Physiotherapist).