

# sleeplab

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## NAVIGATING THE STARK LAW

OUR EXHAUSTED  
**VETERANS**

INFECTION SURVEILLANCE  
AND CONTROL IN THE  
**SLEEP CENTER**



# 5 Common Oral Appliance Therapy Misconceptions

By David Schwartz, DDS

The June 2021 recall notification of positive airway pressure (PAP) machines by Philips has had a significant impact on sleep centers and their patients. While machine repair and replacement efforts are underway, high demand amid supply shortages requires clinicians to adjust both treatment protocols for obstructive sleep apnea (OSA) and the management of patient expectations. As sleep professionals continue to navigate the recall and its subsequent fallout into 2022, sleep centers are turning to oral appliance therapy (OAT) as a proven and effective treatment for OSA patients.

## UNDERSTANDING OAT FOR OSA

The American Academy of Sleep Medicine (AASM) and the American Academy of Dental Sleep Medicine (AADSM) clinical practice guidelines recommend oral appliances be considered as a viable treatment method for patients with OSA who are either in-

tolerant of PAP therapy or prefer an alternate therapy. Despite numerous studies demonstrating OAT is a proven, effective treatment option for OSA, common misconceptions about oral appliances still exist.

It's vital the sleep community includes OAT in its OSA treatment toolbox, leveraging the most current information about appliance therapy protocols and overall clinical effectiveness. This requires an examination of common OAT myths and an understanding of how multidisciplinary management can aid the treatment of OSA patients, including the involvement of qualified dentists to provide custom-fit, FDA-approved oral appliances based on patient needs.

## DISPELLING OAT MYTHS

**Myth 1: Oral appliance therapy isn't as effective as PAP therapy.**

OAT has similar effectiveness to PAP therapy and, favorably,



stronger rates of patient compliance.<sup>1</sup> While PAP therapy has demonstrated greater efficacy in laboratory settings, in “real world” home settings patients are more compliant with OAT usage, resulting in greater overall effectiveness.<sup>2</sup> OAT reduces sleepiness and improves quality of life. In simulated driving tests, patients using oral appliances perform equally compared to patients using PAP. Overall, OAT is comparable to PAP when it comes to patient satisfaction, compliance, and therapy effectiveness.

### **Myth 2: Oral appliance therapy should not be used for treating severe OSA.**

OAT is quite effective in managing severe OSA on its own or, in some cases, in combination with PAP. Researchers found similar health outcomes between PAP and OAT used among patients with moderate to severe sleep apnea.<sup>1</sup> When combining OAT and PAP, PAP pressure may be lowered substantially as the oral appliance increases upper airway patency.<sup>3,4</sup> Both lower pressure and increased comfort may improve compliance with the therapy, thereby improving therapeutic effectiveness<sup>5</sup> regardless of the degree of OSA severity.

### **Myth 3: Oral appliance therapy can be provided by any dentist.**

OAT — and specifically the customized appliance — should only be provided by a qualified dentist who has appropriate training in the field of dental sleep medicine.<sup>6,7</sup> When a dentist without the appropriate education and training attempts to treat a patient’s sleep apnea, it can lead to inappropriate patient care and physician-dentist communication failures, resulting in poor health outcomes.<sup>8</sup> Organizations such as the American Dental Association (ADA) recommend dentists routinely update their training to treat patients under current OAT guidelines.<sup>9</sup> To support patients and help guide multidisciplinary management of OSA, the AADSM maintains a database of qualified dentists. These designated dentists have been trained to collaborate with various physicians on the patient sleep team. This collaboration includes communicating with physicians throughout treatment and referring patients back to specific caregivers to verify treatment efficacy.

### **Myth 4: Oral appliance therapy causes extreme movement of teeth.**

The side effects of OAT are reported to be mild or nonexistent. For most patients, apnea treatment is imperative, so the intensity of any OSA side effects is far less than the risks of not using an oral appliance. Furthermore, qualified dentists are trained to mitigate these mild side effects. When they do occur, most dental interventions are palliative, entailing slight modifications of the oral appliance or no active therapy whatsoever.<sup>10,11</sup>

### **Myth 5: Oral appliances are more expensive than PAP.**

OAT can be less expensive than PAP therapy. PAP machine maintenance requires electricity and patients to replace masks, filters, and tubes; conduct regular cleanings, and fill the humidifier chambers with distilled water. The continuous costs of supplies, effort, and time for CPAP maintenance add up over a five-year period. Oral

appliances, on the other hand, do not require supplies for maintenance and are easy to clean, store and maintain.

## **COLLABORATING ON OSA TREATMENT WITH OAT**

Qualified dentists are trained to screen and detect signs of sleep apnea and collect relevant medical histories from their patients. In most states, qualified dentists can order or distribute home sleep apnea tests (HSATs) and provide patients with relevant instructions. This can streamline the sleep test process and minimize the chance of inaccurate data collection. These qualified dentists are trained to develop mutually agreed upon criteria with their local sleep center to determine which patients are candidates for HSATs. The patient has a consultation with a sleep center to review and interpret the HSAT raw data and receives a diagnosis upon evaluation. Sleep center clinicians present all appropriate treatment options to all patients and refer those who prefer OAT over PAP to a qualified dentist for treatment. Additionally, patients who cannot tolerate PAP or want to integrate both therapy methods are also referred for OAT.

Qualified dentists who provide OAT are trained to collaborate with sleep care team members to determine what metrics should be considered when finding the optimal therapeutic position for the oral appliance. Qualified dentists also consider patient history and preferences through this process. They then evaluate the health and stability of every tooth; the angle, alignment and contours of each tooth; the shape of the arch; and how the lower and upper jaws align to select a device that has the appropriate materials and retention to ensure that the appliance effectively keeps the jaw in position throughout the night to treat the OSA.

Furthermore, qualified dentists also consider how to maximize comfort and minimize side effects to ensure OAT compliance, working with the patient on appropriate appliance positioning and referring the patient back to sleep center clinicians to verify treatment efficacy. They also follow up with patients regularly throughout the first year and annually thereafter to ensure the oral appliance is in good condition, manage any side effects, and assess OAT’s impact on the patient’s condition.

Throughout the OSA treatment process, qualified dentists are trained to keep the sleep center informed. During a time when sleep centers are being asked to do more with less, qualified dentists have become valuable members of the sleep team. ■

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# Our Exhausted Veterans

By Nathan Costiuc, RN, APRN, FNP-BC

If you've ever worked with veterans, you likely quickly realized they know more about disordered sleep than the general population. And with good reason—veterans are exposed to uncommon challenges that can make normal sleep an elusive dream. Working with these sleep-deprived veterans in my clinic means having to work with a set of particular idiosyncrasies in a diagnos-

tically complex context. Here are a few things I've learned along the way.

## CAPITALIZING ON AWARENESS

Whereas my days in primary care saw me combatting widespread underdiagnosis for chronic conditions like sleep apnea, I found quite