

Let's Talk About: Obstructive Sleep Apnea



ST. PAUL'S HOSPITAL
COMMUNITY FORUMS

Obstructive Sleep Apnea

Obstructive sleep apnea is a common serious disease that occurs in 5-10% of the adult population. Obstructive sleep apnea is characterized by recurrent interruptions of breathing during sleep caused by collapse of the upper airway. The resultant loss of breathing causes reduction in blood oxygen saturation, arousals from sleep, and sleep fragmentation. These pauses in breathing are called apneas (literally, "without breath"), and typically last 20 to 40 seconds.

The individual with obstructive sleep apnea is rarely aware of having difficulty breathing, even upon awakening. It is recognized as a problem by others witnessing the individual during episodes or is suspected because of its effects on the body. Obstructive sleep apnea is commonly accompanied with snoring. The disease is also associated with other adverse health and safety effects including cardiovascular disease, motor vehicle crashes, and reduced work productivity.

Causes

Risk factors for sleep apnea include:

- Obesity due to increased soft tissue around the airway
- older age
- male gender
- brain injury (temporary or permanent)
- decreased muscle tone
- structural features that give rise to a narrowed airway.
- alcohol and sedatives that relax the upper airway
- smoking

Signs and Symptoms

Symptoms may be present for years, even decades without identification, during which time the sufferer may become conditioned to the daytime sleepiness and fatigue associated with significant levels of sleep disturbance. Persons who sleep alone without a long-term partner may not be told about their sleep disorder symptoms.

The two main symptoms of obstructive sleep apnea are:

- You're very sleepy during the day, but you don't know why.
- You have been noted to snore or have pauses in your breathing while sleeping.

Some other signs and symptoms of obstructive sleep apnea:

- High blood pressure
- Irritability
- Gasping or choking during sleep
- Depression
- Lack of concentration
- Morning headaches
- Memory problems/memory loss
- For men: impotence

Diagnosis

The best way to diagnose sleep apnea and other sleep problems is an overnight test in a sleep laboratory. This test is called polysomnography (PSG).

PSG measures many things, including:

- brain activity and stages of sleep
- eye movement
- heart beats
- leg movement
- breathing
- movement of your chest and abdomen
- oxygen level in your blood

Ambulatory tests (i.e., in the home) may be useful under certain conditions

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St. Paul's Hospital.

Each month features a different health topic with time to pose questions to the experts.

The forums are free and take place the third Wednesday of every month.

7:00 – 9:00 pm
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St. Paul's Hospital
1081 Burrard Street

For more information and to register, please email ownyourhealth@providencehealth.bc.ca or call 604-806-8495.

This evening's presentations will be available to view on our website:

www.phcmedicine.ca

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Treatment and Research

Treatment

The first line treatment for obstructive sleep apnea is usually continuous positive airway pressure (CPAP), especially for patients with moderate to severe disease.

Health risks if sleep apnea is left untreated:

- You can develop high blood pressure
- Increased risk of heart attack or stroke
- Worsening memory and concentration
- Increased risk of causing a motor vehicle crash
- You can develop an irregular heart beat

How does CPAP work?

The CPAP machine delivers a constant flow of air through tubing and a mask and into the airway. It creates enough pressure in the airway to hold the tissue open, so the airway doesn't collapse.

A sleep specialist will prescribe a particular CPAP pressure, based on how much pressure is needed to keep the airway open.

CPAP is a treatment, not a cure. While using the CPAP, the sleep apnea symptoms stop. Breathing and sleep are healthy. It must be used every time. Sleep apnea symptoms will return if use of the CPAP machine is discontinued.

Alternate and adjunctive treatments for mild and moderate sleep apnea

Lose weight. Overweight people can have extra tissue around their necks- this tissue can block their airway. By losing weight the tissue around the airway shrinks, and allow more air to pass to the lungs. A recent study showed that people who lose 10% of

their weight can have a 30% decrease in their sleep apnea symptoms.

Avoid alcohol and sedatives. Alcohol and sedatives can make the throat muscles relax too much, allowing the airway to close off. Avoiding alcohol and sedatives may be able to keep the airway open.

Sleep on your side, not your back. Some people only get obstructive sleep apnea when they sleep on their backs. Sleeping on your back lets gravity pull on the tissues at the back of the throat and neck. This can make the airway narrow or make it collapse completely. You can train yourself to sleep on your side by:

- putting pillows against your back to prop yourself on your side.
- using the "tennis ball trick": sew a pocket onto the back of your pajama top and put a tennis ball in it. If you start to roll to your back during sleep, the pressure from the ball will make you roll back onto to your side.

Dental appliances for obstructive sleep apnea

The dental appliance fits over the teeth. It is worn at night and holds the tongue and jaw towards the front of the mouth, so they don't slip back and block the airway.

Tonsillectomy and other surgeries

Sleep apnea may occur because the tonsils are too big. One can have surgery to remove them. Tonsil removal is the most common treatment for obstructive sleep apnea in children.

Sources:
Canadian Lung Association
<http://www.lung.ca>

St. Paul's Hospital is an acute care, teaching and research hospital located in downtown Vancouver. It is home to many world-class medical and surgical programs, including heart and lung services, HIV/AIDS and kidney care.

St. Paul's serves both the local community and patients from across BC and the Yukon. St. Paul's is one of 14 health care facilities in Vancouver operated by Providence Health Care, one of Canada's largest faith-based health care organizations. Providence's 1,000 physicians and 6,000 staff deliver compassionate care to patients and residents in British Columbia while training medical professionals and making innovative advances in research.

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