

Sleep Apnea and Heart Disease

The Connection

The importance of sleep



- Sleeping is a basic human need, like eating, drinking, and breathing.
- Sleep is vital for good health and well being
- Getting enough quality sleep can help protect your mental & physical health, quality of life, and safety.

The Importance of Sleep



- Sleep has many physical and psychological benefits such as:
 - Prevent and cure diseases.
 - Repairs damaged cells, allowing the body to cure itself
 - Strengthens your immune system,
 - Helps you cope better with both the physical and mental activities that your mind and body face every single day.

Sleep Apnea : a want for breath

Obstructive Sleep Apnea

- **Obstructive Apnea** is when extra tissue in your throat falls into your airway while sleeping. This causes an obstruction that does not allow air to get into your lungs. This causes oxygen levels in the blood to drop.

Central Sleep Apnea

- **Central Apnea** happens when your brain does not send the proper signals that control breathing. This occurs as a result of other conditions such as Congestive Heart Failure or Stroke.

Symptoms of Sleep Apnea

- Snoring
- Excessive Daytime Sleepiness
- Restless Sleep
- Nonrefreshing Sleep
- Morning Headaches
- Witnessed Apneas

Complications of untreated sleep apnea can include:

- High Blood Pressure
- Heart Irregularities such as Atrial Fibrillation
- Cardiovascular Disease
- Congestive Heart Failure

Linking Sleep Apnea and High Blood Pressure

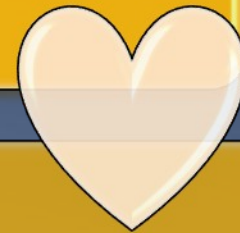


Linking Sleep Apnea and High Blood Pressure

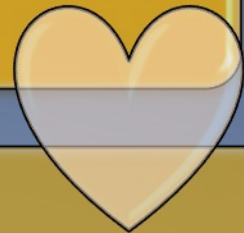
- Traces of the Adrenalin like substance that is released during the Fight or Flight reflex can continue to keep Blood Pressure elevated during the day.
- Because of low Oxygen your body will also release other substances into the bloodstream that can eventually damage the lining of your body's blood vessels.
- This can eventually cause or worsen High Blood Pressure and other forms of Cardiovascular disease or heart problems.

Sleep Apnea and Heart Disease

In Sleep Apnea the heart has to pump harder due to the lack of oxygen in the blood. This increased exertion can cause damage to the heart.



Researchers have shown the more severe the sleep apnea the greater the risk of developing heart disease.



Some studies even suggest that Obstructive sleep apnea can increase the risk of heart attack by as much as 30% if untreated.

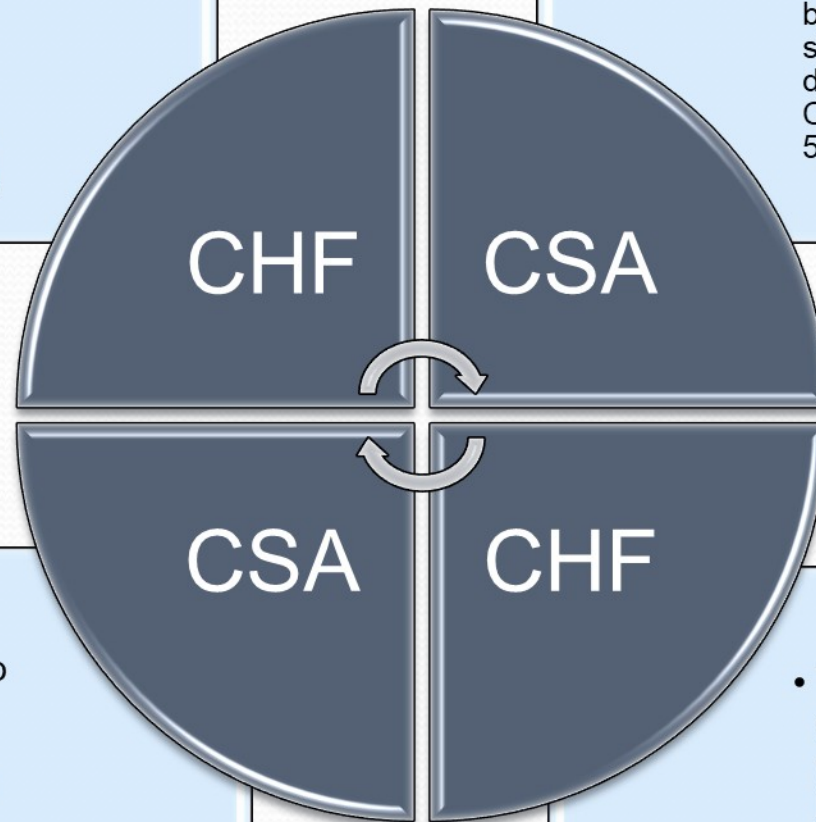
Congestive Heart Failure is a leading cause of Central Sleep Apnea

- Untreated Obstructive Sleep Apnea can lead to Congestive Heart Failure
- 50% of patients with heart failure develop Central Sleep Apnea.
- Consequences of Central Sleep Apnea worsen the diagnosis of Heart Failure making treatment difficult
- Nightly Treatment for Central Sleep Apnea has been proven to improve Cardiac Function and alleviate symptoms of Heart Failure

The Vicious Cycle of Sleep Apnea and Congestive Heart Failure

- Congestive heart failure occurs when the heart is damaged so much that it is unable to pump blood effectively. Obstructive Sleep Apnea can eventually lead to CHF if left untreated.

