

This physician will prescribe the MAS if deemed necessary. A dentist with an advanced training in dental sleep medicine will build the MAS and will be responsible for follow-up visits in collaboration with the referring physician. After making the adequate impressions, the MAS is placed in the mouth, and instructions are given. Several visits for adjustments will take place within the first year.

After three to four months, when symptoms have usually subsided, your dentist will refer you back to the specialized physician for a sleep test to make sure that the MAS is working effectively. If needed, the MAS could be further advanced.

Beware of the appliances sold over the counter or on the internet that are self-adjustable or so called "Boil and Bite". These appliances could harm your oral health by causing gum diseases and/or teeth displacement. These changes could be irreversible and necessitate an orthodontic treatment to correct the problem.



Furthermore, these appliances are far less efficient than the custom made devices adjusted by your dentist. It is a health issue. By consulting with specialized physicians and specially trained dentists, you increase your chances to improve and maintain an optimal health status. A good day always starts with a good night sleep.

## Sweet Dreams...

Société Canadienne  
du Sommeil



Canadian Sleep  
Society

## Dental Appliances in the Treatment of Obstructive Sleep Apnea

ORAL APPLIANCES

POSITIVE EFFECTS OF MAS

SIDE EFFECTS OF MAS

CLINICAL PROTOCOL

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## DENTAL APPLIANCES IN THE TREATMENT OF OBSTRUCTIVE SLEEP APNEA

### Oral Appliances

Mandibular advancement splints (MAS) constitute the vast majority of oral appliances to treat sleep apnea.

### Recommendation

Oral appliances are recognized and recommended as the first line of therapy for simple snoring (without apnea), or for light to moderate obstructive sleep apnea, or as an alternative treatment in moderate to severe cases intolerant or non-compliant to continuous positive airway pressure (C.P.A.P) treatment.

### Mode of Action

The MAS improves and increases the airflow by stabilizing the mandible forward and downward, indirectly pulling the soft palate and the tongue in the same direction, thus, increasing the pharyngeal airway volume tridimensionally. Pharyngeal muscle tone is increased, therefore maintaining the airway open preventing its collapse.

### Efficacy of MAS

Many studies conducted recently have proven the MAS efficacy. They are most effective when recommended as the first line of therapy achieving 94% improvement in patients with a light apnea index. Of course, effectiveness varies from person to person due to factors such as: gender, obesity, age, degree of severity, site of obstruction (nose, pharynx, etc.), and cranial facial anatomy.

### Tolerance of MAS

Tolerance of a treatment and compliance are very important; the better they are, the longer lasting the successful treatment will be. Patients having a better tolerance to MAS treatment are usually less obese, with a light to moderate apnea index.

### Positive Effects of MAS

MAS are known to decrease day/night sleep apnea symptoms such as:

- Apnea/hypopnea index
- Daytime sleepiness
- Snoring
- High blood pressure
- Neuro-behavioural side effects of apnea: memory loss, concentration, attention problems

By reducing these symptoms, the quality of sleep and the quality of life are improved.

### Side Effects of MAS

As for all treatments, side effects exist with MAS. Most side effects are minor and transient, but could include:

- Dental pain
- Muscle pain
- Joint sensitivity
- Small occlusal changes

Patients should consult their dentist regularly for adjustments so that side effects do not become chronic and affect their comfort, occlusion, or tolerance to treatment.

### Clinical Protocol

The diagnosis should absolutely be given by a physician with advanced training in sleep who will usually prescribe a sleep test before establishing a diagnosis.



## ADDITIONAL PATIENT BROCHURES BY SLEEP EXPERTS

- **Dental Appliances**
- **Sleep in Aging**
- **Sleep Bruxism**
- **Drowsy Driving**
- **Insomnia**
- **Human Circadian Rhythms**
- **Strategies for Night Shift Workers**
- **Narcolepsy and Cataplexy**
- **Dreams and Nightmares**
- **Obstructive Sleep Apnea**
- **Patient Guide to Sleep Studies**
- **Positional Therapy for Obstructive Sleep Apnea**
- **Children**
- **Restless Legs Syndrome**
- **Sleep and Post-Traumatic Stress Disorder**
- **Normal Sleep**

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The Canadian Sleep Society is a national organization committed to improving sleep for all Canadians through: support for research, promotion of high quality clinical care, education of professionals and the public, and advocacy for sleep and sleep disorders medicine.

For more information visit [www.canadiansleepsociety.com](http://www.canadiansleepsociety.com) or email [info@css-scs.ca](mailto:info@css-scs.ca)

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