

Snoring Can Indicate Treatable Sleep Condition

by PATTI NEIGHMOND



Interactive: Ever wondered if Richard Knox and Joe Paica snore? Or what their snores would sound like?

August 3, 2009

text size **A A A**

Larry Barsh is a man with a new mission. The retired dentist from New York City wants to help Americans recognize that they may have obstructive sleep apnea, a chronic condition among snorers that disrupts sleep. Dr. Barsh started a Web site, SnoringIsn'tSexy.com, to help educate patients and help dentists play a role in identifying patients with sleep apnea.

Barsh says the vast majority of people with apnea don't know they have the condition. Dentists are in a unique position to help patients who might suffer from sleep apnea, he says. Typically, dentists see patients more often than

physicians, at least two times a year for teeth cleaning.



Enlarge

iStockphoto.com

For an estimated 12 million Americans, disruptive snoring signals the condition obstructive sleep apnea.

At Risk

The National Institutes of Health estimates that more than 12 million American adults have obstructive sleep apnea. Among older Americans, the rate is especially high: at least one out of 10 over the age of 65 has it.

Doctors don't know exactly why sleep apnea occurs, but it is associated with obesity, aging and anatomy, says Dr. Clete Kushida, a neurologist and director of the Stanford Center for Human Sleep Research and president of the American Academy of Sleep Medicine.

The obstructed breathing can result from a variety of factors, such as a large tongue, a large uvula (that cone-shaped projection of tissue in the back of the throat) or a lot of large, crowded teeth. As muscles relax, which they do when people fall asleep — especially on their backs — the tongue muscles tend to pull back and block the airway.

Snoring And Apnea

Understanding Sleep

Learn more about what our sleep patterns say about our health.

What's Behind The Snore? Sagging, Floppy Tissue

How Aging Changes Sleep Patterns

Web Chat: Why We Snore And How To Stop It

[Sleep Apnea: Lessons From The Outback](#)

Snoring is a sign of apnea. Only about 5 to 10 percent of snorers actually have sleep apnea, says Barsh, but everyone who has the most common form of apnea — obstructive sleep apnea — snores. (People with central sleep apnea, caused by incorrect signals from the brain, may not snore.)

"Snoring is an indication of the possibility of a serious medical problem," he says, because sleep apnea is linked to heart disease, stroke, depression and diabetes.

Struggling For Air

During obstructive sleep apnea episodes, snoring patients become quiet for 10 seconds or more — and literally stop breathing. The silence is followed by choking or gagging sounds when the sleeper is partially aroused and breathing resumes. Finally, snoring resumes and the cycle starts over. This cycle can happen anywhere from five times an hour to

sometimes hundreds of times a night. Because people with sleep apnea partially awaken to resume breathing, their sleep is fragmented and they are sleepy in the daytime. The lack of

breathing also causes the oxygen level in the blood stream to fall, contributing to medical problems.

Treatments Differ With Severity

The gold standard of treatment for sleep apnea is called CPAP, which means continuous positive airway pressure. An air pump connected by a tube to a face mask, sort of like a vacuum cleaner in reverse, gently pushes air up through the nostrils and mouth into the upper airway, keeping it from collapsing.

But the CPAP can be loud and cumbersome, and many patients who could benefit from CPAP just don't use it. However, experts say, for those with *severe* apnea, it's the only effective treatment.

Surgical procedures can also help by removing excess tissue in the back of the airway or actually moving parts of the jaw or tongue forward. They're particularly effective with younger patients.



The Mouthguard

The third treatment option is an oral appliance, which looks much like a mouthguard used in sports or a dental retainer typically used after orthodontry.

"Research shows the oral appliance works to treat mild-to-moderate sleep apnea," says Kushida. Studies have been limited, but the appliances appear to not only treat apnea but also conditions associated with apnea, such as high blood pressure, he says.

Courtesy Dr. Mark Friedman
Oral appliances that reposition the tongue and mouth help some obstructive sleep apnea patients maintain regular nighttime breathing.

There are many brands of oral appliances, but all of them work basically the same way, says Dr. Mark Friedman, who specializes in treating snoring and sleep apnea in Encino, Calif., and worked as a clinical professor for over 25 years. He says the appliances work to keep the airway open and allow for comfortable breathing. They move parts in the mouth out of the way. They move the tongue forward by moving the jaw forward. So, the lower jaw juts forward a certain amount.

One Patient's Experience



Rani Stoddard is one of Friedman's patients. She is a nurse who describes her husband as a gem, since he put up with her loud snoring for years.

