

# Treating Carpal Tunnel Syndrome with Dynamic Splinting: A Randomized, Controlled Trial

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**Abstract:** Carpal tunnel syndrome (CTS) affected more than 7 million Americans in 2006, and paresthesias, pain, and weakness are among the common complaints. The purpose of this study was to examine the effect of using dynamic splinting on patients with CTS. Dynamic splinting is a modality that treats CTS using low-load, prolonged duration stretch to reduce contracture, which contributes to median nerve compression. Fifty patients diagnosed with CTS were recruited for this 60-day study (mean age  $51 \pm 12$ ). There was a significant difference (improvement) in Levine-Katz functional scores ( $P < .001$ ,  $T = 4.265$ ) and in the frequency of improved nerve conduction ( $P < .001$ ,  $T = 4.282$ ) for experimental patients. Dynamic splinting reduced experimental patients' symptoms and improved electrodiagnostic parameters.

**Key Words:** Contracture reduction, Dynasplint, range of motion, wrist pain

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