

FACT SHEET: ORAL APPLIANCES

KEY FACTS

- Oral appliances reduce snoring, decrease sleepiness (improved Epworth Sleepiness Scale) with no difference noted between CPAP and oral appliances), and lead to an improved quality of life.
- Prior to electing any form of treatment, patients should undergo an initial evaluation with a board certified sleep specialist and undergo an overnight PSG sleep study.

Q: WHAT ARE ORAL APPLIANCES?

A: Custom-made FDA- approved oral appliances are a viable treatment option for patients with primary snoring and mild to moderate obstructive sleep apnea (OSA). The oral appliance fits in the mouth while you sleep, much like a sports mouthguard or an orthodontic retainer. Oral appliances help to prevent the tongue and soft tissues in the back of the throat from collapsing during sleep, thus keeping the airway open and promoting adequate oxygenation in your blood. Oral appliances may be used alone or in combination with other treatments for sleep-related breathing disorders, such as positive airway pressure (PAP), weight management, or surgery.

Custom-made FDA- approved oral appliances are proven to be more effective than over-the-counter devices. Over-the-counter devices are not recommended as a screening tool or as a therapeutic option¹.

Oral appliance therapy can take several weeks or months to complete. This includes examination by the dental professional, evaluation to determine the most appropriate oral appliance, fitting of the appliance, and titrating and adjusting the appliance to the therapeutic treatment position.

Follow-up care is an essential step in the treatment of snoring and OSA with Oral Appliance Therapy (OAT). The follow-up phase of care will include the assessment of:

- a. the treatment of your sleep disorder
- b. the condition of your appliance
- c. your physical response to your appliance
- d. the comfort and effectiveness of the appliance

Q: HOW DOES AN ORAL APPLIANCE WORK?

A: Custom made oral appliances reposition the tongue and lower jaw forward during sleep to maintain an open airway. Dentists trained in dental sleep medicine know how to select, fabricate, fit, and adjust these devices, which look like mouth guards, to help patients breathe freely during sleep. Follow-up visits and post-adjustment sleep studies help dentists determine if oral appliance therapy is effectively treating the patient's sleep apnea.

Q: WHO SHOULD USE AN ORAL APPLIANCE?

A: OAT is indicated for mild to moderate OSA patients if they prefer it to Continuous Positive Airway Pressure (CPAP), the standard treatment therapy; cannot tolerate CPAP; or are unable to use positional therapy or weight loss to control their apnea. Oral appliances are also recommended for severe OSA patients if they cannot tolerate CPAP. Patients with severe OSA should always try CPAP before considering OAT.



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Q: WHAT IS THE LONG-TERM EFFECTIVENESS OF ORAL APPLIANCES?

A: Studies show a continued long-term benefit to treatment with oral appliances. Many patients (about 90%) use their appliance longer and have their symptoms controlled better when the data is compared to patients using PAP therapy (46-83t2).

Q: WHAT IS HYBRID OR COMBINATION THERAPY?

A: In some patients, the airway is substantially compromised; therefore the use of hybrid or combination therapy may be the most successful treatment. Combination or hybrid therapy includes the use of a sleep oral appliance in combination with PAP therapy. A combination therapy of CPAP assisted by a sleep oral appliance enables the patient to splint the airway open by use of their oral appliance in addition to the use of lower levels of air pressure from the CPAP through nasal pillows or a facemask to ensure adequate levels of oxygen saturation.

Q: WHAT ARE THE ADVANTAGES OF OAT?

A: Some advantages include:

- Oral appliances are comfortable and easy to wear. Most people find that it only takes a couple of weeks to become acclimated to wearing the appliance.
- Oral appliances are small and convenient making them easy to carry when traveling.
- Treatment with oral appliances is reversible and non-invasive.

- No masks or straps involved.
- Silent operation vs. CPAP therapy.

Q: WHAT ARE THE COMMON DISADVANTAGES OF USING OAT?

A: Some disadvantages include:

- Soreness of the jaw, teeth and mouth.
- Long-term use will likely cause permanent changes in the position of the teeth and jaw.
- OAT cannot be used in patients with pre-existing conditions such as Temporomandibular Joint Disorder (TMJ).
- Patients must be checked regularly and visit their dentist often to ensure that the device is performing as intended and that the patient is using it properly.

Q: WHAT IS THE MOST COMMONLY USED TYPE OF SLEEP ORAL APPLIANCE?

A: Mandibular repositioning appliances reposition and maintain the lower jaw in a protruded position during sleep. The appliance opens the airway by moving the tongue forward and through stimulating muscle activity in the tongue, making it more rigid. The appliance also serves to hold the lower jaw and other affiliated structures in a stable position to prevent the mouth from opening, thus allowing the airway to remain open while sleeping.

FURTHER READING

1. American Academy of Dental Sleep Medicine website: www.aadsm.org
2. American Academy of Sleep Medicine website: www.aasmnet.org