

Sleep-related breathing disorders

0020

Mandibular Advancement Devices usage in Patients with Obstructive Sleep Apnea intolerant continuous positive airway pressure treatment

*Monika Wojda¹, Jolanta Kostrzewa-Janicka¹, Przemysław Bieleń², Piotr Jurkowski¹, Rafał Wojda³,
Elżbieta Mierzwińska-Nastalska¹*

¹*Medical University of Warsaw, Department of prosthodontics, warsaw, Poland*

²*hospital, pneumology, warsaw, Poland*

³*Medical University of Warsaw, , Warsaw, Poland*

Obstructive sleep apnea (OSA) is defined as episodes of upper airway obstruction occurring during sleep. In the OSA conservative treatment the method of choice is the use of devices that produce continuous positive airway pressure (CPAP). In patients with mild to moderate form of OSA intraoral mandibular advancement devices (MAD) are recommended.

The aim of the study was to evaluate the therapeutic efficacy of MAD in OSA patients intolerant CPAP.

The study material comprised the subjects selected from 30 patients with OSA who had been CPAP intolerant. All patients underwent a 3-fold polysomnographic (PSG) examination: before treatment, with MAD and CPAP. Patients completed the Epworth Sleepiness Scale (ESS) questionnaire twice.

The analysis of PSG records made before and after treatment with MAD and CPAP revealed positive changes in the assessed parameters as compared to the initial state. More positive values of actually all parameters were recorded in PSG examination in patients during CPAP application compared to MAD treatment.

Based on the statistical analyses, employing Student's t test, Sign and Signed Rank, it may be concluded that MAD treatment produced statistically significant positive changes in the observed parameters: the number of obstructive apneas (Apnea/Hypapnea Index, AHI), duration of snoring and ESS.

Within the limits of the study it may be concluded that the use of MAD can provide the sufficient treatment for OSA in whom CPAP therapy fails.