



Physician Fact Sheet Courtesy of: David Binder, DDS

Oral Appliance Therapy and Failed UPPP

Uvulopalatopharyngoplasty effectively negates the use of a CPAP because there is no longer any seal in the pharyngeal area to prevent loss of pressurized air through the oral cavity.

QuickFacts:

1. Oral appliances that move the mandible to a forward position during sleep are an effective therapy to control OSA after unsuccessful UPPP.
2. Dentists should receive special training and education in order to be qualified to deliver, titrate and manage these appliances and their side effects.

Millman RP et al. The efficacy of oral appliances in the treatment of persistent sleep apnea after uvulopalatopharyngoplasty.

In: Chest (1998 Apr) 113(4):992-6

Twenty-four patients who failed uvulopalatopharyngoplasty (UPPP) for obstructive sleep apnea (OSA) had an adjustable oral (Herbst) appliance made to treat the persistent apnea. Six patients discontinued the device prior to sleep evaluation. Eighteen patients had polysomnographic evaluations at baseline, post-UPPP, and with the Herbst appliance in place. The apnea-hypopnea index baseline (AHI) and arterial oxygen saturation (SaO₂) nadir were 42.3+/-6.1 and 83.6+/-1.8%, respectively. There was no significant change in either parameter with surgery. With the oral appliance, the AHI fell to 15.3+/-4.4 ($p < \text{or} = 0.01$) and the SaO₂ nadir increased to 87.9+/-1.2% ($p < \text{or} = 0.05$). Ten of the patients had control of the OSA with the Herbst appliance with a fall in the AHI to < 10 . There were, in addition, two partial responders as defined by an AHI of < 20 and a $> 50\%$ fall in AHI compared with baseline and post-UPPP values. All but one of the responders and partial responders had complete resolution of subjective symptoms of daytime sleepiness with the appliance.

An adjustable oral appliance appears to be an effective mode of therapy to control OSA after an unsuccessful UPPP.