



Education Bulletin

The ASAA is a non-profit organization dedicated to reducing injury, disability and death from sleep apnea and to enhancing the well-being of those affected by this common disease.

TREATMENT OPTIONS FOR ADULTS WITH OBSTRUCTIVE SLEEP APNEA

There are different treatment options for obstructive sleep apnea (OSA). Which option is right for you depend upon the severity of your sleep apnea (which is determined from a sleep study), the physical structure of your upper airway, and other aspects of your medical history. The various options are listed below so that you can discuss them with your doctor. Only your doctor or sleep specialist can tell you which treatment option is best for you.

When thinking about treatment options, remember that with an obstructive apnea, there are physical blockages or obstructions in the airway during sleep. (In OSA, obstructions occur during sleep but not during waking hours partly because all muscles, including the muscles in the airway, relax during sleep.) Obstructions that cause breathing to stop completely for at least ten seconds are termed apneas. When breathing is substantially reduced for at least ten seconds, it is a hypopnea. Frequent apneas and hypopneas lead to numerous brief awakenings during sleep and to sleepiness during waking hours. Preventing apneas and hypopneas prevents the sleep fragmentation, so treatment reduces the sleepiness. (For simplicity, here “apneas” include hypopneas as well. For more on OSA, read the American Sleep Apnea Association brochure “Get the Facts about Sleep Apnea.”) All treatment options are intended to prevent obstructions from occurring, usually by widening the airway. Keep in mind the precise cause of obstruction is usually difficult to find, and many people have obstructions in more than place.

Positional therapy: Apneas tend to be worse when sleeping on the back (the supine position) as gravity makes it more likely for the tongue to fall back over the airway and/or for the airway muscles and other tissue (like the tonsils) to collapse and block the airway. Hence not sleeping on the back may reduce the number of apneas. To avoid the supine position, some people use homemade remedies, such as putting tennis balls in a tube sock and pinning the sock to the back of the nightshirt. Others purchase products such as a tube or cushion designed specifically to prevent supine sleeping. A number of companies have registered with the FDA pillows for snoring and mild sleep apnea; it is meant to position the neck so the airway is more likely to remain open. Positional alarms are also on the market: they are intended to prevent supine sleeping by making a noise when one begins to sleep on the back. However, they may disrupt sleep so much that the subsequent sleep fragmentation causes a concern.

One study found sleeping on the back but with the back elevated from the waist up may also reduce the collapsibility of the airway and therefore reduce the apneas. Foam wedges, not soft pillows that can actually push the chin towards the chest and worsen apnea, should be used.

Weight loss: Sleep apnea can be weight-related. Additional fat around the neck may make the airway narrower, making obstructions more likely to occur. For some overweight people, especially those with mild cases, losing weight can be an effective treatment. Or weight loss may reduce the severity of the sleep apnea. However, it may be hard to lose weight when you have untreated sleep apnea: you may be too tired to exercise and you may eat to stay awake. Also, it may take some time before the weight loss is achieved, so in light of the potential consequences of untreated OSA, using another treatment option while working towards the weight loss goal may be an option. Losing weight may also improve your health in other ways, but it is always advisable to talk to your doctor before beginning a weight-loss program.

American Sleep Apnea Association Education Bulletin

Remember that sleep apnea occurs in thin people as well; the airway can close during sleep for a number of reasons, not just excess weight.

Avoiding alcohol and other CNS depressants: Alcohol and medications that act as central nervous system (CNS) depressants—such as pain killers, sedatives, and muscle relaxants—can worsen sleep apnea by relaxing the airway muscles further and/or by reducing the respiratory drive and causing more apneas to occur. Hence avoiding alcohol and CNS depressants close to bedtime may be helpful. Ask your doctor or pharmacist if medications you take prescription or over-the-counter or herbal, affect your sleep apnea. The prescribed sleep apnea treatment may be adjusted to take into consideration the use of medications that are CNS depressants.

Oral appliances: Oral appliances, sometimes called dental appliances, are intended to treat apnea by keeping the airway open in one of three ways: by pushing the lower jaw forward (a mandibular advancement device or MAD), by preventing the tongue from falling back over the airway (a tongue-retaining device), or by combining both mechanisms. Oral appliances are typically more effective for people with mild sleep apnea and for non-obese people but can, for some, be effective for moderate and severe sleep apnea. The most common type of oral appliance, a MAD is often adjustable so that the dentist can move the jaw further or reduce the advancement as necessary. The goal is to find the most comfortable and effective position for the patient. On occasion oral appliances may worsen the apnea. Not all dentists have the necessary knowledge of sleep apnea, so if you wish to pursue this therapy, ask your sleep doctor to refer you to a dentist who is familiar with apnea and who works with oral appliances.

Surgery: The intention of surgery is to create a more open airway so obstructions are less likely to occur. There are several different surgical procedures with different effectiveness rates, and surgery can also sometimes worsen the apnea. In addition, there are also several non-surgical procedures that can remove excess or obstructive tissue or harden the soft palate by inserting three small polyester rods. For more about this treatment option, see the ASAA publication “Considering Surgery for OSA?”

Continuous Positive Airway Pressure (CPAP): CPAP works by gently blowing pressurized room air through the airway at a pressure high enough to keep the throat open. This pressurized air acts as a “splint.” The pressure is set according to the patient’s needs at a level that eliminates the apneas and hypopneas that cause awakenings and sleep fragmentation. Pressure that is too low will not be as effective in eliminating the apneas and hypopneas.

CPAP is the most effective method for treating obstructive sleep apnea. It can sometimes be hard to use, but any complaints about the comfort of the machine or mask can usually be addressed easily. Talk to your doctor or home care company representative about any discomfort you may have. For more information about different types of machines and masks, read the ASAA’s “Choosing a CPAP” or “Choosing a Mask and Headgear.”

Discuss with your doctor all of your options to find the one best for you. Which treatment you use is not important; being treated properly is.

Note: Combined treatment is best for some patients. For example, you may be able to use an oral appliance to lower the number of apnea with a CPAP machine at a lower pressure. Another possibility may be to undergo less extensive surgery, which may reduce the number of apneas, and then use an oral appliance or a CPAP machine at a lower pressure.

Because sleep apnea is a medical disorder, by law any device advertised to treat sleep apnea must have approval from the Food and Drug Administration to treat sleep apnea.

12-07