Sleep Apnea

What is Sleep Apnea?

Sleep apnea is a sleep disorder characterized by disturbed or interrupted breathing during sleep, which leads to pronounced disruption of sleep. These temporary interruptions in breathing last for 10 or more seconds each throughout the sleep period and may occur as often as 20-30 times per hour or more. Research suggests that sleep apnea:

- Is more common in males than in females
- Is likely under-diagnosed in females
- Tends to occur in mid-life years for both sexes (along with excessive daytime sleepiness)
- Can develop in association with weight gain
- Can run in families, suggesting a possible genetic basis for the disorder

What are the Types of Sleep Apnea?

- **Obstructive Sleep Apnea**, the most common form, occurs when air cannot flow into, or out of, the nose or mouth although efforts to breathe continue. It is caused by a narrowing of the airway.
- **Central Sleep Apnea**, is less common and occurs when there are problems with signals from the brain that control breathing. This can occur, for instance, after someone has a stroke.

What are Risk Factors for Sleep Apnea?

- being overweight
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- having a large neck circumference
- snoring
- physical abnormality in the nose, throat, or other parts of the upper respiratory tract that make or cause reductions in the size of the airway
- high blood pressure
- drinking alcohol and/or taking sedating medications (use of these substances increases the frequency and duration of pauses in breathing)

What are the Symptoms of Sleep Apnea?

- heavy snoring (although not everyone who snores has sleep apnea)
- struggling to breathe during sleep
- interruptions in breathing during sleep followed by a snort or a loud gasp when breathing resumes
- early morning headaches
- excessive sleepiness during the day
- falling asleep during activities that require attention and concentration such as driving, working, or talking
- reports on the part of sleep partners or coworkers that they observe the symptoms noted above when the person afflicted isn’t yet aware of the problem or is not convinced that the problem exists

What Are The Effects of Sleep Apnea?

- feeling sleepy during the day
- impaired concentration and performance of daytime activities
- falling asleep while at work, driving, or on the phone
- learning and memory difficulties
- increased irritability
- depression
- sexual dysfunction
- increased risk of high blood pressure (estimates indicate that up to 50% of people with sleep apnea also have high blood pressure)
- increased risk of heart attack and stroke

How Is Sleep Apnea Diagnosed?

- It is important to see a doctor for evaluation because sleep apnea may be associated with irregular heartbeat, high blood pressure, heart attack, and stroke.
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- Because there are many different reasons for disturbed sleep, diagnosis may include conducting tests that measure the amount of time (i.e., latency) it takes to fall asleep and record certain bodily functions during sleep.
- Tests for sleep apnea are usually conducted at a specialty sleep center; new technology permits some tests to be performed at home.

**How Is Sleep Apnea Treated?**

- Specific treatment for sleep apnea is tailored to each individual given his/her medical history, physical examination, testing results and, to some extent, personal preference.

- For mild cases of sleep apnea, treatment may include:
  - sleeping on the side instead of the back
  - losing weight if overweight (for some patients, a 10% weight loss can decrease the number of incidents of sleep apnea)
  - avoidance of alcohol, tobacco, and sedating medications, which may make air passageways more likely to collapse during sleep and prolong the duration of sleep apnea incidents
  - some surgical procedures of the airway (in the nose, and or the back of the mouth or throat) to reduce tissue that may be narrowing the airway. Such surgeries, have not been found to be effective for more severe apnea.
  - using a dental appliance, fitted by a dentist, orthodontist, or ear, nose and throat specialist, that repositions the lower jaw and/or the tongue (such devices can also be helpful for those who snore but do not have sleep apnea)

- For more severe cases of sleep apnea, doctors may recommend the following treatment:
  - wearing a mask that helps air circulate through the nasal passages and distributes the air pressure in such a way as to keep the upper airway open during sleep,
  - other treatments listed for mild apnea may also be useful in some cases.

**Further Information about Sleep Apnea**

American Academy of Sleep Medicine Patient Education Web Site: [www.sleepeducation.com](http://www.sleepeducation.com)

Sleep apnea information is available from the American Sleep Apnea Association (ASAA) Web Site: [www.sleepapnea.org/info/index.html](http://www.sleepapnea.org/info/index.html)
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Sleep apnea information is available from the National Institutes of Health Web Site: www.nlm.nih.gov/medlineplus/sleepapnea.html

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