"He says, on a scale of one to ten, I was like a ten plus on snoring," Stoddard says. Today, she wears an oral appliance, "and now I'm like a two," she says. "You know, a little mild, delicate (snoring) in the beginning and then ... it's quiet!"

Stoddard can't speak highly enough about the oral appliance. "I'm a believer!" she says, adding that now, she "sleeps like a baby." She says the appliance is comfortable and she can even take a drink of water while wearing it.

Courtesy Rani Stoddard
Rani Stoddard found that an oral appliance drastically reduced her snoring and apnea.

Although most sleep apnea is initially diagnosed after a study is performed at a sleep center and a physician evaluates the study, apnea can also be measured at home to determine how well treatments are working. To do this, the patient wears a compact device on an armband with two finger-sensors attached. The device measures a number of respiratory functions, including the amount of oxygen getting into the blood. Friedman reports that Stoddard's apnea has been dramatically reduced as a result of the appliance.

Friedman says the oral appliance is at least 60 percent effective for most patients. "For some patients, it's 100 percent effective," he says.

The Role Of The Dentist

Barsh says screening in a dentist's office takes only a few minutes and a few pointed questions,

and dental hygienists can also be trained to screen for apnea. It involves asking whether patients suffer from high blood pressure, if their bed partner has ever observed them stopping breathing during the night, if they feel sleepy during the day and if they snore. A patient's neck size, particularly if it's large, can also be an indicator of apnea.

Friedman, a dentist who specializes in treating snoring and sleep apnea, also asks patients whether they are aware of dreaming during the night. Sometimes patients are confused about why a dentist would be asking such a question, he says.

"But people who don't dream often are not getting into REM sleep," says Friedman. If that's the case, he says, they're probably not getting good deep sleep either. And that, he says, can "lead me to have an inkling that the patient might have a sleep issue."

Since he started focusing on sleep disorders about six years ago, Friedman says the majority of patients with sleep problems are longtime patients. "You would be amazed at the number of people that we have diagnosed within our own practice," he says.

Special Training

Because a sleep-apnea appliance must be fitted precisely to the mouth, Friedman says it's important for a dentist trained in sleep medicine to fit the device. Dentists can take training at various academic centers, but the American Academy of Dental Sleep Medicine offers courses during its annual meetings.

Although there are many appliances advertised on the Internet and on TV, there are only about 60 FDA-approved devices. Of those, Friedman says, he considers only about six to be effective. And, Friedman says, if potential patients are interested in researching what types of oral appliances are available and most effective, the [Academy website](#) is a good place to start.

comments

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Recent First



R Danca (rdanca) wrote:

Based on my experience, a sleep study proves the truth in the saying that, if you go into a barbershop you're gonna come out with a haircut.

I've three times had sleep studies and each time, ta-dah!, the diagnosis was sleep apnea that could only be treated by CPAP. Hmm. Trying to sleep with that thing on makes me understand why waterboarding is torture. I felt like I was drowning or suffocating and did NOT sleep for more than 20 minutes or so before I panicked and yanked the thing away (same experience with both a mouth/nose mask and the funny-looking fat tube that sat under my nose).

I expect the people saying obesity is the cause are likely correct. Sigh. Still, I'd like to give the mouthguard a try. Thanks for the story.

August 6, 2009 9:29:00 PM PDT

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Ben Graef (Benny123) wrote:

Second disappointing article in a week from NPR (the first was the doctor malpractice article) As a sleep specialist, I was happy to learn NPR did a piece on OSA, then when I read it and listened, I was disappointed.

"Too many teeth" had to been taken out of context...no physician would say that. It sounds ridiculous.

Also, why knock on the device 90% of people use for OSA, cpap. There isnt even a comment in here that most people cant even use mandibular devices. They are ONLY for MILD apnea. Period. Stop saying Mild to Moderate, because the evidence is not there. It seems only

dentists are pushing them for all severities. Wasted opportunity to truly educate the masses on OSA.

August 4, 2009 1:39:08 PM PDT

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American Academy of Dental Sleep Medicine (AASDM) wrote:

The American Academy of Sleep Medicine has published practice parameters, confirming that Oral Appliance Therapy is a safe and effective treatment option for patients with mild to moderate Obstructive Sleep Apnea who cannot tolerate or comply with CPAP, the standard treatment therapy.

