

Dr. James E. Metz

Featured Sleep Literature Article

The Metz Center for Sleep Dentistry | 1271 E. Broad St. | Columbus, OH 43205 | 614.252.4444 | www.themetzcenter.com

On behalf of Dr. James E. Metz and The Metz Sleep Center, I regularly review literature for pertinent information pertaining to sleep-disordered breathing. As relevant information is found, we would like to share it you! We hope this information will be helpful in your daily practice.

Sincerely, Dr. Mickey Harrison

I am passing along an article discussing the ability to effectively treat elderly patients with mandibular advancement devices and one utilizing drug-induced sleep endoscopy (DISE) to predict treatment response for severe OSA with mandibular advancement.

1) Treatment of elderly patients with snoring and obstructive sleep apnea using a mandibular advancement device

Marklund M, Franklin KA
Sleep Breath, Published online 02 May 2014:1-3

A Swedish group sought to evaluate oral appliance therapy as a viable option for elderly sleep apnea patients. Extracting data from two previous studies, they had an overall patient pool of 630 people; 56 were over 65 years of age, and 80% (45) continued treatment at the one year follow-up. Out of the remaining 574 individuals that were younger than 65 years of age, 74% (426) continued treatment at the one year follow-up. Thirty-four elderly patients and 243 younger subjects were re-examined with the oral appliance in situ. Both groups demonstrated a similar reduction in the AHI (20.9 to 7.2 mean in the younger group; 22.3 to 10.1 mean in the elderly group). It was concluded that oral appliance therapy is an effective option for those OSA patients older than 65 years, provided that they have adequate dental health to support an OA and sufficient dexterity to maintain oral hygiene and use of the device.

2) Videoendoscopic diagnosis for predicting the response to oral appliance therapy in severe obstructive sleep apnea

Sasao Y, Nohara K, Okuno K, Nakamura Y, Sakai T,
Sleep Breath, 2014;18:809-15

A Japanese group evaluated videoendoscopy as a method to determine response to oral appliance therapy in individuals with severe OSA. They examined 36 patients (27 males and 9 females) that had a diagnosis of severe obstructive sleep apnea following laboratory polysomnography. They utilized a nasoendoscope while each person was horizontal and breathing through their nose; alterations in the airway at the level of the velopharynx and oro/hypopharynx were noted with mandibular advancement. The MADs increased the oro/hypopharynx in all patients; the velopharynx widened in 29 out of 36 individuals. Those with an improved velopharynx had an AHI reduction of 79.8% with oral appliance therapy, versus a 40.6% decrease in AHI in those without velopharyngeal changes. They noted two types of widening in the velopharynx: the “all-round” type, which is circumferential improvement in the anteroposterior-lateral directions; and the “lateral dominant” type, with changes mainly in the lateral aspects. There was no appreciable difference in the AHI reduction between the two types. Therefore, in severe apneics, it may be beneficial to utilize an endoscopy procedure to visualize the impact of mandibular advancement in the retropalatal airway space.