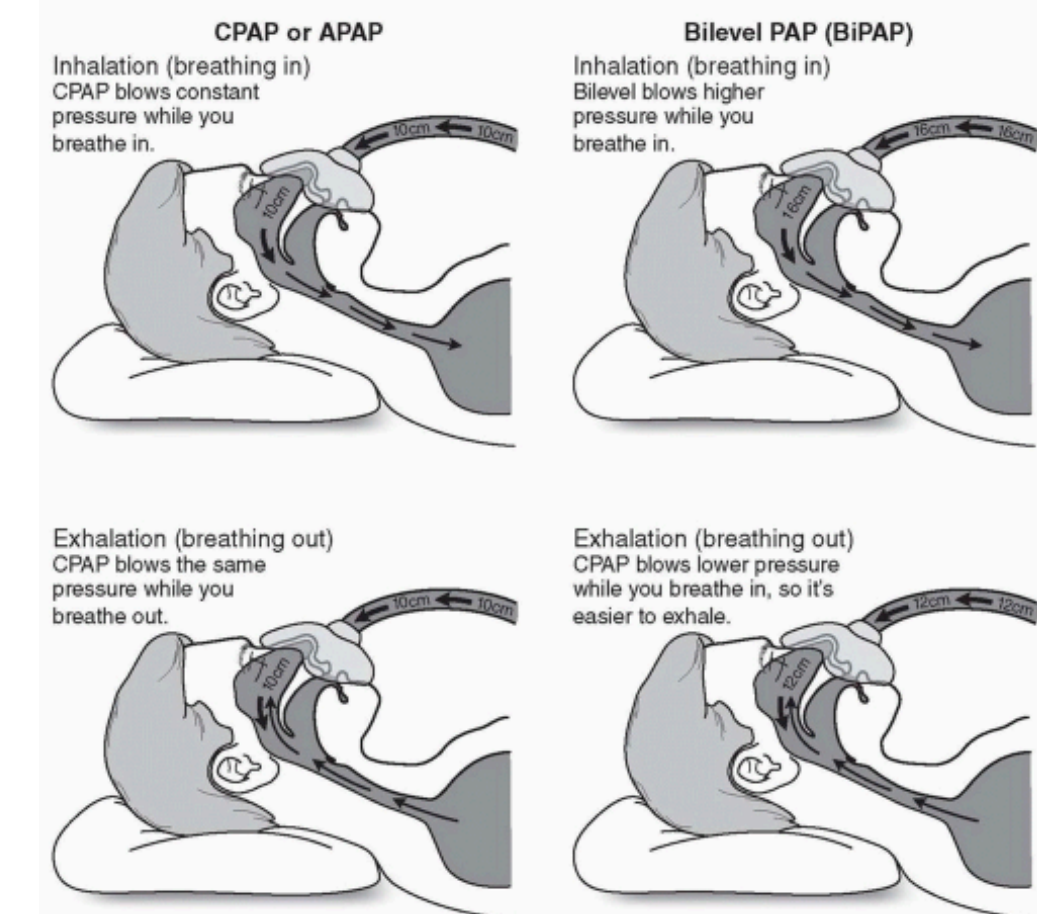


WHAT IS OBSTRUCTIVE SLEEP APNEA?

Sleep apnea is a sleep disorder where breathing stops temporarily or fully. There are two different types of sleep apnea – central and obstructive sleep apnea. Central sleep apnea is defined as the absence of drive to breathe during sleep. This is caused by the lack of communication between the brain and respiratory muscles. Obstructive sleep apnea (OSA) occurs when the upper airway muscles relax, causing pharyngeal collapse. This collapse partially or fully blocks the airway. Therefore, there is little to no exchange of oxygen reaching the lungs or brain during sleep.

