Abstract

Objective Establishing normal reference values for median and ulnar nerve distal motor and sensory latencies for electrophysiological diagnosis of carpal tunnel syndrome (CTS) taking our population's demographic traits into account. Methods Sensory and motor nerve conduction studies for the median and ulnar nerves were performed on 184 non-symptomatic people (age range: 18-75). Reference tables (including means, standard deviations and percentiles) were constructed from the findings. The results were compared to demographic variables such as age, gender, height and weight. Results 3.4 ms mean distal motor latency (SD=0.4) and 3.1 ms sensory peak latency (SD=0.3) were found for the median nerve (conventional test). 0.8 ms distal motor median-ulnar latency difference (SD=0.2) and 0.08 ms mean sensory median-ulnar peak latency difference (SD=0.2) were found (conventional test). Motor and sensory median nerve latency showed a positive relationship with age and height. Conclusions Even though the present study's results have a restricted and preliminary impact due to the type and size of the sample used, they did reveal some differences from data obtained in other countries and could be useful as an initial guide for CTS diagnosis in a Colombian electrophysiological laboratory.

Keywords

Electrodiagnosis, reference value, carpal tunnel syndrome.