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 a common consequence of pregnancy, with incidence of 62% reported (Ablove 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

- 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


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