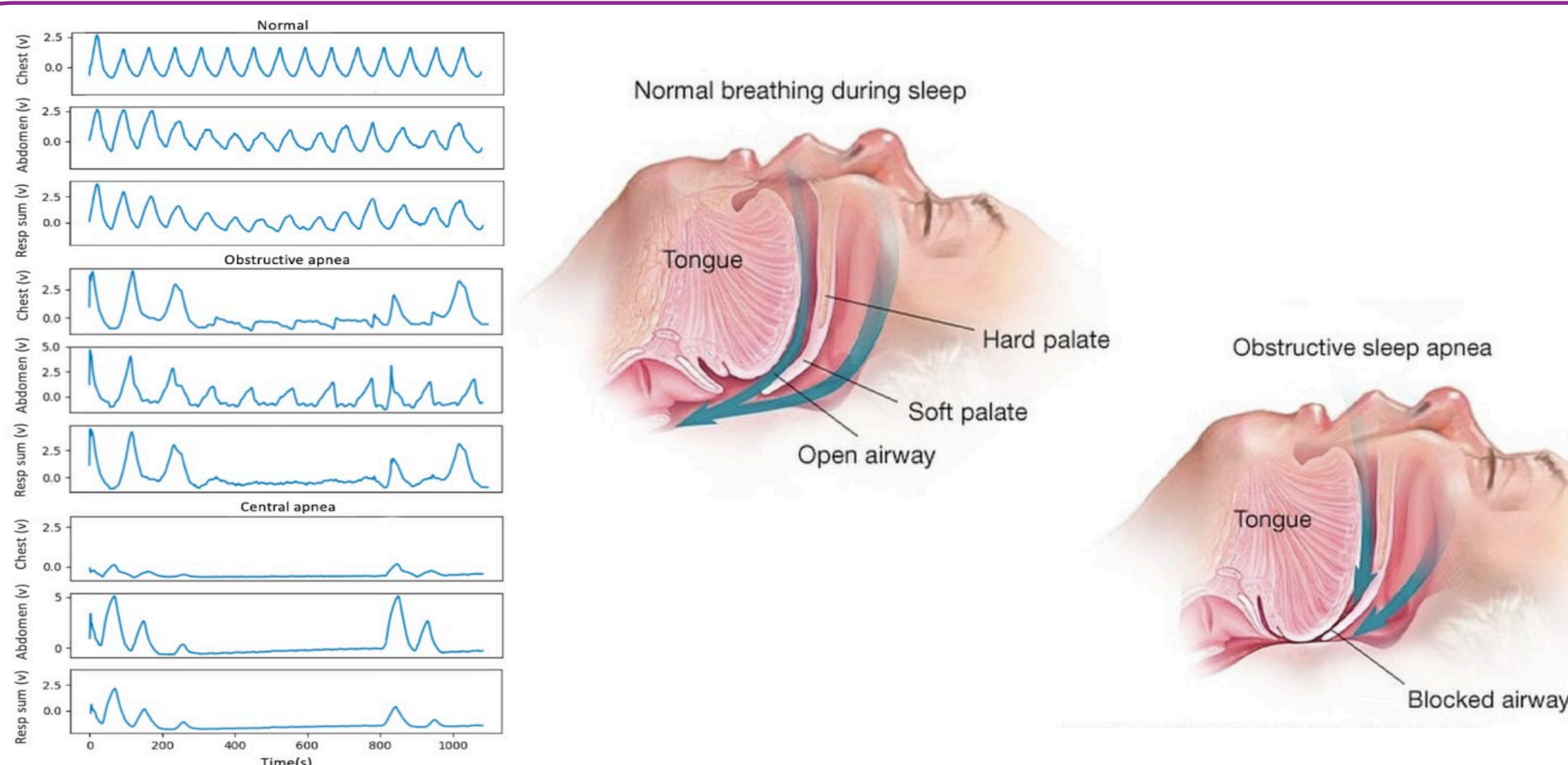
UPDATED GUIDELINES AND DEVICES

- The following guidelines and practice recommendations were updated in 2019 by board-certified sleep medicine specialists and experts with proficiency in treating patients with positive airway pressure (PAP) therapy.
- Treatment and therapy should be diagnosed with objective testing. Objective testing includes home sleep apnea test or in-laboratory sleep testing (polysomnography).
- Once a patient is properly diagnosed, sufficient follow-up, such as troubleshooting and monitoring treatment, should continue after the **initiation** and **during** PAP therapy.



- The reason for this is OSA is a chronic disease that settles rarely. However, patients who make considerable losses in weight or undergo corrective surgery can see success in reducing or eliminating symptoms of the disease.
- Using the GRADE methodology process, the task force assigned four strong recommendations:
- Recommendation 1:** Clinicians should treat OSA in adults with excessive sleepiness compared to no therapy.
- Recommendation 2:** Clinicians should treat patients either with automatic PAP at home or in-laboratory PAP titration in adults with multiple underlying conditions.
- Recommendation 3:** For ongoing treatment, clinicians should either use automatic PAP or continuous PAP in adults with OSA.
- Recommendation 4:** Before starting PAP therapy, patients should be strongly educated.
- As dentists, we are not qualified to diagnose patients. However, we can help with evaluating and screening patients for future referrals to sleep medicine physicians.
- With awaiting objective at-home sleep test results, dentists can suggest oral appliance therapy to improve the patency of the upper airway.
- If patients are diagnosed with OSA and prescribed an oral appliance, it is recommended a qualified dentist treat the patient with a **custom, titratable appliance over non-custom oral devices**.
- Lastly, if patients are not diagnosed with OSA but want to decrease or eliminate snoring, sleep physicians should recommend oral appliances instead of no therapy.

