

Silence the Snoring

Is sleep apnea robbing you of rest?

By Jonathan Denby

Does your partner complain that you snore loudly? Or that you sometimes stop breathing at night? It might be sleep apnea. Here, Charles P. Kimmelman, M.D., an otolaryngologist and associate professor at Weill Cornell Medical College in New York City, explains sleep apnea's symptoms, diagnosis and treatment.



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What is sleep apnea?

“Sleep apnea is a condition in which, during the deeper phases of sleep, the muscles of the throat, base of the tongue and palate relax so much that the airway narrows,” says Dr. Kimmelman. “When we breathe in, a negative pressure is generated which sucks the walls of the throat together. Because people with sleep apnea have overly relaxed muscles in the throat, this pressure causes their airways to narrow until no air passes through. If there is a reduction of the airflow—but not a total absence—we refer to that as hypopnea.”

Due to its symptoms, sleep apnea is often confused with insomnia, although the two conditions are quite different. Sleep apnea is caused by physical factors: overly relaxed throat muscles, extra tissue around the throat due to obesity or the natural shape of a particular person's airway that restricts airflow. Insomnia has a number of possible origins, from psychological factors like stress, anxiety and depression, to a noisy bedroom, to such conditions as gastroesophageal reflux disease.

How many people in the United States suffer from it?

More than 12 million people in the United States suffer from obstructive sleep apnea, according to the National Heart, Lung and Blood Institute (NHLBI), one of the National Institutes of Health.

Who is at risk?

“Almost anybody, from children to people in old age,” says Dr. Kimmelman. “But generally, snoring, which is one of the symptoms of apnea, is more common in people over thirty. So people who are most at risk of developing this condition are usually in middle age.” According to the NHLBI, one out of 25 middle-aged men and one out of 50 middle-aged women have sleep apnea. Those most at risk are adults who snore loudly, are overweight, have high blood pressure, have a narrowed airway due to either their structure or allergic congestion, or have a family history of sleep apnea.

What are the health risks for untreated sleep apnea?

“There are many,” says Dr. Kimmelman. “Most significantly, it can affect the cardiovascular system—blood pressure, the rhythm of the heartbeat, the strength of the heart.”

But if oxygen is reduced, all organs will eventually start to malfunction. The brain is especially affected by lack of sleep. “We’re not sure what goes on in the brain when we sleep,” he says. “What does sleep do? Why do we need to sleep? We have ideas but no firm proof of exactly why, but we do know that if you don’t get the proper amount and distribution of sleep, then the brain malfunctions and you can’t think as clearly. Lack of sleep may cause behavioral changes, especially in children, who may start to act as though they have attention deficit hyperactivity disorder, and sometimes be misdiagnosed with it. But it may be that they have very big tonsils blocking their breathing.” Lack of sleep has even been tied to women being unable to conceive. “So, sleep apnea can have far-ranging effects.”

What are the symptoms?

“In the very early stages, it’s just snoring,” says Dr. Kimmelman. “Now, that’s bad enough, because if there’s a bed partner, then you are affecting that person. Many times someone will come see us just because of that. But once things start to get worse in terms of the hypopnoea and apnea, then the major symptom is feeling tired all the time, even falling asleep at the wrong time—which is really bad if you’re driving a car, for example. Your attention to detail and skills that require significant attention can suffer. You don’t have the mental clarity that you need.”

People with sleep apnea or hypopnoea usually can tell they have a problem, Dr. Kimmelman says. They feel constantly tired and “it’s almost like they stayed up all night, every night.” Because these symptoms may be related to another sleep disorder, such as insomnia, those who suffer sleep problems should consult a sleep specialist to determine the exact causes of their problem.

What kind of doctor or specialist treats sleep apnea?

“There are different specialists that deal with it,” says Dr. Kimmelman. “I’m an otolaryngologist—an ear, nose and throat specialist—and of course we are very concerned about the airway, the breathing passages and the whole process of breathing. Other physicians who deal with apnea are sleep specialists. That’s a relatively new medical specialty, which is officially recognized now because sleep is such an important aspect of our health and because there are so many people with these sorts of problems.”

How is sleep apnea typically treated?

Treatment can start with losing weight. “One of the most common associated problems related to sleep apnea is obesity or weight gain,” Dr. Kimmelman says. “An increase in weight can lead to a collection of fat around the throat, which can cause the airway to narrow and disrupt sleep.” Going on a diet and exercising daily to lose weight can help reduce this fat around the throat and improve breathing. “Exercise is very important and very good for you in general, but especially with this condition,” says Dr. Kimmelman.

Along with lifestyle changes, a patient may try a mask-like device called a CPAP (for “continuous positive airway pressure”). “It is worn over the face and blows air into the nose and/or mouth, in order to inflate the loose segment from the nose to the voice box. It blows it up like a balloon to keep it from collapsing,” says Dr. Kimmelman.

The CPAP is not for everyone. “Going to sleep looking like an F-15 fighter pilot leaves a lot to be desired if you have a bed partner!” says Dr. Kimmelman. “Also, you are tethered to a tube that goes from the mask to a unit that pumps the air in.” Some people may, without knowing it, rip the device off during sleep. Children especially have problems tolerating the CPAP device, he notes.

As far as medications go, the only one that is used to treat the effects of sleep apnea is modafinil, which is taken during the day. “Modafinil does keep people awake and alert when they need to be,” says Dr. Kimmelman. “However, it doesn’t cure sleep apnea--but at least it takes the edge off their tiredness during the day.”

Although surgery can be used to open the airway, many surgical procedures have drawbacks and less than half of sufferers benefit, according to Dr. Kimmelman.

However, he notes, one effective surgical implant, the Pillar, stabilizes the soft palate during the deepest phases of sleep and prevents it from obstructing the airway: “The same principle is used in sailboats, where you reinforce a sail to keep it from fluttering around and to keep it stable. Essentially, the soft palette acts like a sail. During snoring, it flutters and contributes both to the sound and the apnea.” The Pillar procedure usually takes 25 to 30 minutes under general anesthesia. “The patient has virtually no discomfort,” Dr. Kimmelman says, “although the throat is a little sore for a few days, and there’s very little chance of complication. The majority of people—seventy percent—get enough improvement that they’re happy and they feel better.”

Visit Dr. Kimmelman’s website for more information
www.stopsnoringnewyork.com