



The Airway Series
What is Sleep Apnea?

Sleep apnea is a condition in which a person experiences one or more pauses in breath while sleeping. These pauses can last anywhere from seconds to minutes, and can occur as often as 30 times or more during just one hour of sleep. Obstructive sleep apnea (OSA) is caused by a collapse in the airway that may either constrict or close the airway completely. When the airway is blocked, the body's oxygen supply is decreased or eliminated altogether and overall blood oxygen levels will begin to drop. This signals the brain to disrupt sleep in order to re-open the airway, often experienced as a gasp, snort, or choke.

If the airway is constricted, but not completely closed, this will often manifest as snoring. Certainly very loud snoring can disrupt the sleep of spouses and partners, but even very mild snoring can decrease the amount of oxygen flow into the body and should not be considered benign until tested. Even children should be monitored for snoring during sleep. It is not normal or cute for a child to snore. Anyone who snores is actually experiencing a restricted airway during sleep that tends to only get worse as they age. If you do not have someone to tell you if you snore, try recording yourself during sleep, and look for other symptoms. Daytime sleepiness, recurring dreams of drowning or choking, and waking up gasping for air may all be indications of airway obstruction during sleep as well.

Know the Risks

The risks for people with obstructive sleep apnea can be quite serious. Left untreated, sleep apnea can increase the risk of:

- High blood pressure
- Irregular heartbeats
- Heart attack
- Stroke
- Obesity
- Diabetes
- And in the worst cases, heart failure

People suffering from sleep apnea also do not rest well due to repeated interruptions of the deeper levels of sleep. This lack of rest can increase a person's overall risk of work-related and driving accidents due to daytime sleepiness.

For more information please visit the National Heart, Lung, and Blood Institute.



It has also been observed that those with sleep apnea have a greater tendency to grind their teeth during sleep. Grinding the teeth helps to tighten the throat muscles, and is thought to be one of the body's attempts to keep the airway open. Over time, however, grinding will destroy the teeth and ultimately contributes to a smaller airway as the original height of the teeth is ground away.

Over the past two decades, great strides have been made in the diagnosis and treatment of obstructive sleep apnea. Once thought to be a condition restricted mostly to overweight men aged 50 and older, we now know that OSA can effect anyone of any age, gender, or weight, including children. In fact, several recent studies have shown up to a 30% increased incidence of OSA in children with ADHD, as well as improvements in behavior and attention after the apnea has been treated.

Successful treatment of mild to moderate sleep apnea and snoring is often accomplished with the use of a customized dental appliance that gently repositions the lower jaw during sleep and increases airway opening. Moderate to severe cases of sleep apnea often require the use of a CPAP (Continuous Positive Airway Pressure) machine to ensure that the airway remains fully open through the night. Many people use a CPAP machine in conjunction with a dental appliance to protect the teeth and allow for the use of the CPAP at a lower, more comfortable setting. In rare cases, surgery may also be recommended.

To view our entire resource library, please visit www.drmartharich.com.



Could You Have Sleep Apnea?

We all get sleepy during the day sometimes, but chronic daytime sleepiness combined with other symptoms may be an indication that you have sleep apnea or some other kind of sleep disorder. How likely are you to doze off or fall asleep in the following situations? Use the following scale to rate each situation:

0 = no chance of dozing, 1 = slight chance, 2 = moderate chance, 3 = high chance

- Sitting and reading _____
- Sitting inactive in a public place _____
- Lying down to rest in the afternoon _____
- In a car, while stopped for a few minutes in traffic _____
- As a passenger in a car for an hour _____
- Sitting quietly after lunch (without alcohol) _____
- Watching TV _____
- Sitting and talking to someone _____

Add up your total score. If the number equals 10 or more, you are overly sleepy during the day. Talk to your doctor about your sleep quality and consider a sleep apnea screening to determine if constricted airway at night is contributing to the problem.

For more information on snoring and sleep apnea diagnosis and treatment, please visit the *Snoring and Sleep Apnea Treatment and Services* page on our website.



References:

National Heart, Lung, and Blood Institute: *What is Sleep Apnea?*

National Library of Medicine: *Is Obstructive Sleep Apnea Associated with ADHD?*

Sleep Journal: *How Many Children with ADHD Have Sleep Apnea or Periodic Leg Movements on Polysomnography?*