

News on sleep apnea for the commercial trucking industry

Still snoring while on CPAP treatment?



By Katia LaManna, LCSW

Have you or your bed partner noticed that you are still snoring or have started snoring again while on PAP (Positive Airway Pressure) treatment? Snoring while on PAP treatment might be the result of the following:

- Mask leak
- Weight gain
- Age
- The need for pressure adjustments or a titration study

Any one or combination of these factors above can cause and or contribute to

snoring while on PAP treatment. Make sure that your mask fits well and that you are changing out the mask cushions on a regular basis.

Weight gain and age are also likely responsible for snoring issues that weren't there before or were previously being managed by your PAP treatment. This may indicate that your pressures need adjustment and for some of you, this may mean a titration study. A CPAP titration study is a sleep study that is performed while you sleep at the sleep

lab with your CPAP or the lab's CPAP equipment. While you sleep, a sleep technician monitors your sleep apnea and titrates (adjusts) the CPAP unit to make sure that the unit is eliminating your sleep apnea obstructions. However, if you are using an Auto Titrating Unit and you recently completed a sleep study, your sleep doctor or clinician can make adjustments to your CPAP unit to help with snoring issues.

Make sure you let your doctor and or clinician know if you are snoring.

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Precision Pulmonary Diagnostics
8275 El Rio, Suite 110
Houston, TX 77054
Phone: 713-520-5864
Fax: 713-528-0433
e-mail: info@ppdsleep.com

Precision Pulmonary Diagnostics (PPD), provides professional screening for drivers who are at risk for sleep apnea. This is a HIPPA-compliant, online tool customized to a company's requirements.

Once a driver has been diagnosed with sleep apnea, PPD will provide local diagnostic services with the ease of Web-based scheduling and quick, reliable turn-around – from diagnosis to treatment.

Drivers who require treatment will be fitted for and provided with a CPAP mask, flow generator, and heated humidifier for nightly use.

In order to ensure drivers are using their masks correctly, PPD has partnered with a leading manufacturer of CPAP equipment, masks, and the only provider of a patented wireless compliance monitoring system.

The wireless compliance monitoring system provides daily information of CPAP use, efficacy, and allows real-time troubleshooting of any problems your drivers may be experiencing. With this data, we can enhance your drivers' CPAP acceptance and long-term compliance. In short, our protocols can maximize your results and your return on investment.

Dear Readers,

For many of you, being diagnosed with sleep apnea takes some adjusting. For many people, the diagnosis of sleep apnea may come as a complete surprise. Is it no surprise then that sleep apnea is also known as the silent killer?

Once you have been diagnosed with sleep apnea and provided with a CPAP unit, it can take anywhere from a few nights to a few months to adjust to wearing the CPAP. Many people become discouraged fairly soon after starting treatment and give up on the treatment all together. Most truck drivers don't have that option because for many truck drivers, treatment of sleep apnea is not optional.

What you can do to help with your adjustment to CPAP:

- Try not to get discouraged when you initially start CPAP treatment. Be patient with yourself.
- Set small obtainable goals. If you struggle with CPAP treatment, try using it for 1-2 hours over a period of time and then slowly start to increase your usage. Try using it when/if you take a nap or while you are reading a book/ watching TV and sitting quietly.
- Communicate your CPAP treatment issues to the clinician assigned to help/coach you with your compliance.
- Make sure you are using humidification with your CPAP. By far the most complaints I receive with intolerance are related to lack of humidification.
- Replace your mask inserts often, usually monthly if you are using your CPAP every night. An old cushion will affect how well your mask fits and seals to your face.
- Join an online sleep apnea support group. These forums are usually filled with a lot of information and personal stories of how other people overcame their own CPAP treatment struggles. For example: www.sleepapnea.support.org is a great site for sleep apnea information and support.
- Above all, don't give up hope. Many people take 3 steps forward and 2 steps backward for a while until they have worked through their treatment issues. Call your DME provider or support center for ongoing support.

Safe Travels,

Katia LaManna, LCSW
Precision Pulmonary Diagnostics LLC

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Study: OSA symptoms linked to depression

OSA and other symptoms of sleep apnea are associated with depression regardless of weight, age, gender or race, according to a study released by the Center for Disease Control and Prevention.

Researchers of the study, which appears in the April issue of the journal SLEEP, surveyed 9,714 adults between 2005-2008. The survey asked questions such as frequency of snoring and snorting, gasping or stopping breathing while asleep, and asked participants to take a 9-item depression screen.

“Snorting, gasping or stopping breathing while asleep was associated with nearly all depression symptoms, including feeling hopeless and feeling like a failure,” said Anne G. Wheaton, PhD, lead author of the study. “We expected persons with sleep-disordered breathing to report trouble sleeping or sleeping too much, or feeling tired and having little energy, but not the other symptoms.”

Snoring itself was not associated with depression symptoms in men or women.



Photo credit: David Castillo Dominici

Snorting, gasping and pauses in breathing during sleep are all signs of OSA, a common form of sleep-disordered breathing. Six percent of men and 3 percent of women in the study reported having physician-diagnosed sleep apnea. OSA occurs when the muscles relax during sleep, causing soft tissue in the back of the throat to collapse and block the upper airway.

The study is the first nationally representative sampling to examine this relationship. Previous studies focused on smaller samples of target demographics.

OSA could cause serious eye issues, study says

Sleep apnea and normal-tension glaucoma could go hand-in-hand, according to a new study in the Journal of Glaucoma.

Normal-tension glaucoma was more prevalent in patients with OSA than in patients without the disorder.

The study allowed 247 patients with OSA systems to undergo an overnight polysomnography, which discovered 209 patients had OSA and 38 patients were classified as normal. All patients underwent an eye evaluation.

