

Original Paper

Comparison of therapeutic effects of two type of cock-up splint carpal tunnel syndrome

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Abstract

Background and Objective: Carpal Tunnel Syndrome is the most common compression neuropathy which can cause mild, moderate and sever disability in patiens hands. The first standard treatment is to use Cock-up splint. This study was done to compare therapeutic effects of long (With MP Joint restriction) and short (without mp Joint restriction) Cock-up splint patients with Carpal Tunnel Syndrome.

Materials and Methods: In this clinical trail study was done on 23 patients with mild and moderate Carpal Tunnel Syndrome in Shafa Yahyayian Hospital, Tehran, Iran. The diagnosis of Carpal Tunnel Syndrome in patients confirmed with electrodiagnostic method. In this study 23 Patients was treated with long & short cock-up splint in two groups. Group A (12 Patients) was treated by long Splint and group B (11) Patients was treated by short Splint for 4 weeks. Patients was evaluated by Semmes –Wein stein monofilaments, Two Point discrimination, Visual analog Scale (VAS), pinch and Grip Strength.

Results: Both types of splints appear to be effective in decreasing CTS symptoms but long Splint more beneficial than Short splint. The results of SWMS, 2PD, Pinch & grip Strength in group A had higher significant difference than group B. ($P < 0.05$). Two groups did not have significant difference in results of severity of pain according to VAS.

Conclusion: This study revealed that long Cock-up Splint in comparision with short Cock-up splint demonstrate high efficacy in improving the signs of Carpal Tunnel Syndrome.

Keywords: Carpal Tunnel Syndrome, Cock-up Splint, Neuropathy, Grip Strength, Pinch

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