Management of Carpal Tunnel Syndrome in Adults

Guidance for General Practitioners 2018

(based on BOA guidance 2017 and views of local orthopaedic hand surgeons)

Presentation

- Signs/symptoms consistent with both the history and examination
- Consider Differential Diagnosis

Mild to Moderate			Severe	
History	**AND**	**Examination**	**History**	**AND** **Examination**
Intermittent paraesthesia in the correct distribution (thumb, index, middle) **AND** Exacerbation of symptoms at night **AND** No persistent hypoaesthesia		Subjective (mild) or Objective (moderate) sensory impairment in the correct distribution **AND** Subjective (mild) or Objective (moderate) weakness in the thumb/loss of coordination	Persistent paraesthesia in the correct distribution **AND** Persistent numbness and weakness in the correct distribution **AND** Daily symptoms with frequent night waking	Reduced vibration and 2-point discrimination **AND** Objective thenar muscle weakness **AND** Thenar muscle wasting (visible)

Investigations

- Blood test is only needed if the history and examination suggests a specific secondary cause eg. hypothyroidism, rheumatoid arthritis.

MANAGEMENT

STEP 1 *0 weeks*

- **Patient information**
- **Wrist splint at night** (12 weeks; with review after 6 weeks where necessary)

Severe:

- **REFER to 2ndry Care**
- Patient information
- Wrist splint at night
- NCS ONLY if diagnosis in doubt

STEP 2 *12 weeks*

Corticosteroid (CSC) injection

- GP or Intermediate provider
- 40mg methylprednisolone or 40mg triamcinolone acetonide with local anaesthetic

No Benefit → **Nerve Conduction Study** (at least 6 weeks after CSC inj^{n})

Sustained Improvement → **Repeat CSC injection every 6 months as necessary**

Temporary Improvement (significant symptom recurrence within 6 weeks) → **REFER to 2ndry Care** Assuring:

1. Value of and need for surgery on the basis of symptoms
2. Patient willing to proceed to surgery

"Red Flags" – emergency referral to A&E

- Fracture
- Onset of tingling/numbness after injury
- Nerve /other suspected tumour (Syringomyelia)

"Yellow Flags" – urgent speciality referral (< 2 wk)

- Neurological diseases(MS, MND)
- Active inflammatory joint diseases (eg. Gout, RA)
- Peripheral limb ischaemia (eg thoracic outlet syndrome or Raynaud's disease)
- Cervical nerve root entrapment

STEP 3 *16+ weeks*

Negative, Borderline or Mild NCS Conservative Mx/ Consider Alternative Dx

Moderate, or Severe NCS → **REFER to 2ndry Care** Assuring:

1. Value of and need for surgery on the basis of symptoms
2. Patient willing to proceed to surgery

Remember Alternative Diagnosis:

- Ulnar neuropathy (at the elbow - cubital tunnel syndrome, or wrist - canal of Guyon)
- Peripheral neuropathy (all forms, diabetic neuropathy)
- Trigger digits
- Restless limb syndrome (Restless legs; may begin in arm)
- De Quervain's tenosynovitis (and other tendonitides)
- Writers cramp (focal dystonia of the forearm)