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Providing Solutions for Complex Dental Problems

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A Randomized Cross Over Study Comparing the Efficacy of Two Mandibular Advancement Appliances in the Treatment of Mild-Moderate Obstructive Sleep Apnea

Al-Dharrab A.

Cranio. 2016 Nov 24:1-6

The purpose of this study was to compare efficacy, side effects, patient compliance, and preference between two types of custom-made mandibular advancement appliances (MAAs) in the treatment of patients with mild to moderate obstructive sleep apnea (OSA). This prospective, randomized, crossover study of 12 patients with mild to moderate OSA compared a titratable and a non-titratable MAA. Each patient was fitted with both appliances in a random order with a washout period of two weeks. Efficacy, side effects, compliance, and preference were evaluated by a questionnaire. All patients underwent overnight home sleep recordings prior to and after the use of each appliance in order to objectively assess sleep quality in terms of the apnea and hypopnea index (AHI), snoring frequency and oxygen desaturation index.

Treatment successes (relief of symptoms and/or reduction of AHI to <10/h) were reported with both types of appliances. No compliance failure was reported, and in most patients, the side effects were mild, and improved with time. Both types of oral appliances were effective treatments for patients with mild to moderate OSA, with fewer side effects and higher patient satisfaction.