

ULNAR NEUROPATHY

Ulnar neuropathy is when there is irritation or damage to the ulnar nerve causing numbness and/or weakness of the hand.

The ulnar nerve is one of the nerves in the arm responsible for sensation and movement in the hand. It travels down the arm from the neck down the forearm and into the hand. You can feel it at the elbow, where it lies just under the skin

It is most susceptible to damage at the elbow, where it can easily be compressed. When this happens, the patient will experience tingling or numbness over the 4th and 5th fingers and this side of the hand. More rarely the grip may become weak, and the patient may have difficulty using the hand.

How common is it?

Intermittent tingling from pressure on the ulnar nerve is really common. Around 50% of the population experience intermittent numbness in this region of the hand, particularly when they wake up in the morning, or on other occasions when the elbow is bent or they are leaning on it

Causes:

Compression – This can occur simply by leaning on the elbows habitually. With repeated activity such as golf or tennis, the nerve may become entrapped by surrounding structures.

Nerves are made of a central part (the axon) which is like the wire of an electrical cable, and an outside covering (epineurium/perineurium) that gets easily "rubbed" by repeated injury. The covering will heal if it is allowed to, but it does so very slowly over months.

Trauma – A simple blow to the elbow may cause very short lived ulnar nerve symptoms (this is why the elbow is called 'the funny bone'.) More severe trauma, especially when there is a fracture near the elbow, may damage the nerve.

Neuropathy – Rarely, other medical problems may cause ulnar neuropathy. Usually other nerves are usually affected.

Investigations:

Usually none are needed. If there has been a significant injury to the elbow, then an xray may be needed to exclude a fracture or dislocation. If other nerves are affected (there is numbness, tingling or weakness outside the ulnar nerve area) then some blood tests or scans may be required.

Treatment:

Treatment of ulnar neuropathy is aimed at the underlying cause. This usually means avoiding the activity which has caused the problem and improving positioning of the hands and elbows at work/home.

This may mean looking at the way you sit at work or on a chair at home. It may mean trying to adjust the way you sleep or buying a neoprene elbow splint which may discourage you from bending your elbow when you are asleep. Essentially its important to avoid activities where the elbow is flexed for long periods as this stretches the nerve across the funny bone and can rub it.

There isn't good evidence to guide treatment but in most people (>95%) all this is needed is this kind of action. In most people the symptoms often resolve over weeks to months or may continue to give low level symptoms if the nerve keeps being stretched at the elbow. If the nerve has been severely damaged by trauma, or the hand has been weak for a long time, the prognosis is less certain.

Occasionally, surgery may be required if there is weakness in the fingers, even then its not clear how useful operations are. The small trials that have been done haven't shown much evidence of benefit compared to conservative treatment in most cases.

