

Atrial Fibrillation and Sleep Apnea: What You Need to Know

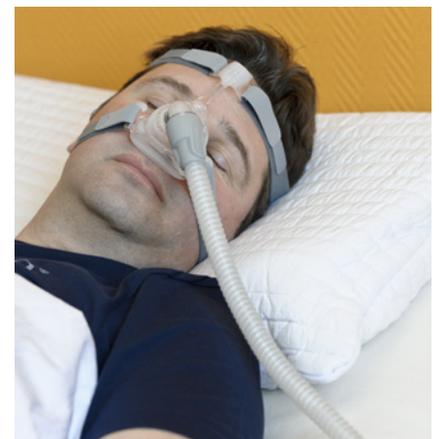
About half of patients with AFib also have sleep apnea.

Atrial Fibrillation (AFib) is an abnormal heart rhythm that affects 2.5 million people in the U.S. and 33.5 million people worldwide. AFib is caused by chaotic electrical signals, which make the upper chambers of the heart (the atria) quiver, instead of contracting properly. During AFib, blood pools in the atria, which can allow a clot to form. If a blood clot breaks free, it can enter the bloodstream and cause a stroke. People with AFib have a stroke risk that is five times higher than people who do not have AFib.

There are many risk factors for developing AFib. These include being age 60 years of age or older, having high blood pressure, diabetes, or existing heart disease. Another risk factor that is little known and not completely understood is sleep apnea. Only

now are health care providers beginning to understand the overlap of these two conditions, and how addressing both can lead to better patient outcomes.

Sleep apnea affects about 18 million U.S. citizens and 100 million people worldwide. Eighty-five percent of cases go undiagnosed. Sleep apnea is when breathing stops or becomes critically shallow during sleep. The most common type of sleep apnea, obstructive sleep apnea, is caused by blocked airways in the throat. A person with sleep apnea will awaken, partially or fully, when the brain doesn't get enough oxygen. These partial or complete awakenings can happen up to hundreds of times each night. The person may not be aware that he or she is waking from sleep so frequently. People with sleep apnea may be known



as loud snorers and often wake from sleep gasping for air, or have the feeling of choking. They may also experience excessive daytime sleepiness or fatigue and in some people, insomnia and depression. Long-term untreated sleep apnea can cause impairments in thinking and increase the risk for accidents, diabetes, and a number of cardiovascular conditions, including high blood pressure, stroke, and AFib.

Relationship between AFib and Sleep Apnea

Our understanding of the exact relationship between AFib and sleep apnea is evolving. It is estimated that half of the patients with AFib also have sleep apnea. And patients with sleep apnea have four times the risk of developing AFib. Over time, untreated sleep apnea can lead to the onset of risk factors such as hypertension and diabetes that predispose a person to AFib. Further, it has been shown that sleep apnea directly triggers arrhythmias during sleep. The heart experiences mechanical stresses and chemical changes each time a person with sleep apnea is startled awake by lack of oxygen, and that may contribute to the development of AFib.

In addition, studies suggest that untreated sleep apnea impairs the ability to control AFib because it reduces the effectiveness of certain AFib treatments. For example, people with both AFib and sleep apnea may not respond as well to medications to control the heart rate as AFib patients without sleep apnea. Patients with sleep apnea are also more likely to have AFib recurrences after a cardioversion or catheter ablation compared to AFib patients without

sleep apnea undergoing the same treatments. Preventing sleep apnea makes AFib treatments more effective—regardless of the treatment type (medication versus procedure). New research suggests that when both AFib and sleep apnea are present, treating both is more likely to result in better health overall.

Diagnosing Sleep Apnea

Sleep apnea is diagnosed by an overnight sleep test, which can be done at home or more commonly in a sleep laboratory. The sleep test measures the number of times that a person either stops breathing during sleep or breathing becomes very shallow. It also measures the level of oxygen in the blood and monitors the brain and heart rhythm during sleep.

Talking to Your Doctor

While the exact nature and extent of the link between sleep apnea and AFib is not yet fully understood, talk to your doctor about sleep apnea to find out whether you might benefit from evaluation and treatment. Discuss any sleep problems such as snoring or excessive day-time sleepiness with your electrophysiologist (a doctor who specializes in heart rhythm disorders).

Treating sleep apnea can improve quality of life and reduce the risk of heart attack and stroke.

The questions below may help you talk to your doctor about sleep apnea and how it affects your AFib:

- Do my symptoms indicate that I might have sleep apnea? Some of these might include:
 - Waking in the morning with a headache
 - Waking in the morning just as tired as when you went to bed
 - Loud, persistent snoring that wakes your bed partner
 - Pauses in breathing with gasping episodes during sleep
- Who do I see to get a sleep study?
- How will addressing sleep apnea help control my AFib?
- Does sleep apnea increase my AFib stroke risk?
- What other risk factors can I change to improve my AFib?