- Central Sleep Apnea is caused by the failure of the brain to signal for a breath and can be direct result of heart failure. CSA develops in an estimated 50% of patients with CHF.

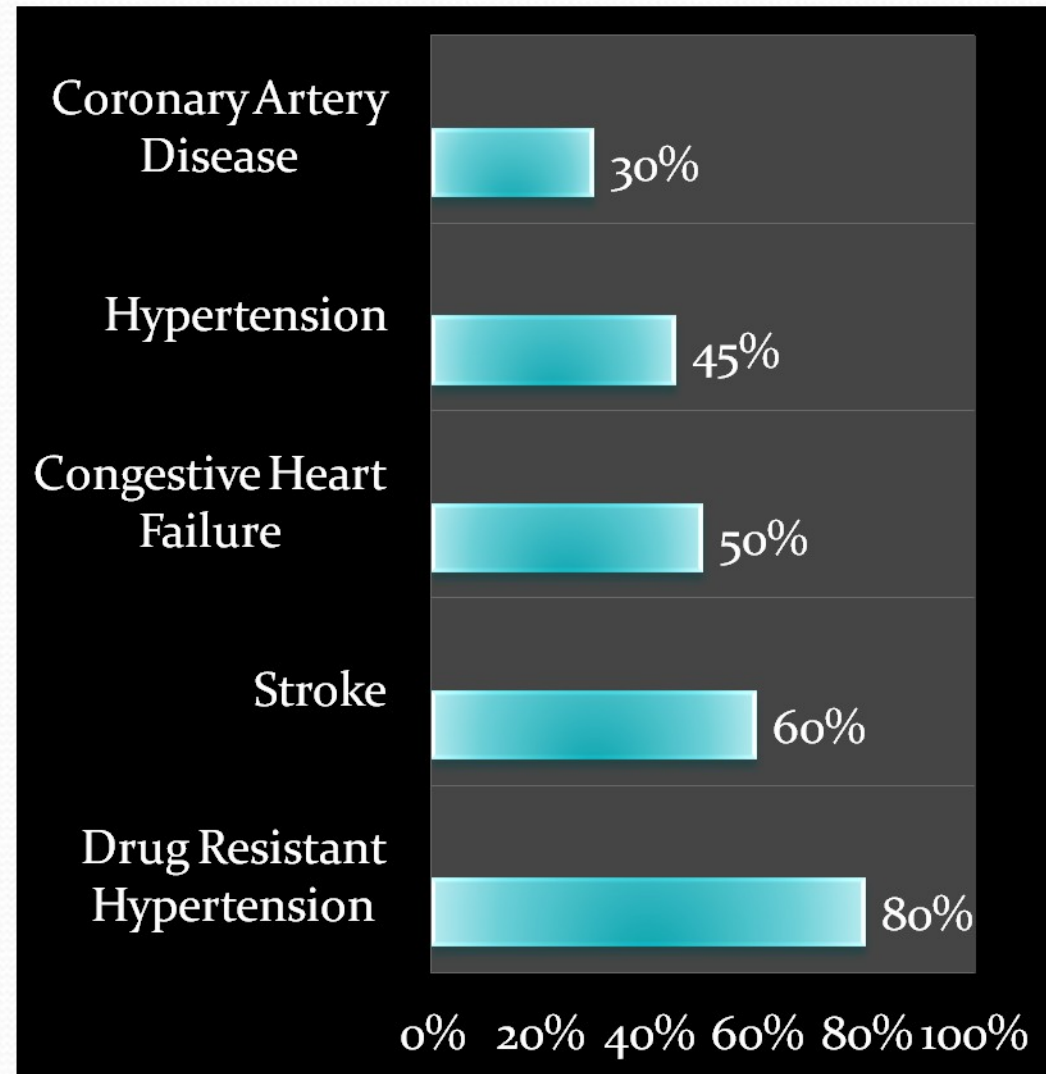


- Worsened CHF leads to increased amounts of Central Apnea decreasing the Cardiac output, again making CHF worse.

- The stress on the heart caused from CSA worsen the symptoms of Heart failure.

