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Oral appliances: treatment of Obstructive Sleep Apnea Syndrome

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Aim

To prove that oral appliances can represent a valid treatment in specific cases of Severe Obstructive Sleep Apnea Syndrome (OSAS), when Continous Positive Arway Pressure (CPAP) is rejected by patient.

Materials and methods

A 63-year-old male patient, with Body Mass Index of 26.1, showed an history of repeated episodes of day-time sleepiness, severe snoring and suspicious sleep apnea episodes. He was subjected to a Drug Induced Sedation Endoscopy (DISE). Results showed a predominantly retro-lingual obstruction of the respiratory upper airway. Patient was subjected to polysomnography (P1) and the diagnosis was of severe positional OSAS. The patient couldn't bear the CPAP and was treated with a ***Mandibular Advancement Device*** (***MAD***, Fig. 1-2). After two years the control polysomnography (P2) was carried out. Data obtained in P1 and P2 were compared (Table 1).

Fig. 1

Fig. 2

Fig. 1-2. (1) Clinical case; **(2)** Mandibular Advancement Device (MAD)

Results

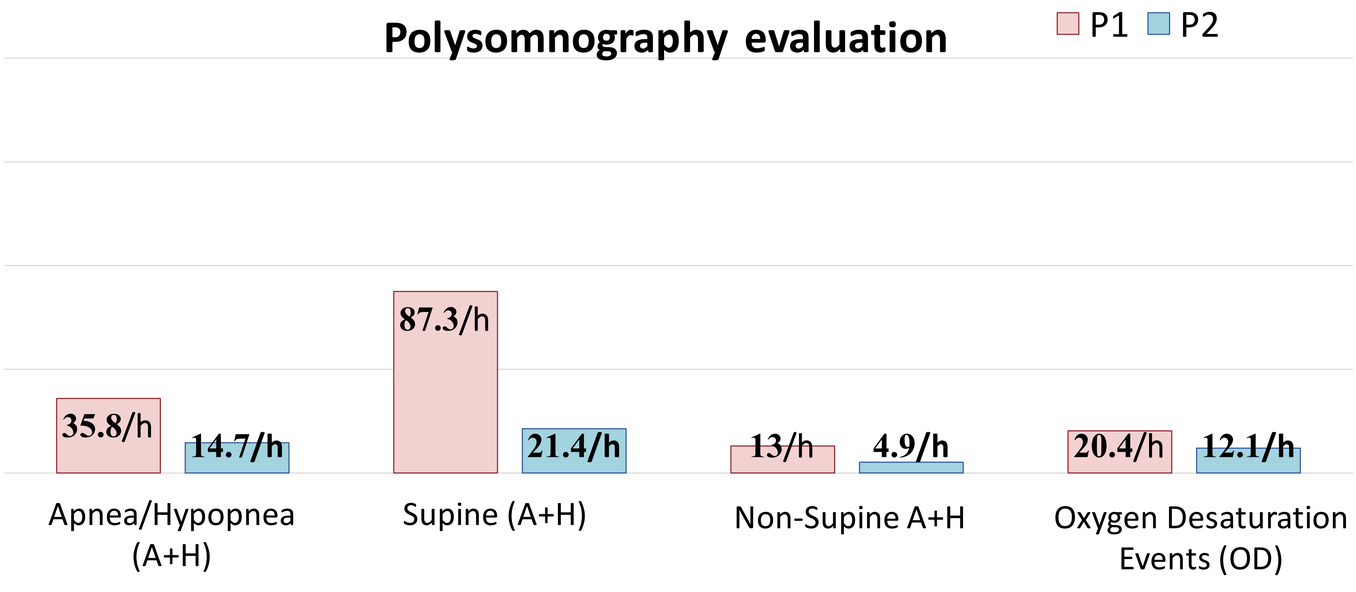

Table 1. Comparison between polysomnography before (P1) and after (P2) the treatment with MAD.

Conclusion

After two years of MAD treatment, AHI was reduced by 58.9%, while AHI in supine position was reduced by 75.5%, with a complete remission of symptoms. Therefore, MAD can be used successfully in severe positional OSAS, when CPAP is not tolerated by patient.

References

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