

**EXPERIENCES WITH SEMIADJUSTABLE FORM OF MANDIBULAR
ADVANCEMENT ORAL APPLIANCES**

Zoltan Szakacs, Peter Koves, and Gusztav Klenk,

(1) Sleep Disorder Center of Military Hospital,(2) Stomatological Institute of Medical University
Budapest, Hungary

Introduction: As an alternative of the positive airway pressure therapy many kinds of oral Appliances (OA) have been developed. The mandibular advancement devices known to be the most Widely applied form of OA. This form can be divided into adjustable, semi-adjustable and non Adjustable groups. Since the semi-adjustable group offered expectedly the most advantageous Cost beneficial effects, we chose one type of this group (the TheraSnore=TS) to obtain experiences in this special field of OSA treatment.

Methods: As a result of a two level selection process 65 patients (51 Males,14 Females, mean age 46±9), (35 snorers, 26 mild OSAS and 4 moderate OSAS patients) entered the OA fitting including stomatological assessment, first fitting of OA, adaptation period and the final fitting. This combined protocol was completed some newly developed simple tests (mandibular, and tongue mobility test, measurement of the mandibular gum border height, relation between mandibular joint tension and snoring heaviness relation) in order to improve the adaptation process for the patients making it more individually. The changes of clinical status were monitored by means of subjective scales, clinical status, and four to eight channel polygraphy.

Results: In all habitual snorers we could reach total stop of snoring and almost entire ceasing of Daytime sleepiness / tiredness. The best result were obtained in case of patients with snoring depending on body position. In 22 OSAS patients the AHI decreased more than 50%. In 14 mild sleepiness / tiredness proved to be independent of the severity of AHI in OSAS patients. We found its cessation in all OSAS patients. Despite the good results obtained in the above complaints and symptoms we could get only a moderate relief of hypertony and cardiac arrythmias.

Conclusion: One year long experience enables us to conclude as follows: **1.** This kind of OA Proved to be highly effective and well-tolerable tool for habitual snorers and mild to moderate OSAS (and UARS) patients even from cost- beneficial point of view. **2.** However its effectiveness considerably depends on keeping the extract rules of protocol including our newly developed tests focusing upon the individual features. **3.** TS consequently alleviated daytime sleepiness and severity of snoring, but did not appear to be so effective in the relief of cardiovascular symptoms. **4.** The management system needed for TS seems to be adaptable to the organization of our health care system.

References:

American Sleep Disorders Association Standards of Practice Committee. Practice parameters for Treatment of snoring and obstructive sleep apnea with oral appliances. Sleep, 1995, 18:511-3.
Schmidt-Nowara W. W., Meade T. E. and Marvin B.H.: Treatment of Snoring and obstructive Sleep Apnea with a Dental Orthosis. Chest, 1991, 1378-1385.