

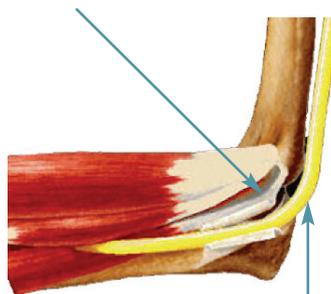


## SURGERY

# Ulnar Nerve Surgery at the Elbow

### Picture of the Ulnar Nerve at the Elbow (inner side view of the elbow)

Bone felt on the inside of the elbow (medial epicondyle – nerve sits behind this usually)



The Ulnar  
Nerve

### What does this involve?

This involves surgery to relieve pressure on the ulna nerve where it passes behind the inside of the elbow.

### When is surgery needed?

This operation is performed to relieve pressure on the ulna nerve as it runs under a tight band on the inner side of the elbow.

Many people occasionally have some symptoms of pressure on their ulnar nerve, for instance waking from sleep with numbness and tingling in the ring and little fingers. Surgery might be considered if you have:

- Unpleasant, regular symptoms interfering with your day to day activities
- Persistent numbness all the time in the finger tips – this implies the start of permanent damage to the nerve which might not recover even if you have the operation
- Weakness in the hand – implying the muscles supplied by the ulna nerve might be affected

For milder symptoms trying to avoid sleeping with the arm tightly bent up might help.

### Which operation is the right one for me?

There are several types of operation designed to remove the pressure on the ulna nerve. The two simplest options are:

- Decompression - if the nerve is just too tightly bound down at the elbow simply cutting the tight strap might be all that is needed.
- Subcutaneous Transposition - sometimes the nerve is also subluxing. This is when the nerve appears to partly or completely move around the medial epicondyle when the elbow is bent up. Subluxing also puts pressure on the nerve. One solution is to gently free up the nerve and move it in front of the medial epicondyle. This is called a subcutaneous transposition.

### What are the main risks of this operation?

#### Swelling, Stiffness and Scar pain

This can be reduced by keeping the arm elevated and moving all the free joints as soon as possible. Local swelling around the surgical site can persist for several months. Local swelling can be helped by massaging the tissues and this may also improve any irritability in the surgical scar.

Occasionally patients are troubled by more swelling and stiffness than average. In this case complex regional pain syndrome (CRPS) is sometimes the cause (see relevant information sheet in 'Conditions we Treat'). Severe CRPS occurs in less than 1% of cases.

#### Infection

This is unusual in the hand (less than 1% of cases). Local wound infections can often be treated with antibiotics by mouth. Rarely deep seated infections may require re-admission to hospital, antibiotics into the vein and occasionally more surgery.

#### Nerve Damage

The nerve most at risk with this operation is a small branch supplying the skin next to the scar on the inner side of the elbow and forearm. If this is damaged it may leave a permanent patch of numbness. This should not interfere with how your arm functions. Significant direct damage to the ulna nerve or its main branches is

extremely rare with this surgery if your operation is performed by an experienced hand surgeon.

#### Residual numbness or weakness in the fingers

If your finger tips were permanently numb before the operation they may not recover immediately after the operation. Recovery of sensation maybe continue even up to two years after surgery, but some people never regain full, normal sensation in the tips of the fingers. Similarly muscle power may take months to improve.

Pressure symptoms (pain, increased pins and needles at night and in certain elbow positions) should be relieved immediately after the operation.

#### Residual pressure symptoms and recurrence

On-going symptoms relating to pressure on the nerve after the operation might imply that some of the tissue over the nerve has not been divided. This can also occur after a transposition if scarring arises around the nerve in its new position.

Symptoms that return years after a successful operation imply that tissue has re-grown over the nerve and further compression is occurring. Either of these two problems may require further surgery. Other conditions can cause nerve symptoms and need to be carefully excluded.

#### Type of Operation

Day case

#### Length of Procedure

30 - 45 mins

#### Anaesthesia

General Anaesthetic



## Post Operative Course

### Day 1 and 2

- A sticky dressing and padded bandage is applied after the operation.
- Keep the dressings clean and dry
- Keep the arm elevated in a sling or on pillows to reduce swelling
- Start moving all the free joints immediately after the operation to prevent stiffness. You will be given an exercise sheet to help with this.
- Take painkillers before the anaesthetic wears off and as necessary thereafter

### Day 3 - 14

- Remove the padded bandage but keep/replace the sticky dressing over the wound to protect it.
- Keep the wound clean and dry
- Continue gently exercising the joints. Work particularly on fully straightening the elbow.
- You can use the hand for light activities but avoid heavy loading and prolonged periods with the hand hanging down below your waist as this will make it swell.

### 2 Weeks

- A wound check and removal/trimming of stitches should occur between 10 and 14 days after your surgery. The details will be arranged on the day of your surgery.
- Continue gradually increasing activities with the hand and wrist as comfort allows.
- Once the wound is completely sealed a daily session of 10 minutes massaging the scar with unscented hand cream is often useful to disperse swelling and desensitise the scar.
- Continue to avoid heavy loading/lifting if a transposition has been performed.

### 6 Weeks

- Most people are back to normal activities by this stage although scar massage may still be useful.
- Patients who have had a transposition can start heavier loading at this stage.

### 3 Months

- It may take this long for residual discomfort in the scar to settle down.

## Post Operative Difficulties

### Contact your surgical centre at any stage if:

- Your fingers become more swollen, stiff or painful than you expect
- You see any discharge, wetness or detect any unpleasant smells from below your dressing

Outside normal working hours you may need to attend your local Accident and Emergency Department for help with these issues.

### Driving

You may drive when you feel confident to control the car, even in an emergency.

Many patients, particularly if they have had right sided surgery, find they can drive within a week of this operation. Left sided surgery (for the gear stick and hand brake) may take a little longer.

### Time off Work

This will vary depending on the nature of your job. A light desk job may only require a few days off work. If you have a very heavy job you may need up to 6 weeks off work.

Sick notes can be provided on the day of your operation, at your clinic visits and by your own GP.