

## Mandibular advancement device efficacy as a therapeutic alternative treatment in patients with OSA and CPAP intolerance after 3 years of follow up

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**INTRODUCTION** Obstructive Sleep Apnea (OSA) is a major health problem.

40% of patients on CPAP treatment have poor compliance.

**Mandibular advancement device (MAD) is a therapeutic alternative**

### OBJETIVE

Assess the **efficacy** of MAD measured by the apnea-hypopnea index (AHI) in patients with OSA and CPAP intolerance after 3 years of follow-up

### METHODS

- Descriptive study of patients diagnosed of OSA in the Sleep Unit of a tertiary hospital (2018 – 2022)
- A respiratory polygraphy was performed at baseline, at 3 months and after 3 years

### RESULTS



Figure1- The mean initial AHI was 24/h (SD: 15), at 3 months there was a mean AHI of 11.9/h (SD: 10) and at 3 years 11.4/h (SD: 7), resulting in a significant decrease both at 3 months and 3 years after the start of treatment ( $p < 0.005$ )

- 62 patients:  $55 \pm 11.6$  years, 72% males
- 31 patients (50%) persisted with MAD after 3 years
- Daytime sleepiness measured by the **Epworth scale (ESS)** and change in quality of life measured by the **Quebec questionnaire (QSQ)** had a statistically significant decrease at 3 months and 3 years

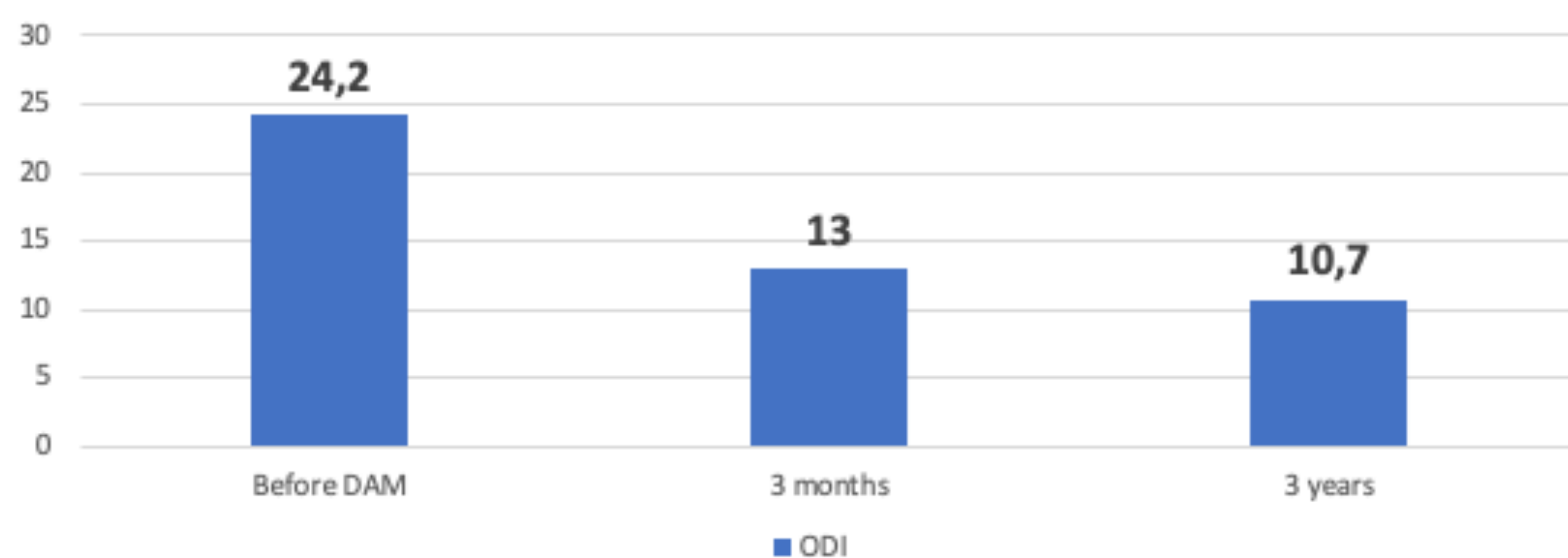


Figure2- Similar improvement in the oxygen desaturation index (ODI) was observed; Baseline ODI: 24.2/h (SD: 22), ODI at 3 months: 13/h (SD 9.9) and ODI at 3 years: 10.7 (SD 6.5), with statistically significant improvement at 3 months ( $p < 0.005$ ) and 3 years ( $p = 0.013$ )

### CONCLUSION

MAD is an **adequate alternative therapy** in patients with OSA with intolerance to CPAP, observing an adequate control of the disease in the short and long term in those patients who maintain the treatment