

## **Carpal Tunnel Syndrome with Negative Nerve Conduction Studies: A Preliminary Experience of a Case Series of Surgical Decompression**

KSR Pushpakumara

*Faculty of Medicine, General Sir John Kotelawala Defence University*

smpshpkmr@yahoo.com

Carpal tunnel syndrome (CTS) is the commonest compressive neuropathy involving peripheral nerves. When clinical diagnosis of CTS is made, it is common practice among clinicians to confirm it by nerve conduction studies (NCS), which has sensitivity of 73% - 90%. Surgeons are reluctant to perform carpal tunnel decompression (CTD), the only long lasting treatment option available, when NCS is not suggestive of CTS. There is hardly any data about the outcome following surgical treatment of this specific group. We discuss about the surgical outcome of four females aged 55, 47, 55 and 16, and a male of 48 years old with classical clinical picture of CTS but negative NCS. None had any underlying aetiologies such as diabetes mellitus. Informed consent was taken explaining that their NCS are negative, but test is not 100% sensitive, and improvement following surgery might or might not be as good as for those with positive NCS, but no data available to comment. All five underwent uncomplicated CTD, with complete relief of all the symptoms by the time they attended the clinic two weeks post op. Four patients had an excellent long term outcome over several months, though the 16 year old was lost from the follow up. In our series, patients with clinically diagnosed CTS but negative NCS had a very good outcome following CTD. Though the number is small and more data is needed to draw firm conclusions, surgery may be carefully considered in this subgroup of patients when consecutive management has failed.

**Keywords:** *carpal tunnel syndrome, negative nerve conduction studies, carpal tunnel decompression*