CENTRAL VS OBSTRUCTIVE SLEEP APNEA



SIGNS, SYMPTOMS, & ASSOCIATED CONDITIONS

SIGNS & SYMPTOMS	ASSOCIATED CONDITIONS
EXCESSIVE DAYTIME SLEEPINESS	OBESITY
FATIGUE	HYPERTENSION
IMPAIRED COGNITION	CORONARY ARTERY DISEASE
SNORING	HEART FAILURE
MORNING HEADACHES	ARRYTHMIAS
OBSERVED EPISODES OF NON-BREATHING	STROKE

QUESTIONNAIRES & MALLAMPATI SCORE

Epworth Sleepiness Scale

Name: _____ Today's date: _____
Your age (Yrs): _____ Your sex (Male = M, Female = F): _____

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?
This refers to your usual waking hours of life in recent times.
Even if you haven't done some of these things recently try to work out how they would have affected you.

Use the following scale to choose the most appropriate number for each situation:
0 = would never doze
1 = slight chance of dozing
2 = moderate chance of dozing
3 = high chance of dozing

It is important that you answer each question as best you can.

Situation	Chance of Dozing (0-3)
Sitting and reading	_____
Watching TV	_____
Sitting, inactive in a public place (e.g. a theatre or a meeting)	_____
As a passenger in a car for an hour without a break	_____
Lying down to rest in the afternoon when circumstances permit	_____
Sitting and talking to someone	_____
Sitting quietly after a lunch without alcohol	_____
In a car, while stopped for a few minutes in the traffic	_____

STOP

S	So you snore loudly (louder enough to be heard through closed doors or louder than talking)?	Yes	No
T	Do you often feel tired, fatigued or sleepy during the daytime?	Yes	No
O	Has anyone observed you stop breathing or choking or gasping during your sleep?	Yes	No
P	Do you have or are you being treated for high blood pressure?	Yes	No

Bang

B	BMI more than 35?	Yes	No
a	Age – over 50 years old?	Yes	No
n	Neck circumference – is it greater than 17" if you are a male or 16" if you are a female?	Yes	No
g	Gender – are you a male?	Yes	No

SUMMARY

- Board certified sleep physicians first diagnose patients with suspected sleep apnea either with an at-home test or in laboratory test.
- Positive airway pressure therapy is recommended when indicated and follow-up/maintenance is essential to keep associated conditions and signs/symptoms well controlled.
- Dentists play an important role in screening patients for identifying patients with OSA.
- Dentists can recommend and manage oral appliance therapy for patients with OSA and collaborate with their sleep physician.

WORKS CITED

- Patil SP, Ayappa IA, Caples SM, Kimoff RJ, Patel SR, Harrod CG. Treatment of Adult Obstructive Sleep Apnea with Positive Airway Pressure: An American Academy of Sleep Medicine Clinical Practice Guideline. *J Clin Sleep Med.* 2019 Feb 15;15(2):335-343. doi: 10.5664/jcsm.7640. PMID: 30736887; PMCID: PMC6374094.
- Patil SP, Ayappa IA, Caples SM, Kimoff RJ, Patel SR, Harrod CG. Treatment of Adult Obstructive Sleep Apnea With Positive Airway Pressure: An American Academy of Sleep Medicine Systematic Review, Meta-Analysis, and GRADE Assessment. *J Clin Sleep Med.* 2019 Feb 15;15(2):301-334. doi: 10.5664/jcsm.7638. PMID: 30736888; PMCID: PMC6374080.
- Mannarino, M. R., Di Filippo, F., & Pirro, M. (2012). Obstructive sleep apnea syndrome. *European Journal of Internal Medicine, 23*(7), 586–593. <https://doi.org/10.1016/j.ejim.2012.05.013>
- Quan SF, Schmidt-Nowara W. The Role of Dentists in the Diagnosis and Treatment of Obstructive Sleep Apnea: Consensus and Controversy. *J Clin Sleep Med.* 2017 Oct 15;13(10):1117-1119. doi: 10.5664/jcsm.6748. PMID: 28942761; PMCID: PMC5612624.
- Ramar K, Dort LC, Katz SG, Lettieri CJ, Harrod CG, Thomas SM, Chervin RD. Clinical Practice Guideline for the Treatment of Obstructive Sleep Apnea and Snoring with Oral Appliance Therapy: An Update for 2015. *J Clin Sleep Med.* 2015 Jul 15;11(7):773-827. doi: 10.5664/jcsm.4858. PMID: 26094920; PMCID: PMC4481062.
- Semelka M, Wilson J, Floyd R. Diagnosis and Treatment of Obstructive Sleep Apnea in Adults. *Am Fam Physician.* 2016 Sep 1;94(5):355-60. PMID: 27583421.

