

Losing weight can cure obstructive sleep apnea in overweight patients

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For sufferers of obstructive sleep apnea (OSA), a new study shows that losing weight is perhaps the single most effective way to reduce OSA symptoms and associated disorders, according to a new study in the *American Journal of Respiratory and Critical Care Medicine*, one of the American Thoracic Society's three peer-reviewed journals.

Weight loss may not be a new miracle pill or a fancy high-tech treatment, but it is an exciting therapy for sufferers of OSA both because of its short- and long-term effectiveness and for its relatively modest price tag. Surgery doesn't last, continuous positive airway pressure (CPAP) machines are only as effective as the patient's adherence, and most other devices have had disappointing outcomes, in addition to being expensive, unwieldy and having poor patient compliance. Furthermore, OSA is generally only treated when it has progressed to a moderate to severe state.

"Very low calorie diet (VLCD) combined with active lifestyle counseling resulting in marked weight reduction is a feasible and effective treatment for the majority of patients with mild OSA, and the achieved beneficial outcomes are maintained at 1-year follow-up," wrote Henri P.I. Tuomilehto, M.D., Ph.D., of the department of Otorhinolaryngology at the Kuopio University Hospital in Finland.

The prospective, randomized trial found that, in 81 patients with mild OSA, the 40 patients who were in the intervention arm underwent a diet that strictly limited caloric intake combined with lifestyle counseling lost

more than 20 pounds on average in a year—and kept it off, resulting in markedly lower symptoms of OSA. The 41 patients in the control arm, who only received lifestyle counseling and lost on average less than 6 pounds, and were much less likely to see improvements in their OSA.

And not only does sustained weight loss improve OSA, it also improves the many other independently linked co-morbidities such as hypertension, high cholesterol, and diabetes.

"This is emphasized by our findings that, in conjunction with the improvement in AHI, significant improvements were also found in symptoms related to OSA, insulin resistance, lipids, and cardiorespiratory variables, such as arterial oxygen saturation, in patients belonging to the intervention group," wrote Dr. Tuomilehto.

Furthermore, Dr. Tuomilehto observed, "The greater the change in body weight or waist circumference, the greater was the improvement in OSA." In fact, mild OSA was objectively cured in 88 percent of the patients who lost more than 33 pounds, a statistic that declined with the amount of weight lost. Only in 62 percent of those who lost between 11 and 33 pounds were objectively cured of their OSA, as were 38 percent of those who lost between zero and 11 pounds, and only 11 percent of those who had not lost weight or who had gained weight.

"Witnessed apneas," i.e., those loud or disturbing enough to have wakened the bedfellows of study participants, "totally vanished" in 26 percent of those patients, but in only three percent of the control group.

"This appears to be a fairly straightforward relationship, and while we would not necessarily recommend the severe caloric restriction used in our study to every patient, one of the first treatment for OSA that should be considered in the overweight patient is clearly weight loss," said Dr. Tuomilehto.

"A more aggressive treatment of obesity in patients with OSA is well-founded. Lifestyle intervention with an early VLCD is a feasible, low-cost, and curative treatment for the vast majority of patients with mild OSA and it can be implemented in a primary care setting after diagnosis of OSA. Weight reduction also results in an improvement of obesity-related risk factors for cardiovascular diseases."

Source: American Thoracic Society

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