

Probing Question: Is snoring dangerous?

March 1 2010, By Chris Tachibana



CPAP mask used to treat sleep apnea

Homer Simpson does it. Dagwood Bumstead does it. Snoring is a cartoon classic, but if you live with a snorer, it's anything but funny. The nocturnal noise can ruin a good night's sleep, or worse, can be a sign of sleep apnea, a more serious condition that often increases one's risk of depression, memory difficulties, sexual dysfunction and even stroke and heart attack.

What's the difference between [snoring](#) and [sleep apnea](#)? They're related, it turns out.

"Snoring and apnea are on a continuum," said Edward Bixler, professor of psychiatry at Penn State Milton S. Hershey Medical Center. "In fact, snoring is the milder form of sleep-disordered breathing (SDB). It's a partial restriction of the airway, and apnea is a complete restriction."

In snoring, some air gets through, causing tissues in the throat to vibrate.

This creates the classic assortment of rattles and whistles that are funny in a sitcom, but not likely to get laughs at 3 a.m. from family members kept awake by the din.

Further along the SDB continuum is sleep apnea, which is a complete blockage of the airway. This may limit the air supply so severely that blood oxygen levels drop, causing the sleeper to wake, often gasping and snorting. When this occurs several times a night, it interrupts the sleep cycle, preventing a normal night's rest and, in some cases, making the heart work harder which can create or worsen cardiovascular stress and disease. Bixler said that although the individual may not be aware of these nocturnal breath cessations, signs such as severe [daytime sleepiness](#) can point to sleep apnea. He recommends that those who suspect a problem be evaluated by a sleep specialist. For severe cases of sleep apnea, devices like a continuous positive air pressure pump, also called CPAP, may be recommended to keep the airway open at night. An estimated 20 million Americans are affected by SDBs, making the condition as prevalent as diabetes or asthma, though less likely to be discovered and treated.

Although run-of-the-mill snoring might seem less worrisome than sleep apnea, it also can compromise your health and should be taken seriously, Bixler said.

"Snoring does more than impair the bed partner's sleep. Even simple snoring without apnea somewhat increases the risk of hypertension, which is something you don't want to ignore."

The first suggestions to prevent any type of SDB, including snoring and apnea, are simple and practical.

"If you experience even light intermittent snoring, take care of your nasal congestion, avoid alcohol, exercise and lose weight," Bixler said.

Why does weight loss and exercise help? Bixler and colleague Alexandros Vgontzas believe they have some answers. They have researched the causes of SDB and how its harmful effects might be prevented, and found that inflammatory signalling molecules called cytokines are a factor in daytime sleepiness and in SDB.

"We postulated that sleep apnea is a part of metabolic syndrome, a condition that includes excess abdominal fat, insulin resistance and inflammation," said Bixler.

He and Vgontzas are now untangling the contributions of factors like obesity and inflammatory cytokines to SDB, including "the chicken and egg question of what comes first, inflammatory signals or SDB." Their results suggest that inflammatory cytokines may cause sleep disorders and sleepiness, rather than the other way around.

"It's a very complex process, but all pieces are pointing in the same direction," he said.

They recently expanded their sleep disorder studies to include children, and found "risk factors that are similar to those of adults. Waist circumference was a strong risk factor for SDB, and we observed a robust association between SDB and blood pressure," said Bixler. "For mild SDB, nasal factors like chronic sinusitis or rhinitis were major risk factors."

Kids with sleep disorders might be advised to have their tonsils and adenoids removed, but says Bixler, "our data did not support this. Anatomic factors in our study made a small contribution."

Provided by Pennsylvania State University

Citation: Probing Question: Is snoring dangerous? (2010, March 1) retrieved 4 May 2024 from <https://medicalxpress.com/news/2010-03-probing-dangerous.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.