

YOUR HEART AND SLEEP

Quick Facts:

Obstructive sleep apnea causes some people to stop breathing due to the closure of the upper airway during sleep. It has been linked to various heart conditions. Repeated interruptions to sleep and drops in blood oxygen level can increase heart rate and blood pressure, making the heart work harder.

KEY POINTS:

Sleep apnea has been linked to:

- **High blood pressure**
- **Abnormal heart rhythms**
- **Heart failure**
- **Sudden cardiac death**
- **Obesity, diabetes and high cholesterol**

Short sleep duration (less than 5 hours a night), shift work and restless legs syndrome have also been linked to negative effects on the heart.



How Can I Learn More?

- Talk to your board-certified sleep medicine physician.
- Visit www.sleepeducation.org

Am I At Risk:

Conditions that could suggest the presence of sleep apnea include history of loud snoring, waking up gasping or choking, stop-breathing episodes in sleep reported by a bed partner, not waking up refreshed, morning headaches and excessive daytime sleepiness. Symptoms of a heart condition may include but are not limited to: chest pain, shortness of breath and/or dizziness on exertion, abnormal heart rhythms and swelling of the feet.

GENERAL OVERVIEW:

Obstructive sleep apnea affects at least 25 million adults in the U.S. It is caused by a collapse of the airway in the back of the nose, mouth and throat during sleep. As a result, air cannot get to the lungs. This leads to a brief arousal from sleep that causes sleep fragmentation and poor sleep quality. This cycle can repeat hundreds of times in one night, but typically these events are not remembered in the morning.

Sleep apnea is most closely linked with high blood pressure (hypertension) in the lungs and the body.

About half of patients with hypertension have sleep apnea and half of patients with sleep apnea have hypertension. Usually blood pressure is higher during the day and lower at night, but in those with sleep apnea, this does not occur, so your heart does not “rest.” Interestingly, sleep apnea is the most common cause of “resistant hypertension”, where patients require four or more medications to control their high blood pressure.

GENERAL OVERVIEW CONTINUED:

Sleep apnea has been linked to various heart conditions:

Sleep apnea increases the risk of abnormal heart rhythms, which in turn heightens the risk for developing a stroke. Additionally, patients with untreated sleep apnea have twice the chance of their abnormal heart rhythms re-occurring after this has been treated with medication, electrical therapy and even surgery.

Sleep apnea is seen in a majority of patients with heart failure. In these patients, sometimes a different type of apnea called “central sleep apnea” can be seen, as well as an abnormal breathing pattern called “Cheyne-Stokes breathing pattern”. In central sleep apnea, the upper airway is not collapsed, but the brain does not send signals to the body to breathe.

A number of large studies have shown that a sleeping consistently for less than 5 hours a night may have negative consequences on the heart.

Sleep apnea is linked to sudden cardiac death. In those without sleep apnea, death rates peak in the early morning, but research studies of patients with sleep apnea have shown that their death rate peaks at night.

Sleep apnea is linked to obesity, high blood glucose and cholesterol levels and may shorten sleep duration, all of which may potentially affect the heart.

TREATMENT:

If you have sleep apnea and heart disease, it is important to make sure you receive adequate treatment. Luckily, treatment of sleep apnea has shown to reduce heart-related problems in a number of research studies.

TIPS:

- Follow a healthy lifestyle by limiting salt intake, eating a balanced diet and exercising regularly.
- Try to maintain a healthy body weight.
- Follow good sleep habits.

➔ Next Steps:

- Talk to your doctor about your symptoms. It may help to write down your symptoms including the time of day when they occur.
- Keep a daily and nightly log of your sleep habits. Share this information with your sleep doctor.
- Your sleep doctor may schedule you for an overnight sleep study and a daytime nap study.
- Ask you sleep doctor if you should change any of your sleep habits or medications before the sleep study.



Questions For Your Physician

Take a few minutes to write your questions for the next time you see your healthcare provider.



Sample Questions:

Why do I feel tired all the time?

Why do I wake up so early in the morning?