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Analysis of Electroneuromyography Component Result as the Supporting Diagnosis of Carpal Tunnel Syndrome

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Abstract : There are number of diseases that have becoming chronic due to late diagnosis. By becoming chronic, those diseases will become more difficult to treat and lead to high risk of death. Because of this, early detection is considered to be important. One of those diseases is carpal tunnel syndrome. This study focusing on principal component analysis (PCA) results on peripheral nerve conduction. PCA method was conducted to get the structure of motoric and sensory median nerves based on four variables. The level of carpal tunnel syndrome can be measured from the latency, amplitude, nerve conduction velocity (NCV) and Fwave. There is a tendency that high latency correlates to low amplitude and high Fwave correlates to low NCV. Markedly, CTS status is derived mostly from latency and amplitude.
Keywords: electroneuromyography, principal component analysis, median nerves, carpal tunnel syndrome.

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