



Frequently Asked Questions about Obstructive Sleep Apnea

What is Obstructive Sleep Apnea?

Obstructive Sleep Apnea (OSA) is a condition that exists, when the airway partially or completely closes during sleep. OSA is the stoppage of breathing caused by relaxed tissues in the throat. Snoring is caused by vibrations of these relaxed tissues..

Why is it a Problem?

This closing of the airway causes decreases in blood oxygen levels, severe sleep interruption, and excessive daytime sleepiness. Potential problems of untreated OSA include hypertension, coronary heart disease, myocardial infarction, pulmonary hypertension, congestive heart failure, stroke, neuropsychiatric problems, cognitive impairment, sexual dysfunction and injuries due to accidents.

What is the connection between Obstructive Sleep Apnea and Cardiac Disease?

People with Coronary Artery Disease and lowered blood oxygen levels may be at risk of ventricular arrhythmias and nocturnal sudden death

Some research suggests that apnea may be a cause of heart disease.

- In obstructive sleep apnea, often marked by snoring, the right side of the heart may suffer damage because it has to pump harder to support the extra effort of the lungs trying to overcome the obstruction to the airway.
- Central apneas may cause high blood pressure, surges of adrenaline, and irregular heart beats. Central apnea occurs without snoring and is not caused by airway obstruction; rather it is caused by the failure of the brain to signal for a breath.

What is a polysomnogram?

A polysomnogram is an overnight recording of all of your sleep activities. This is usually done in a specially designed sleep center. The process records brain waves, muscle movements, eye movements, breathing through you mouth and nose, snoring, heart rate and pattern and leg movements.

Information is gathered using small discs, called electrodes that are placed around your chest and abdomen. This painless procedure is designed to be as comfortable as possible. The rooms at the sleep center are all private and decorated somewhat like a standard home or hotel bedroom. Each room has a television.

If I have Obstructive Sleep Apnea what are my treatment options?

- **CPAP-- Continuous Positive Airway Pressure**
The most common treatment today is to create positive airway pressure. The CPAP consists of an air compressor, a tube, and a mask that covers the nose. The compressor blows air into the airway which prevents the airway from collapsing when you are sleeping.
- **Intra-oral Fixation Device** –(Oral Appliance). This is designed to gently move the lower jaw forward. This device is custom made by a dentist who specializes in the treatment of sleep apnea. Once fitted the device must be adjusted to eliminate as many apnea events as possible.

- **Surgery**
 - **Tonsillectomy**- In children the problem is most often large tonsils that block the airway. If this is the cause a tonsillectomy will most likely resolve the OSA.
 - **Repositioning the jaw** – when the problem is caused by a jaw that is set back too far.
 - **LAUP Surgery** – removal or shortening of the uvula, removal of tonsils, and sometimes shortening of the soft palate. This procedure may eliminate snoring without preventing OSA.
 - **Tracheostomy** – the creation of an opening in the lower part of the throat, below where the airway collapses. This opening is plugged during the day so that normal speech is possible, and open during the night so that normal breathing is possible.
 - **Straightening of the septum, Turbinectomy and/or UPPP** - These procedures may diminish the number of OSA events but may not resolve the condition completely. These procedures have been shown to be effective in the resolution of primary snoring.

My doctor told me to avoid exacerbating factors. What are these?

Exacerbating factors are events or activities that contribute your sleep disordered breathing. Some of these events or activities are listed below.

- Weight: Excessive weight is probably the leading factors contributing to OSA. For many patients, weight loss and exercise have reversed the process.
- Smoking: Among many other health risks, cigarette smoking causes swelling of the mucous membranes in the nose, swelling of tissue in the back of the throat, and blockage of small vessels in the lungs.
- Alcohol: Alcohol causes an increased relaxation of the airway during sleep.
- Other factor affecting quality of nighttime sleep that can lead to apnea.

-a disruptive bed partner	-a baby or child waking you up
-daytime stress or aggravation	-sleeping during the day
-excessive use of caffeinated products	-room too hot or cold
-ambient light	-use of medications that effect sleep
- Medical Problems: Anything that leads to the blockage of the nose, the throat, or the lung potentially play a role in the development of sleep disordered breathing such as:
 1. allergies to airborne particles such as pet dander
 2. dryness in the nose because of a wood burning stove or other heat in your home
 3. deviated septum
 4. large tonsils / adenoids
 5. excessive amounts of fatty tissue
 6. enlargement of some of the complex tissues at the back of the throat
 7. lung problems related to childhood asthma through emphysema
 8. can be a symptom that results from hypothyroidism
 9. can be a symptom that results from diabetes