

RESEARCH REPORT

Carpel tunnel

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**Extra median spread of sensory symptoms in carpal tunnel syndrome (CTS) suggests the presence of pain related mechanisms
Pain. 2006 June; 122 (3): 264-70 PMID 16530966**

This article is most likely to be of interest to those members involved in the diagnosis and treatment of carpal tunnel syndrome and those interested in chronic pain physiology. It provides some useful guidance on diagnosis and suggests how CTS may be an under diagnosed condition, highlighting that a number of patients with carpal tunnel syndrome can present with an extra median distribution of symptoms.

In this study a median distribution was found in 60.6% of subjects with CTS a glove distribution 35.2% and ulnar distribution 4.2%. Electrodiagnostic tests and cervical spine MRI were used to help confirm diagnosis and to help exclude other causes such as cervical radiculopathy.

The article includes a useful discussion of some of the possible neurophysiological mechanisms behind atypical presentations and also for the presence of chronic neuropathic pain in CTS.

Extra-median spread of sensory symptoms was associated with higher levels of pain and parasthesia and the authors suggest that central nervous system mechanisms of plasticity may underlie the spread of symptoms in CTS. Increased pressure of the median nerve may trigger spontaneous discharges in the sensory fibres. This ectopic activity may cause changes in the dorsal horn receptive field and contribute to the spread of sensory complaints outside the median nerve territory

The article concludes that the diagnostic suspicion of CTS should not be confined to patients with symptoms in the median nerve territory. Enhanced awareness of all patterns of presentation of CTS is important to avoid underestimation of the number of affected patients. The authors stress the value of electro diagnostic procedures in patients with atypical symptom distribution.

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