ORTHOPAEDICS WA

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ULNAR NERVE COMPRESSION (CUBITAL TUNNEL SYNDROME)

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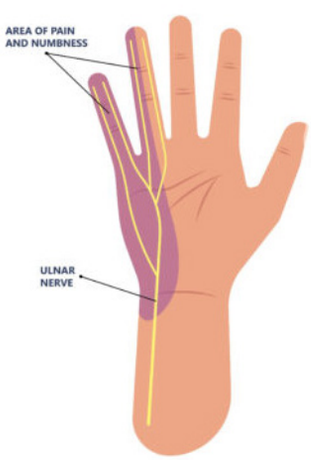
WHAT IS ULNAR NERVE COMPRESSION?

The ulnar nerve is a major nerve that supplies sensation to the **little and ring fingers** and controls some of the muscles in the hand. It passes around the inside of the elbow, through a narrow passage called the **cubital tunnel**. If the nerve becomes compressed in this area, it can lead to discomfort and functional issues in the hand and fingers.

Ulnar nerve compression at the cubital tunnel is a manageable condition with both non-surgical and surgical treatment options. Early intervention can prevent worsening symptoms and improve hand function. If you have questions or concerns, consult your specialist for further guidance.

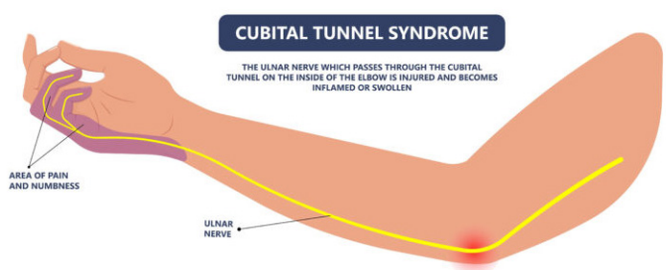
WHAT DO YOU NOTICE WITH CUBITAL TUNNEL SYNDROME?

- **Tingling or numbness** in the little and ring fingers.
- Symptoms may start intermittently and worsen over time.
- **Weakness in hand muscles**, leading to difficulty gripping or increased clumsiness.
- In severe cases, **muscle wasting** in the hand.



WHAT DOES IT LOOK LIKE?

- Any muscle weakness or wasting in the hand.
- Numbness in the little and ring fingers.
- Tingling when the nerve is tapped at the elbow or wrist.
- Grip strength and finger movement.



WHAT TESTS MIGHT WE DO?

- **Nerve Conduction Studies:** Measures how fast signals travel through the nerve at the elbow and wrist.
- **Electromyography (EMG):** May be used to assess muscle activity and nerve function.
- These tests help confirm the site of nerve compression and determine severity.

TREATMENT OPTIONS

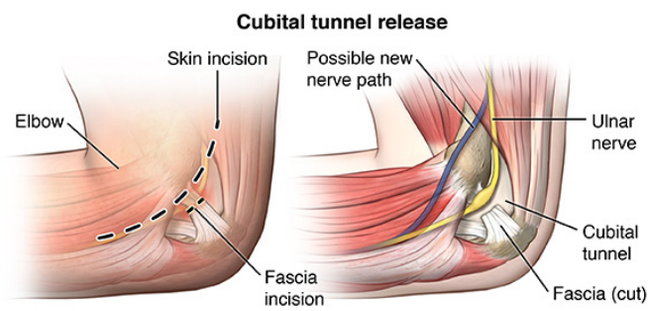
NON-SURGICAL TREATMENTS

- **Elbow Splints:** Worn at night to keep the elbow straight and reduce pressure on the nerve.
- **Steroid Injections:** May temporarily relieve symptoms.
- If symptoms persist or worsen, surgery may be recommended.

SURGICAL TREATMENT

Surgery is considered for severe cases and can involve:

- **Simple Nerve Decompression**: Relieves pressure on the nerve without moving it.
- **Nerve Transposition:** Moving the nerve to a less restrictive position if it is under excessive tension.
- **Bone Removal** (Medial Epicondylectomy): Occasionally done to further reduce nerve pressure.



POST-OPERATIVE CARE AND RECOVERY

- The procedure is typically **performed as a day surgery** under local or general anaesthesia
- After surgery, the arm may be placed in a **soft bandage** or s**plint** for support.
- Patients are encouraged to **move their fingers** soon after surgery to prevent stiffness.
- Physical therapy may be recommended to regain strength and flexibility in the hand and arm.
- Pain and swelling can be managed with prescribed or **over-the-counter** pain medication.
- Most people return to light activities within a few weeks, while **full recovery may take several months**, depending on the severity of the condition and the type of surgery performed.
- Most people return to driving two weeks after surgery.

POTENTIAL COMPLICATIONS

- Over 50% of patients may still have some lingering symptoms post-surgery, but the goal is to prevent further worsening.
- Possible complications:
  - **Infection** (<1% risk)
  - **Nerve damage**, which can cause pain or worsened symptoms (<1% risk)
  - **Recurrence of symptoms**, which may require further treatment (~50% chance of residual symptoms)

WHAT IF YOU HAVE A PROBLEM?

If you have any concerns once you are discharged from hospital you should either telephone the hospital ward, or the surgeons rooms. If they are not available you should consult your GP or local ED. Your surgeon would always want to know about any issues or complications, and would want the GP or nurse to call them to discuss the problem.

Further information is available on the OrthopaedicsWA website.