

LETTERS TO THE EDITOR

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Short-term evaluation of motor and sensory nerve conduction parameters in COVID-19-associated peripheral neuropathy patients

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To the Editor,

On using motor and nerve conduction studies, Shaddad et al. [1] found that motor nerve conduction (MNC) latency and amplitude for the median nerve (MN) were deranged significantly in COVID-19 patients. The COVID-19 patients also had significantly greater MNC latency and F wave latency for the posterior tibial nerve (PTN). The D-dimer and C-reactive protein levels were correlated with a significant positive association with a latency of MN MNC, sensory nerve conduction (SNC), and f-wave; latency of MNC and F wave of the PTN; and SNC latency for sural nerve [1]. In addition to the study limitation of the lack of long-term follow-up which was addressed by Shaddad et al. [1], we, hereby, explore the following limitation. Neurophysiological studies, which involve various components, are crucial tools for the investigation of neuromuscular diseases. They could provide useful information on peripheral nerve function and knowledge of the reference values (RV) of these studies is critical for clinicians in evaluating suspected neuromuscular disorders. As these RV are impacted by numerous

biological (such as age, gender, body height), physical (such as the temperature of the limb), and technical factors [2, 3], different populations-specific RV of motor and nerve conduction studies have been formulated to be utilized in health centers and research [4, 5]. Interestingly, Egypt has developed its own RV for these studies [6]. In the study methodology, Shaddad et al. [1] stated that the values below the 95th centile or $\pm 2SD$ of control for all components of neurophysiological studies were regarded as abnormal. However, they didn't address the reference of the employed RV. Due to this limitation, we believe that the study findings presented by Shaddad et al. [1] are doubtful.

Abbreviations

MNC	Motor nerve conduction
MN	Median nerve
PTN	Posterior tibial nerve
SNC	Sensory nerve conduction
RV	Reference values

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MDA reviewed the literature on nerve conduction studies, wrote and edited the manuscript, and made the final approval.

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Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

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Competing interests

The authors declare that they have no competing interests.

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