

Oral Appliance Therapy for OSA: The Facts

Oral appliance therapy (OAT) is a proven treatment for obstructive sleep apnea (OSA) and should be presented as an option to patients seeking therapy for OSA.

OAT is effective

Studies have demonstrated that OAT effectively treats OSA through reduction in apnea-hypopnea index (AHI) and respiratory disturbance index in patients.^{1,2} Studies have demonstrated similar effectiveness between OAT and CPAP, even among patients with moderate-to-severe OSA.³

OAT provides the same short and long-term health benefits as CPAP

- Reduced risk of cardiovascular mortality⁴
- Reduction in blood pressure⁵
- Improved sleep quality⁶

- Reduced depression⁷
- Improved driving performance³
- Better quality of life⁸

Reduced daytime sleepiness⁶

Patients comply with OAT

CPAP is often prescribed as the first-line therapy for those with OSA; however, about 50% of patients will become non-compliant with their treatment after one year.⁹ Studies have indicated that up to 93% of patients are compliant with OAT.¹⁰

Patients prefer OAT

As many as 81% of patients prefer OAT to CPAP¹¹ because it is effective, easy to use, easy to transport, quiet, comfortable, noninvasive, and less obtrusive.

Qualified dentists (not DME companies) manage OAT

Once prescribed by a physician, oral appliances are provided by a qualified dentist, who is trained in the delivery of oral appliances, as well as the nuances of coordinating treatment for a medical disorder with the diagnosing physician. If patients have a problem with their oral appliance or experience side effects, they simply call their qualified dentist.

Medical insurance covers OAT

Medicare and most major commercial insurers cover OAT.

Begin referring to qualified dentists

OSA should only be treated by qualified dentists who have the necessary training to provide optimal care and know how to communicate with both physicians and patients. Verify that your local dentist is qualified to provide oral appliance therapy on the <u>Find an AADSM Dentist</u> web page at aadsm.org, by calling 630-686-9875, or emailing info@aadsm.org.

References:

- 1. Gotsopoulos H, Chen C, Qian J, Cistulli PA. Oral appliance therapy improves symptoms in obstructive sleep apnea: a randomized, controlled trial. Am J Respir Crit Care Med. 2002;166(5):743-748. doi:10.1164/rccm.200203-208OC
- 2. Andrén A, Hedberg P, Walker-Engström M-L, Wahlén P, Tegelberg Å. Effects of treatment with oral appliance on 24-h blood pressure in patients with obstructive sleep apnea and hypertension: a randomized clinical trial. Sleep Breath. 2013;17(2):705-712. doi:10.1007/s11325-012-0746-7
- 3. Phillips CL, Grunstein RR, Darendeliler MA, et al. Health outcomes of continuous positive airway pressure versus oral appliance treatment for obstructive sleep apnea. Am J Respir Crit Care Med. 2013;187(8):879-887. doi:10.1164/rccm.201212-2223OC
- Anandam A, Patil M, Akinnusi M, Jaoude P, El-Solh AA. Cardiovascular mortality in obstructive sleep apnoea treated with continuous positive airway pressure or oral appliance: An observational study. Respirology. 2013;18(8):1184-1190. doi:10.1111/resp.12140
- 5. Gotsopoulos H, Kelly JJ, Cistulli PA. Oral appliance therapy reduces blood pressure in obstructive sleep apnea: a randomized, controlled trial. Sleep. 2004;27(5):934-941. doi:10.1093/sleep/27.5.934
- 6. Mehta A, Qian J, Petocz P, Darendeliler MA, Cistulli PA. A randomized, controlled study of a mandibular advancement splint for obstructive sleep apnea. Am J Respir Crit Care Med. 2001;163(6):1457-1461. doi:10.1164/ajrccm.163.6.2004213
- Naismith SL, Winter VR, Hickie IB, Cistulli PA. Effect of oral appliance therapy on neurobehavioral functioning in obstructive sleep apnea: a randomized controlled trial. J Clin Sleep Med. 2005;1(4):374-380. http://jcsm.aasm.org/Articles/010409.pdf. Accessed July 11, 2018.
- Marklund M, Verbraecken J, Randerath W. Non-CPAP therapies in obstructive sleep apnoea: Mandibular advancement device therapy. Eur Respir J. 2012;39(5):1241-1247. doi:10.1183/09031936.00144711
- 9. Stepnowsky CJ, Moore PJ. Nasal CPAP treatment for obstructive sleep apnea: Developing a new perspective on dosing strategies and compliance. J Psychosom Res. 2003;54(6):599-605. doi:10.1016/S0022-3999(03)00038-2
- 10. Vanderveken OM, Dieltjens M, Wouters K, De Backer WA, Van De Heyning PH, Braem MJ. Objective measurement of compliance dur-ing oral appliance therapy for sleepdisordered breathing. Thorax. 2013;68(1):91-96. doi:10.1136/thoraxjnl-2012-201900
- 11. Tan YK, L'Estrange PR, Luo YM, et al. Mandibular advancement splints and continuous positive airway pressure in patients with obstructive sleep apnoea: A randomized cross-over trial. Eur J Orthod. 2002;24(3):239-249. doi:10.1093/ejo/24.3.239

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