



PRELIMINAR RESULTS OF ORAL APLIANCE DEVICE IN MILD TO MODERATE OBSTRUCTIVE SLEEP APNEA SYNDROME

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INTRODUCTION: The first line treatment of Obstructive Sleep Apne-Hyponea Syndrome (OSAHS) is CPAP. Oral appliances are a useful therapeutic alternative, but its efficacy can varies between different studies, with approximately a mean efficiency of 52%, if we define therapeutic success as a final AHI of < 5. To evaluate the efficacy of oral appliance (Orthoapnea®) in patients with mild to moderate OSAHS.

MATERIALS and METHODS: We evaluated the quality of sleep (Pittsburgh), somnolence (Epworth Sleepiness scale (ESS), subjective snore (visual analogue snore scale (VASS), Snore Outcome Survey (SOS), Spouse/Bed Partner Survey (SBPS), and sleep parameters with conventional nocturnal Video-Polysomnography (V-PSG) before and after oral appliance treatment.

RESULTS: We studied 25 patients 72% male 28% female with a mean age $50,6 \pm 10,3$, mean body mass index (BMI) $27,6 \pm 2,8$, and mean RDI $16,8 \pm 6,3$. We obtain statistical differences in ESS, VASS, Pittsburgh, SOS and SBPS, N1, Arousal, Snore index, respiratory effort related to arousal, hypopnea, obstructive apnea, and $ODI > 3\%$. There is statistically significant improvement in: global RDI(-11,6) with RDI < 5 in 68%, Supine RDI(-22,5) with RDI < 5 in 55,6, non-supine RDI(-7,3) RDI < 5 in 78,9% and NREM-RDI(- 10,8) with RDI < 5 in 80%. No significant improvement were observed in REM- RDI(-7,7) with RDI < 5 in 53,3%. The improvement of the RDI did not have correlation with the age weight, and time in postural position.

CONCLUSION: Oral appliances are an effective treatment for mild to moderate OSAHS, with improvement of both, subjective and objective sleep parameters.

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