Differential Diagnosis of Carpal Tunnel Syndrome

KeywOrds: Carpal tunnel syndrome, Electromyography, Distal motor latency, Polyneuropathy

Hakan AKGUN1, Mehmet YUCEL2, Oguzhan OZ3, Seref DEMIRKAYA3

1Etimesgut Military Hospital, Department of Neurology, Ankara, Turkey
2Kasimpasa Military Hospital, Department of Neurology, Istanbul, Turkey
3Gulhane Military Medical Academy, Department of Neurology, Ankara, Turkey

Corresponding Author: Hakan AKGUN / E-mail: drhakanakgun@gmail.com

We have read the case report of Oge et al. with interest (2). They evaluated the carpal tunnel range/carpal tunnel area ratio among patients with carpal tunnel syndrome and the control group, together with the median nerve area and its palmar bowing of the transverse carpal ligament. An increase in the ratio of carpal tunnel range/carpal tunnel area were detected in patients with carpal tunnel syndrome. An increase was also detected in the cross sectional areas of the median nerve measured at the proximal entrance of the carpal tunnel and on the palmar bowing of the transverse carpal ligament. The distal motor latencies (DML) of all patients on the electromyography (EMG) performed were found to be longer than 4.6 msec and all patients were diagnosed with severe carpal tunnel syndrome. The authors have not stated if evaluation of other nerves was performed. This suggests that no motor or sensory conduction evaluation of other nerves was performed. If this has already been done, it should have been stated. The accuracy of the diagnosis of carpal tunnel syndrome becomes questionable if it has not been done because there are many polyneuropathies that extend DML (1,3). The limitations of the study are making the final diagnosis only by the prolongation of median nerve DML on EMG, and assessing the median nerve sensory conduction but not assessing other nerves to differentiate other diseases arising with demyelinating polyneuropathies. We, the readers, were left with some unanswered questions regarding the diagnosis. We think that it will be of benefit if the authors clarify this issue.

ABBREVIATIONS
Distal Motor Latency (DML), Electromyography (EMG)

REFERENCES