August 4, 2009 10:21:48 AM PDT

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Laurence Barsh (libarshdmd) wrote:

Interviewers get information from many sources when they publish a final article. I did not say CPAP was noisy nor did I say obstructive sleep apnea was caused by "too many teeth in the back of throat" as the reporter said in the audio interview. TMJ dysfunction can be a problem but can be easily managed by a dentist with the proper training. CPAP is the primary treatment for sleep apnea but about 50% of patients treated with CPAP cannot tolerate it for one reason or the other. Oral appliances, while not quite as effective, are tolerated better and have been approved as an alternative to CPAP when the patient cannot wear the CPAP unit or does not want to. There have been multiple studies attesting to the efficacy of oral appliances. The standards for acceptable CPAP use are quite modest - 4 hours a night for an average of 5 nights a week. This is equivalent to reducing the AHI from 46 to 20. But this only happens if the patient wears the unit continually. According to Dr. Philip Westbrook, therapy does not have to normalize the AHI to reduce the hypoxemic burden, sleep fragmentation, daytime somnolence, hypertension or to extend life. Oral appliances in the hands of a trained dentist offer a viable alternative for patients.

August 4, 2009 1:26:39 AM PDT

[Recommend \(5\)](#)

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Some Guy (You_know) wrote:

Boy I wish I had health insurance and/or a job and/or a place to live. I've tried to get docs with expertise in sleep disorders to donate their time for a sleep study . Also I tried to get medical device manufacturers to donate a CPAP or equivalent technology. The time and technology involved make treating sleep disorders is an expensive, high profit business. Since my sleep problems won't kill me immediately no one will help.

August 3, 2009 5:30:40 PM PDT

[Recommend \(3\)](#)

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International Professors (intlprofs) wrote:

What does it cost to have a dentist do it, as opposed to buying it for #120?

August 3, 2009 5:24:30 PM PDT

[Recommend \(15\)](#)

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N Jones (Sleepmaster) wrote:

I appreciate any health care specialist who screens for sleep disorders.

However, by categorizing the only treatment known to be effective for all persons with OSA as "loud and cumbersome" and "sort of like a vacuum cleaner in reverse", you choose perjorative language to describe a safe and effective treatment, and err in describing the PAP devices of today.

While it is true that PAPs from previous years could be loud, large and uncomfortable to wear, today's devices are extremely quiet, small, and much more comfortable. There are over 50 interfaces that patients can choose from in order to find a "mask" that is comfortable and fits well.

Additionally, the use of heated humidity has greatly improved comfort and compliance for patients in the last 10 years.

Oral/dental devices are not effective for many patients in regards to OSA. There are very few studies looking at their effectiveness.

They have been shown to help with snoring in the absence of any sleep-related breathing disorders. It is also true that many of these devices are not FDA-approved and should only be fitted and worn with the assistance of a trained dentist.

Also, OSA affects many slender, young people as well as the older and obese patients we often see.

August 3, 2009 1:41:36 PM PDT

[Recommend \(5\)](#)

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mark schedler (scheds) wrote:

Folks considering dental appliances should know that they can be involved in expensive problems with the TMJ - a joint in the jaw - I understand most health plans exclude coverage for TMJ problems. A friend spent years and \$75k dealing with problems resulting from his use of a dental appliance. I found that, if you don't use it every night, it will no longer fit as your teeth float. I also thought it was only a matter of time until I broke a tooth. The device snaps onto your teeth. I had a terrible time getting used to CPAP and this device made the difference, but I'm grateful to be off it. I am a big fan of CPAP for apnea and allergy relief.

August 3, 2009 1:31:19 PM PDT

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Sleep Medicine (AASM) wrote:

An evaluation and sleep study at an AASM-accredited sleep disorders center will confirm the presence and severity of sleep apnea. Then a board-certified sleep specialist will determine which treatment option is best for you. To find an AASM-accredited sleep center in your area, go to www.sleepcenters.org.

August 3, 2009 12:59:34 PM PDT

[Recommend \(1\)](#)

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Dan Hortsch (DanHortsch) wrote:

I agree with Mr. Nurse (below) that a CPAP is not noisy. While the nose mask, which I use, feels cumbersome at first, one gets accustomed to it, and the results have made a significant difference in my life. I wish I had obtained a sleep test and the CPAP before I retired. It would have made life better, no question.

My insurance (I still had company coverage) covered the cost of the sleep test and the major part of the CPAP. Medicare covers occasional replacement of the mask, a new humidifier and so on. The regional health organization through which I obtained it provides free inspections to make sure it remains properly calibrated. The article explores the perspective of dentists who might do perfectly fine work with their approach, and gives too short shrift to the CPAP. An earlier NPR piece, as I recall, reported on the apnea and the CPAP in more detail. Personally, I would find it hard to sleep with any kind of mouth guard. As for the person who said that the majority of people with apnea are obese, perhaps it is true. But it hits people of regular weight, no question. I would prefer not to use anything, but the alternative is a bad one.

August 3, 2009 12:52:33 PM PDT

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