

Effect of vitamin b6 on clinical symptoms and electrodiagnostic results of patients with carpal tunnel syndrome.

[Talebi M¹](#), [Andalib S](#), [Bakhti S](#), [Ayromlou H](#), [Aghili A](#), [Talebi A](#).

Abstract

PURPOSE:

Carpal tunnel syndrome (CTS) refers to a cluster of signs and symptoms that stems from compression of the median nerve traveling through carpal tunnel. Surgery is a definite treatment for CTS; however, many conservative therapies have been proposed. The present study set out to assess the effect of vitamin B6 in patients with CTS.

METHODS:

Forty patients (67 hands) with mild-moderate CTS were initially selected and randomly assigned into two groups as follows: 1) Case group with 20 subjects (32 affected hands) receiving vitamin B6 (120 mg/day for 3 months) and splinting. 2) Control group with 19 subjects (35 affected hands) only received splinting. One subject from the control group dispensed with continuing participation in the research. Daily symptoms and electrodiagnostic (NCV-EMG) results were assessed at baseline and after 3 months.

RESULTS:

Nocturnal awakening frequency due to pain, daily pain, daily pain frequency, daily pain persistence, hand numbness, hand weakness, hand tingling, severity of nocturnal numbness and tingling, nocturnal awakening frequency owing to hand numbness and tingling, and clumsiness in handling objects improved significantly in the vitamin B6-treated patients; even so, only problem with opening a jam bottle and handling phone significantly reduced in the control group. The median nerve sensory latency mean decreased following the treatment; and the median nerve sensory amplitude mean and sensory conduction velocity mean increased.

CONCLUSION:

The present study suggests that vitamin B6 treatment improves clinical symptoms and sensory electrodiagnostic results in CTS patients, and thus is recommended for CTS treatment.