

Efficacy of the Hegab Temporomandibular Joint Splint in Treating Patients Diagnosed with Dystonia with or Without Systemic Involvement: A Report of 14 Cases

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Abstract : Dystonia is a neurological motor disorder characterized by involuntary and uncontrollable muscle contractions, tension, twisting, and tremors. The aim of the present study was to analyze the improvement in dystonic contractions in patients with dystonia following the use of a Hegab temporomandibular joint splint (HTS). The Fahn-Marsden Dystonia Movement Scale (DMS) and Disability Scale were used in the current study to evaluate dystonia. An HTS with a thickness ranging from 4 to 6 mm was used to treat the patients enrolled in the study. The final sample comprised 14 patients (10 female and four male) with mean (range) ages of 35.64 (18 to 55) years. Pre-treatment DMS ranged from 6.5 to 57 mean (SD) 18.21 (13.38). At the end of the study, DMS ranged from 0 to 15 mean (SD) 3.14 (3.86). Statistical analysis of the differences between pre-treatment and post-treatment DMS showed a significant decrease in DMS at the end of the treatment period ($p = 0.0001$). Regarding the disability scale, the pre-treatment disability scale ranged from 7 to 18 mean (SD) 9.46 (3.02). At the end of the study, DMS ranged from 0 to 3 mean (SD) 1.46 (1.13). There was a statistically highly significant decrease in the Disability Scale at the end of the treatment period (p -value 0.0001). This study suggests that the HTS can be considered an effective treatment modality for dystonia, as it significantly decreases both the DMS and the Disability scale.

Keywords : HTS, dystonia, DMS, disability scale

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