Losing Weight: A Solution For Sleep Apnea? Transcript

(Transcripts are generated by AI and may contain errors)

Weight Loss and Sleep Apnea Overview

Dr. Audrey Wells here. And I want to talk about a question that I get a lot. If I lose weight, will my sleep apnea go away? In this video, I'm going to talk about the relationship between weight and sleep apnea.

There are many research studies looking at how much weight impacts, sleep apnea, severity. And overall, it's estimated that weight loss of 10 to 15% in patients with moderate obesity can reduce the severity of sleep apnea by 20 to 30%.

Now, moderate obesity is defined as having a BMI or body mass index between 35 and 40.

BMI, Obesity Classes, and AHI Severity

And the reduction in sleep apnea severity is based on the measure of AHI or apnea-hypopnea index I want to say a few words about the body mass index, which is an indirect measurement of body fat using height and weight.

Now, this measurement is definitely limited, but it's used because it's easy to measure height and weight in the clinic. Now, at the bottom of this slide, I'm showing you the numbers associated with the different categories of BMI.

There's normal, overweight and class one, class two and class three obesity. If you look at the yellow color there, you can see that moderate obesity with a BMI between 35 and 40 is also called Class two obesity.

So as an example, a person with sleep apnea who is five feet seven inches tall and has a weight of 225 pounds, has a BMI of 35, and losing 25 pounds could significantly reduce the severity of their sleep apnea.

Weight loss works by reducing fatty tissue. And if you have less fat surrounding your airway in your tongue and under your chin, then your airway is more open and less collapsible.

How Weight Loss Improves Breathing

If you have less fatty tissue in your belly area, your diaphragm and the base of your lungs are going to function better because there's less pressure on your diaphragm, especially when you're laying down.

Additionally, fat is a hormone producing tissue that influences the neuro respiratory control of breathing. So losing weight can improve that relationship.

Here are a couple of drawings. Now, the one on the left is showing a normal airway space, which is marked in green, light blue and purple shading. The picture on the right is showing the distribution of fatty tissue in the upper upper airway and neck and comparing this to the area on the left.

You can see that the fatty tissue in yellow, this is markedly reducing the space for air to pass through on its way to the lungs. There can be fat deposition in the back walls of the airway that press that tissue forward.

There can be fat in the soft palate which makes up the roof of your mouth way back toward your throat. There can be fat in your tongue and there can be fatty tissue below the tongue and in your neck area.

Unfortunately, you have no control over how you lose weight or gain weight. In other words, you can't selectively lose weight from your throat and neck area to increase the airway caliber.

Fat Distribution and Airway Narrowing

It's also known that those with more abdominal fat or people who have an apple shape have higher risks for cardiovascular diseases and sleep apnea. Now, the abdominal weight can push up on the diaphragm muscle in the abdomen so that it doesn't work as efficiently as it could without that pressure.

And this is especially true when you're lying down and you don't have gravity on your side. So weight loss from around your middle section can help your breathing.

Please realize that sleep apnea can be due to other factors besides weight. There are actually multiple contributing factors, but for now, know that 20 to 25% of people who are diagnosed with sleep apnea actually have a body mass index in the normal range.

So I think the real question is what are your chances of improving sleep apnea with weight loss and a limitation here is that research studies look at large populations of people, but within those populations, individual results, very significantly I can tell you that there are higher chances of reducing your sleep apnea severity or even eliminating sleep apnea if you lose enough weight to get to a normal or near normal body mass index.

Your chances are also higher. The younger you are and the more mild your sleep apnea severity is.

Who Benefits Most From Weight Loss

It's helpful if you don't have high blood pressure or diabetes, since those conditions are independent risk factors for sleep apnea. And finally, a bit of a wild card is how much the non weight related factors are contributing and that would simply not be known prior to weight loss.

But in hindsight, if you lost weight and your sleep apnea was cured, you could reasonably say that the non weight related risk factors were not playing a role if you are overweight or even in one of the categories of obesity.

I want to highlight that your weight is a unique risk factor for sleep apnea, since it can be intentionally changed. I want you to keep in mind four things.

If you're contemplating a weight loss journey. First off, moving toward a healthy weight is a worthy endeavor, regardless of the effect it has on your sleep apnea.

There are many health benefits associated with weight loss, although I do recognize that there are unhealthy people with normal weight and there are people who carry excess weight who actually enjoy good health.

If you're not happy with your weight and the effect it's having on your own personal life or your health. Weight loss would improve the health of your heart and cardiovascular system.

Health Benefits Beyond Sleep Apnea

It would increase your cognitive abilities, increase your immunity, lessen the strain on your joints, improve your blood glucose levels, cholesterol measures, and liver function.

And yes, it can make your breathing easier. Secondly, know that even without sleep apnea, carrying extra weight can cause reduced sleep quality. It can cause daytime sleepiness or fatigue, sleep disruption due to acid reflux.

It can cause inflammation and joint and back pain, which can interfere with your sleep. Thirdly, even if your sleep apnea doesn't totally go away with weight loss, more treatment options may open up for you if your sleep apnea severity does improve.

For example, the pressure setting of your CPAP machine could be lowered if your sleep apnea severity gets better. Or you may be a good candidate for oral appliance therapy.

And if your sleep apnea is isolated to sleeping on your back position therapy may also be an option. Finally, if you

do lose weight, don't quit. Sleep apnea treatment prematurely untreated or even undertreated.

Sleep apnea can cause weight, regain and cancel out your progress.

Retesting and Staying on Treatment

Because of this, you want to get retested. If you lose at least 10% of your body weight and have significant improvement in symptoms. This is to see if your sleep apnea has gone away or not.

If you are struggling with your weight, I really want to encourage you to keep moving toward a solution. It all starts with healthy lifestyle practices, which includes healthy sleep, good nutrition and moving every day in a way that makes you feel good.

This is something I coach on regularly and I can help you understand when it's time to think about medical treatment for your weight. What I'm talking about is prescription medication or bariatric surgery.

In the meantime, keep striving toward your health goals. And remember, the well slept version of you is the best version of you.