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SAS : consequences and treatement

About 45 Cases of Application of SOMNOSNORE Mandibular Advancement Devices in Snoring Treatment

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Introduction

The mandibular advancement devices used today in France are the appliances with an ajustment system which allows to adapt the mandibular propulsion to the patient's symptomatology. However, this system has the disadvantage of taking space in the mouth. My experience over 500 mandibular advancement devices in treatment of SAS or snoring shows that snoring disappears since the first titration.
The titration is the most important act in the realization of a mandibular advancement device. A good initial titration will guarantee good effectiveness and will ensure the patient's comfort, which will encourage him to wear it. In addition, it will reduce the number of control consultations, and thus, will save the practitioner's and his patient's time.

Objective

The purpose of this study is to determine whether, in snoring, a good initial titration may prevent us from using titratable mandibular advancement devices mm/mm, which would simplify and reduce their size to improve patient confort.

Patients and Methods

Single-Center Prospective Study

Inclusion Criteria
AHI < 5 or Epworth < 5
Good dental health
Refusal to any surgery
Minimal active propulsion 6mm

Exclusion Criteria
Doubt on temporomandibular joints
Psychic disorders
Periodontitis or poor dental status
Small mouth opening

Results

The study included **45 cases of Somnosnor treatment** since November 2014 till August 2015

Demographic data:

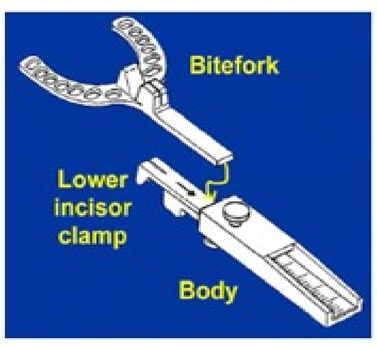
25 men and 20 women
mean age: 43 years [24-72]
Average propulsion (70% of MAP): 5 mm

Type of oral appliance:

The mandibular advancement device (MAD) Somnosnor manufactured by the laboratory Somnomed was used for this study; it is identical to the MAD Somnodent but without control jack, on the contrary, this oral appliance comes with one upper gutter and two lower gutters: the first one, with the desired titration, and the second one, with a supplementary step of 20%of the first one.
This MAD has the advantage of being very retentive: its gutters are rigid and complete, that is to saythat it takes well all the dental block and therefore reduces the risk of dental migration. Finally, its mode of action is retention, that is to say, it prevents the mandible from tipping backward due to the presence of a hold, resulting in an oral closing movement during sleep and improves the outcome of snoring.

Titration:

The initial titration was at 70% of the maximum active propulsion (MAP). Measuring the titration was performed with a George Gauge. This easy to use tool allows the most accurate measuring of necessary propulsion, and it is realized exactly in the position required by the recording range. This tool allows the patient to know the position that the mandible will take during sleep. Then, in the same time, it is possible to adapt the propulsion to the patient comfort and particularly to cope with the discomfort at the level of temporomandibular joints.



Within included 45 patients:

1 patient left the study due to joint pain
38 patients were satisfied immediately
2 patients had an excessive propulsion, it had to be reduced
1 patient had an incomplete result despite a second adjustment without any possibility for further propulsion because of large tonsils
2 patients passed to the second gutter
1 patient needed an intermediate gutter

Discussion and Conclusion

Between 44 patients who completed the study, 43 subjects had stopped snoring. The use of the mandibular advancement device SOMNOSNORE allows to acheive the complete result on snoring. This oral appliance is easy to produce, and, if the initial titration is well done, the result is immediate and the follow up is easier.
In future, the oral appliances with an integrated control system could probably be replaced by less bulky mandibular advancement devices with preset and easily interchangeable gutters to fit the patient's symptomatology.
I think that, in future, what has been shown in this study on snoring could be made for SAS. The titration of oral appliances would be performed by changing gutters.

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