

# Oral Appliance Therapy For Obstructive Sleep Apnea (OSA)

EDIC CLINICAL DENTISTRY ADVISOR | 2020 UPDATE

## Five Recommended Screening Questions

### 1. What prevents you from getting a good night's sleep?

- Insomnia
- Restless Legs Syndrome
- Circadian rhythm disorders
- Sleep disordered breathing
- Poor sleep hygiene or environmental problems
- Substance use or abuse

### 2. Are you excessively sleepy during the day?

- Insufficient sleep/sleep deprivation
- Most sleep disorders
- Mood disorders
- Substance use or abuse

### 3. How many hours do you normally sleep?

- Insufficient sleep
- Poor sleep hygiene
- Insomnia
- Circadian rhythm disorder (shift work)

### 4. Have you been told that you snore or stop breathing?

- Sleep disordered breathing (obstructive sleep apnea)
- Snoring

### 5. What medications (and other substances) do you take?

- Antidepressants
- Anti-seizure medications
- Narcotics
- Cardiac medications
- Alcohol
- Caffeine

### Common Symptoms

- Loud snoring
- Witnessed apnea episodes
- Excessive daytime sleepiness
- Gastro-esophageal reflux syndrome
- Erectile dysfunction

### Common Anatomical Features <sup>8-12</sup>

- Retro positioning of the tongue
- the dimension of pharyngeal lumen
- the elongation of the uvula and soft palatal drape
- a narrow maxillary arch with a deep palatal vault
- mandibular retrognathism
- inferiorly positioned hyoid bone
- tonsillar hypertrophy
- deviated septum
- nasal polyps

# Oral Appliance Therapy For Obstructive Sleep Apnea (OSA)

EDIC CLINICAL DENTISTRY ADVISOR | 2020 UPDATE

## Commonly Asked Questions Regarding OSA

The updated practice parameters from the American Academy of Sleep Medicine recommend the use of oral appliances for mild to moderate obstructive sleep apnea and in patients with severe obstructive sleep apnea who do not tolerate CPAP therapy.<sup>7</sup> Current guidelines also recommend face-to-face evaluation with a sleep physician, as part of diagnostic process, which must take place, and a failure of the patient to be able to accept CPAP therapy prior to initiation of oral appliance therapy.

### 1. How is OSA diagnosed?

The American Academy of Sleep Medicine requires that diagnosis be made only by a sleep physician. The gold standard is an overnight polysomnograph which is an attended overnight sleep study done in the sleep lab. **Dentists cannot diagnose sleep apnea but can screen for them and refer to the PCP or a sleep physician for the diagnosis.**

### 2. If I think a patient has snoring or sleep apnea can I go directly to the use of a sleep appliance?

No. You still need to follow the step above.

### 3. Can I use a portable sleep monitor for the diagnosis of sleep apnea?

Portable sleep monitors are not yet completely accepted for full assessment of sleep disorders but can be used as a screen to test for sleep apnea with a follow-up by a PSG and sleep physician diagnose to verify before the diagnosis can be officially made.

### 4. Who reads the sleep studies?

Recorded by a certified PSG technologist, read and interpreted by a certified sleep physician.

### 5. Once I insert the Oral Appliance, what is my follow-up?

Once you insert an Oral Appliance, you need to follow-up with either a portable sleep monitor or another PSG to assure the effectiveness of the jaw position when you think you have reached your end point in the jaw protrusion. In either case, follow-up is a must and patient's report is not enough to verify that your treatment is succeeding.

### 6. Do I need to send the patient back to the physician even though the treatment is appliance therapy?

Yes. The PCP or the sleep physician must see the patient for follow-up care.

### 7. Do I need to have a six month and a one year follow-up visit with the patient?

Yes. This is a must so that you can continue to monitor the appliances effectiveness and either avoid or manage common side effects.

7. Kushida CA, Morgenthaler TI, Littner MR, Alessi CA, Bailey D, Coleman J, Jr., et al. Practice parameters for the treatment of snoring and Obstructive Sleep Apnea with oral appliances: an update for 2005. *Sleep* 2006;29(2):240-3. 8. Berger RM. Mandibular Retrognathia and sleep apnea. *JAMA* 1982;247(16):2234. 9. Bucchieri A, Mastrangelo C, Stella R, Poladas EG. [Cephalometric evaluation of hyoid bone position in patients with obstructive sleep apnea]. *Minerva Stomatol* 2004;53(1-2):33-9. 10. Chang SJ, Chae KY. Obstructive sleep apnea syndrome in children: Epidemiology, pathophysiology, diagnosis and sequelae. *Korean J Pediatr* 2010;53(10):863-71. 11. Ishii I, Godoy A, Ishman SL, Gourin CG, Ishii M. The nasal obstruction symptom evaluation survey as a screening tool for obstructive sleep apnea. *Arch Otolaryngol Head Neck Surg* 2011;137(2):119-23. 12. Mekhitarian Neto L, Fava AS, Lopes HC, Stamm A. Epidemiological analysis of structural alterations of the nasal cavity associated with obstructive sleep apnea syndrome (OSA). *Braz J Otorhinolaryngol* 2005;71(4):464-6.