

## Carpal Tunnel Syndrome (CTS)

CTS is the most common upper limb compression neuropathy (Hayes et al. 2002). The classical presentation is a complaint of pain and paraesthesia in the radial 3½ digits which may be experienced or exacerbated at night. Palmer sensation is frequently normal due as the median nerve gives off the palmer sensory branch proximal to the transverse carpal ligament.

CTS is also common consequence of pregnancy, with incidence of 62% reported (Abllove et al., 2009). It usually occurs during the third trimester and is associated with generalised oedema. Symptoms most commonly respond to non-operative treatment or spontaneously resolve postpartum.

CTS can be associated with diabetes, osteoarthritis but there is little evidence to support resolution of symptoms with non-operative treatment in these conditions.

Non-operative management of CTS may be indicated for mild symptoms but not for moderate to severe where there may be signs of muscle atrophy, significant sensory disturbance or significant duration of symptoms. Timeframes for improvement can range from 6 – 10 weeks before resolution of symptoms. Differential diagnoses may include pronator syndrome, diabetic neuropathy, hand-arm vibration syndrome or cervical radiculopathy.

### Information Required for Referral

- Duration/onset of symptoms.
- Provocative activities, including night symptoms.
- Medications and Medical History - including current pregnancy, diabetes, OA of the hand.
- Social and Drug History (ETOH/smoking).

### Investigations Required for Referral

- Nil.

### Fax to

Flinders Medical Centre	(08) 8204 5020
Repatriation Hospital	(08) 8275 1061
Noarlunga Hospital	(08) 8384 9711

## Red Flags

Red flags should prompt immediate GP referral to the **Emergency Department**

- Recent trauma which may indicate underlying injury such as fractures or tendon injury
- Loss of digital motion

### Suggested GP Management

- Fitting of a wrist orthosis with wrist position neutral (0°) for night wear. Trial for 6 – 10 weeks.
- Avoidance or modification of aggravating activities.

### Clinical Resources

- Mackin, E., Callahan, A., Osterman, A. L. And Skiven, T. (Eds).2002. *Hunter, Mackin & Callahan's Rehabilitation of the Hand and Upper Extremity* (5<sup>th</sup> Edn). Mosby Inc.: St. Louis, USA.

General Information to assist with referrals and the and Referral templates for FMC and RGH are available to download from the SALHN Outpatient Services website [www.sahealth.sa.gov.au/SALHNoutpatients](http://www.sahealth.sa.gov.au/SALHNoutpatients)

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1.0	September 2014	September	Original