Sleep Apnea's Role In Heart Health Transcript

(Transcripts are generated by AI and may contain errors)

Overview of Untreated Sleep Apnea

Hello again, Dr. Audrey Wells here. And in this video, I'm going to show you how untreated or undertreated obstructive sleep apnea affects your body. Now, this may have been information that was reviewed with you at the time you were diagnosed, but I find that many people do well to have a refresher, and that's because there's a lot of information coming at you in the beginning.

Obstructive sleep apnea is a breathing disorder because there are blockages in your airway during sleep. And there's two main problems with this. The blocked airway causes drops in your blood, oxygen level.

That's because you're no longer breathing normally.

Cardiovascular Risks

And when you've choked off your airway and your blood, oxygen levels go down. Your brain has to respond to that emergency by waking up at least a little bit to open up your throat and take some recovery breaths.

So the two problems are oxygen levels go down and your sleep is disrupted. The research data taken from loads of patients with untreated sleep apnea are very clear both your heart and your blood vessels together.

This is known as your cardiovascular system. This will suffer. So with the heart, what this looks like is increased risk of coronary artery disease, increased risk of heart attack problems with heart rhythms such as atrial fibrillation or AFIB and even increased risk for congestive heart failure with your blood vessels.

Untreated sleep apnea can be a causative factor for high blood pressure or hypertension and can even affect your blood pressure variability.

Immune, Lung, and Reproductive Effects

In addition, if you have untreated sleep apnea, you're at risk for stroke and TIA or transient ischemic attack. Sleep apnea also interferes with your immune system.

This happens through inappropriate or prolonged activation of immune mediators from the sleep deprivation and even from the intermittent low oxygen levels.

This causes chronic inflammation and increased risk for infections, also a reduced response to vaccination. There's even a connection with sleep apnea and risk for cancer.

Those with lung disease will have increased stress. If sleep apnea is also a problem. Anyone who has asthma, COPD or pulmonary hypertension is at risk for bigger drops in their blood oxygen level during sleep.

If their airway becomes obstructed. Obstructive sleep apnea can cause changes to your reproductive system.

Brain and Mental Health Effects

So women may report irregular menstrual cycles, particularly if they have PCOS as well. And both sexes can have reduced sexual libido. Men can experience erectile dysfunction, reduced testosterone and reduced sperm counts.

Your brain is profoundly affected by untreated sleep apnea. This is because your brain depends on a continuous supply of oxygen and a reliable supply of sleep.

So with sleep apnea, you don't have either one. In fact, sleep apnea forces your brain to choose between staying asleep and getting oxygen. In addition to not functioning well during the daytime, there is an increased risk for depression and anxiety, risk for headache, and even risk for Alzheimer's disease and Parkinson's disease.

It may be interesting to many of you that untreated sleep apnea is related to your gut and your microbiome.

Gut, Metabolic, and Weight Impacts

Specifically, people tend to have more acid reflux symptoms with untreated sleep apnea, since they're using their belly and their chest muscles to try to overcome that airway obstruction.

And this pushes the stomach contents up into the esophagus and into your mouth because you're lying down and you're going to experience that as acid reflux or heartburn.

Sleep apnea is also associated with cholesterol problems and developing a fatty liver. And finally, your microbiome is affected because there is less bacterial diversity with untreated sleep apnea.

So if you have gut problems, this is yet another reason to get your sleep apnea treated. It's also well known that having untreated sleep apnea very commonly affects your metabolism.

If you don't already have type two diabetes, you're at increased risk because untreated sleep apnea affects your ability to process glucose. If you already have type two diabetes and you're not treating your sleep apnea, it can contribute to poor control of your diabetes.

And it's also a recipe for weight gain. Obstructive sleep apnea is associated with sleep loss. And the sleep loss alone causes increased ghrelin, which is the hunger hormone, the hormone that tells you you're full or leptin is low.

So this is a double whammy for increased appetite and eating more. Plus, your body is experiencing stress from sleep deprivation and fluctuations in your blood oxygen level.

Daily Function, Safety, and Aging

So so your cortisol levels will be elevated, inappropriate at Leigh and you're more likely to deposit fat in your abdomen and around your organs. Sleep loss is associated with increased pain, sensitivity, reduced endurance, and having a longer physical reaction time, lower coordination, and ultimately increased risk for having an auto accident.

All of these things affect your day to day life and even your safety, especially if you drive a car or have a job that involves some degree of danger.

If you're not alert. Ultimately, your physical body and your brain experience accelerated aging with untreated sleep apnea, even your skin and your outward appearance will suffer from the lack of sleep and the abnormal fluctuations in your blood oxygen levels.

And this happens with any untreated breathing disorder, but with obstructive sleep apnea, your brain and your body will function as if they're older. Now, I hope I've demonstrated that untreated or even under treated sleep apnea, especially if it's in the moderate to severe range, will affect your entire body.

Treatment Encouragement and Next Steps

It causes stress on every organ system, and it directly affects your heart, your metabolism, your immune system and your brain over time. It's going to put you at risk for accumulating multiple medical problems.

So if you need help with treating your sleep apnea or even knowing where to start, I can help you. That can look

like help with your CPAP or it can look differently.

I want you to know that you have choices and I've worked with thousands of people and this experience has told me that you probably don't even know about all the possibilities available to you, so don't hesitate to reach out to me and start moving forward to correct your breathing problem.

You really deserve healthy sleep.