Commentary

Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy, where the median nerve is affected at the wrist. Nerve conduction study of the median nerve is the gold standard in the diagnosis and grading of CTS.^[1-3]

In order to relieve the disturbing effects of CTS on life quality, various treatment methods have been evolved and commonly used. The treatment options of CTS include both surgical and non-surgical procedures. Non-surgical modalities include analgesics, oral steroids, splinting, ultrasound therapy, and local steroid injections.^[2,4]

Local steroid injections have been shown to provide relief of symptoms especially in short-terms.^[2-4] According to American Academy of Orthopaedic Surgeons (AAOS), local steroid injection or splinting is recommended for treating patients with CTS, before considering surgery.^[5]

In patients with CTS, there has often been a poor correlation between neurophysiological tests and symptoms. There are both studies investigating the treatment success using severity of symptoms or neurophysiological measurements. [2-4] Boston Carpal Tunnel Questionnaire (disease-specific), Disabilities of the arm, shoulder, and hand (region-specific; upper limb), Michigan Hand Outcomes Questionnaire (region-specific; hand/wrist), Patient Evaluation Measure (region-specific; hand), SF-12, or SF-36 Short Form Health Survey (generic; physical health component for global health impact) were recommended as follow-up parameters of the CTS treatment according to AAOS. [5] In the current study, replied neurophysiological investigation was performed

1 month after injection and motor distal latency was considered to be an objective criteria for follow-up.^[6]

In this interesting study, the authors have demonstrated a satisfactory improvement after 1 month of the local steroid injection (40 mg triamcinalone). Motor distal latencies and visual analogue score (VAS) of 100 were used for the objective parameter for follow-ups. Although sensory studies are more sensible tests in the diagnosis of CTS, it is not useable because of not being recordable in severe cases. Symptomatic improvement with a VAS score of at least 50% was reported in all patients, while 100% percent improvement was reported in 73% of the patients. The distal motor latency improvement was observed by 9.5% after 1 month of the injection. [6]

In conclusion, this study is helpful for demonstrating the effectiveness of local steroid injection after 1 month in patients with CTS and motor nerve conduction study of median nerve is a useful tool for monitoring the results of the therapy. I believe that further investigations in long-term would be beneficial for enlightening the outcome of this therapy.

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