PRELIMINARY RESULTS OF ORAL APPLIANCE DEVICE IN MILD TO MODERATE OBSTRUCTIVE SLEEP APNEA SYNDROME

Presenting Author: Alex Ferre (Spain)

Ferre A, Vila J, Gallardo E, Perello E, Romero O, Sampol G

INTRODUCTION: The first line treatment of Obstructive Sleep Apnea-Hypopnea Syndrome (OSAHS) is CPAP. Oral appliances are a useful therapeutic alternative, but its efficacy can vary 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±10.3, mean body mass index (BMI) 27.6±2.8, and mean RDI 16.8±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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