Prevalence of Sleep Apnea and Cardiovascular Disease

- 30 percent of people with coronary artery disease have obstructive sleep apnea
- 45 percent of people with hypertension have obstructive sleep apnea
- 50 percent of people with congestive heart failure have obstructive sleep apnea
- 60 percent of people suffering from stroke have obstructive sleep apnea
- 80 percent of people with drug-resistant hypertension have obstructive sleep apnea



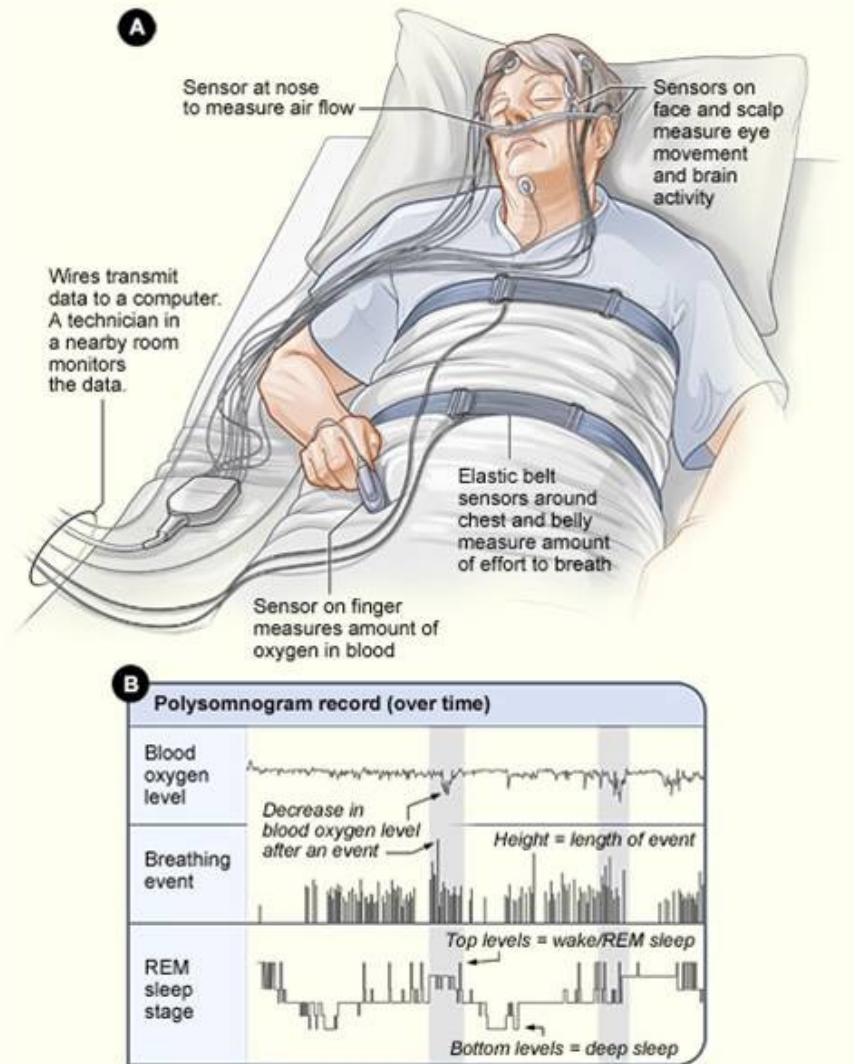
Could Sleep Apnea be affecting your Health?

A Sleep Study is used to Diagnose Sleep Apnea.

Ask these questions to see if you should talk with your Doctor about the possibility of Sleep Apnea affecting you or a loved one:

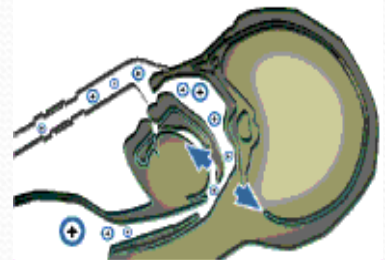
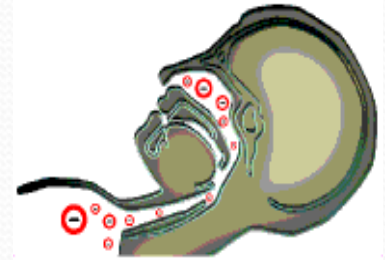
1. Do you snore?
2. Do you wake up gasping for breath or choking?
3. Do you wake up feeling tired or get excessively sleepy during the day?
4. Do you have High Blood Pressure?
5. Have you ever been told that you stop breathing?
6. Is your BMI > 30

If you have answered “YES” to 2 or more of these questions you could be suffering from Sleep Apnea.



Treatment for Sleep Apnea

- The most effective form of treatment for sleep apnea is CPAP therapy.
- CPAP delivers air pressure that keeps the airway inflated while sleeping and preventing the obstruction in the throat.
- Resulting in:
 - Successful Breathing
 - Better Oxygenation
 - Less Disruptions of Sleep
 - Lower Blood Pressure
 - Less Strain on Heart and Blood Vessels



It's more than “just snoring”!

