ORAL APPLIANCE: A MULTIDISCIPLINARY APPROACH INVOLVING 62 PATIENTS AFFECTED BY MILD TO SEVERE OSAS

INTRODUCTION Mandibular advancement devices (MAD) are an effective treatment for mild to moderate OSAS and can be used as an alternative therapy in severe OSAS, when patients refuse C-PAP or surgical treatment. Prevalent retroglossal obstruction and low nasal resistance have been reported as predictors of good treatment response. The objective of this study was to investigate if a multidisciplinary approach in patient selection, including the evaluation of sites of obstruction, increases the percentage of therapeutic response to oral appliance therapy. MATERIAL AND METHODS: 62 patients affected by OSAS were recruited after a multidisciplinary evaluation by an otorhinolaryngologist and an orthodontist. Inclusion criteria were prevalent retroglossal obstruction and low nasal resistance. Exclusion criteria were dental, periodontal and TMJ functional controindications. A custom made mandibular advancing oral appliance (TAP) was used. Initial therapeutical protrusion was designed with a George Gauge bite fork, with 5 mm of anterior vertical opening and initial advancement was the 60-70% on maximal protrusion.. The device was incrementally titrated to the maximal comfortable limit of advancement over a 4-8 week period. After 4 months from the end of titration a nocturnal polygraphy was performed to determine treatment outcome and a t-test was used to analyze differences between BMI, AHI, ODI, min O2 Sat from baseline to follow-up. A P value < 0.05 was considered significant. RESULTS There was no significant change in the BMI. AHI, ODI and min O2 Sat improved significantly. 52% of the patients reached an AHI<5 and 77% of reached an AHI<10. CONCLUSION Our results showed a more positive effect than those reported in previous reviews of the literature. This suggests that an integrated approach in patient selection can improve oral appliance treatment response predictability.