

Oral appliance therapy improves symptoms in obstructive sleep apnea: A randomised, controlled trial

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The aim of this study was to evaluate the effect of a mandibular advancement splint (MAS) on daytime sleepiness and a range of other symptoms in obstructive sleep apnea (OSA). Using a randomized crossover design, patients received 4 weeks of treatment with MAS and a control device (inactive oral appliance), with an intervening 1- week washout. At the end of each treatment period, patients were reassessed by questionnaire, polysomnography, and multiple sleep latency test. Fifty-nine men and 14 women with a mean (\pm SD) age of 48 ± 11 years and proven OSA experienced a significantly improved mean (\pm SEM) sleep latency on the multiple sleep latency test (10.3 ± 0.5 versus 9.1 ± 0.5 minutes, $p = 0.01$) and Epworth sleepiness scale score (7 ± 1 versus 9 ± 1 , $p < 0.0001$) with the MAS compared with the control device after 4 weeks. The proportion of patients with normal subjective sleepiness was significantly higher with the MAS than with the control device (82 versus 62%, $p < 0.01$), but this was not so for objective sleepiness (48 versus 34%, $p = 0.08$). Other OSA symptoms were controlled in significantly more patients with the MAS than with the control device. **MAS therapy improves a range of symptoms associated with OSA..**