One patient had mild OSA, three patients had moderate OSA and eight patients had severe OSA..



Photo credit: cbenjasuwan

Study results showed that normal-tension glaucoma was identified in 12 patients with OSA (5.7%). The prevalence of normal-tension glaucoma was significantly higher in the OSA group than in the non-glaucoma group. Normal-tension glaucoma was significantly more prevalent in patients

with moderate or severe OSA than in normal patients or those with mild OSA.

In patients with moderate or severe OSA, significantly reduced retinal nerve fiber layer thickness was observed in the superior quadrant and temporal quadrant of the eye.

“The severity of obstructive sleep apnea/hypopnea syndrome inversely correlated with retinal nerve fiber layer thickness,” the study authors said.

“Clinicians need to consider the possibility of glaucoma in patients with moderate and severe obstructive sleep apnea/hypopnea syndrome.”

Protect your heart

Sleep apnea treatment may prevent heart failure

Photo credit: cbenjasuwan

CPAP treatment may do more than help with OSA. A new study concludes it could also help prevent heart failure.

In a study published in *Circulation: Heart Failure*, a journal of the American Heart Association, researchers in the U.K. discovered that moderate to severe obstructive sleep apnea (OSA) can cause changes in the heart's shape and function, similar to the effects of hypertension. These changes include increased mass, thickening of the heart wall and reduced pumping ability.

But, six months after CPAP treatment, the abnormalities returned to near-normal measurements in sleep apnea patients.

"To the best of our knowledge, this is the first study to provide a comprehensive assessment of left ventricular structural and functional parameters using advanced echocardiograms in otherwise healthy apnea patients," said Gregory Y. H. Lip, M.D., a researcher at the University of Birmingham Center for Cardiovascular Sciences in Birmingham, U.K.

"Our findings imply that OSA could

be crucial in the development of left ventricular diastolic dysfunction that can lead to heart failure and increased mortality if left untreated."

British researchers evaluated 40 patients with moderate to severe obstructive sleep apnea and compared the results with those obtained from 40 people with high blood pressure and 40 healthy people.

The OSA patients had abnormal cardiac structure and performance changes typically associated with chronic high

blood pressure, even though their blood pressure was only moderately elevated.

"OSA patients may have cardiac abnormalities that often are undetected, but will improve with CPAP," Lip said. "Patients also need to understand that OSA is not a benign disorder, but that their risk of heart problems can be easily treated with CPAP."

The National Sleep Foundation estimates that more than 18 million Americans have some form of OSA.

CPAP may improve heart health

OSA treatment in men may help lower their cholesterol scores and improve their heart health, according to a study in the *New England Journal of Medicine*.

Individuals with OSA are known for having high rates of metabolic syndrome, a condition characterized by abdominal obesity, high blood pressure, unregulated blood sugar and unhealthy cholesterol levels, said researchers at the India Institute of Medical Science. These health issues

substantially increases the possibility of heart disease and diabetes. Researchers tested CPAP therapy and its effect on such risks.

Concluding factors dictated individuals on CPAP therapy showed a significant improvement in a number of measures of metabolic syndrome, including cholesterol test scores. The findings indicate that treating sleep apnea may have a direct positive impact on men's metabolic health.

Study: Physical activity impacts sleep quality



Photo credit: graur razvan ionut

Exercise impacts your overall quality of sleep, according to a new study in the journal of Mental Health and Physical Activity.

The study sampled more than 2600 men and women, ages 18-85, and found, those who participated in at least 150 minutes of moderate to vigorous exercise per week (which is the national guideline) slept significantly better and felt more alert during the day. The study controlled for age, BMI (Body Mass Index), health status, smoking status, and depression.

The relative risk of often feeling overly sleepy during the day compared to never feeling overly sleepy during the day decreased by 65 percent for participants meeting physical activity guidelines. People were also 68 percent less likely to have leg cramps while sleeping and 46 percent less likely to have difficulty concentrating

while tired if they met the guidelines. Right now, evidence concludes about 35-40 percent of the United States population has problems falling asleep or with daytime sleepiness.

Brad Cardinal, a professor of exercise science at Oregon State University and one of the study's authors, said they were using the physical activity guidelines set forth for cardiovascular health but it shows the guidelines might have a spill-over effect into other areas like sleep health.

"Our findings demonstrate a link between regular physical activity and perceptions of sleepiness during the day," said Paul Loprinzi, an assistant professor at Bellarmine University is lead author of the study. "This suggests that participation in physical activity on a regular basis may positively influence an individual's productivity at work."

Exercises for the road

Consider the following easy activities.

Knee Grabs (abs)

- Lie on back with knees bent.
- Pull right knee toward chest and place hand on your knee.
- Push knee into hand, hold 10 sec.
- Relax and repeat 10 times. Repeat with left knee.

Leg Extensions (thigh)

- Sit on chair facing a wall.
- Raise right leg so toes are pointed and touching wall.
- Push wall with toes, hold 10 sec.
- Repeat 10 times with each leg.

Heel Digs (calves, hamstrings)

- Sit on chair, feet on ground
- Push right heel into ground away from chair
- Hold 10 seconds.
- Relax and repeat 10 times. Repeat with left foot.

Leg Adductors (thighs)

- Sit in chair, and put an object like basketball between knees.
- Squeeze with knees, hold 5 sec.
- Relax and repeat 10 times.

Curl Ups (abs, hips and shoulders)

- Lie on back with bent knees.
- Bring knees into chest, hold with hands.
- Push knees against hands while keeping in position, hold 5 sec.
- Relax and repeat 10 times.

Also:

- Park far away from stop location so you are forced to walk or jog.
- Carry a jump rope with you.
- Keep basic exercise equipment like stretch bands and dumbbells in your cab.
- Do standing push-ups against your truck.