

You Still Need More than CPAP for OSA Patients to Lose Weight

Response to Mysliwiec et al. Weight gain with CPAP: a complication of treatment?

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In their comment regarding our recent paper demonstrating that persons with obstructive sleep apnea (OSA) gain weight after being treated with continuous positive airway pressure (CPAP) and the accompanying editorial,^{1,2} Mysliwiec and colleagues suggest that the observed increase in weight was related to an increase in lean body mass (LBM) rather than adipose tissue.³ Consequently, they contend that weight gain with CPAP may actually represent a beneficial effect.³ Inasmuch as we did not perform body composition studies on the participants in our study, we cannot confirm or refute whether an increase in LBM, adipose tissue, or both occurred.

Although we agree that CPAP can be associated with an increase in LBM in some individuals,^{4,5} it needs to be emphasized that the vast majority of persons with OSA are overweight if not frankly obese.⁶ Most, but not all studies report that visceral fat does not decrease with CPAP use.^{4,5,7-9} Moreover, in the study by Muntzer et al.,⁴ there was a trend for an increase in visceral fat with CPAP, although it did not reach statistical significance. However, waist circumference⁴ and subcutaneous fat⁵ increased. Yet, whether weight gain induced by CPAP in persons with OSA is reflected by increased LBM or adipose tissue is not as important as the failure to observe any weight reduction. A recent meta-analysis indicates that even metabolically healthy obese persons are at increased risk for cardiovascular disease and death, suggesting a "healthy obesity" phenotype does not exist.¹⁰ Weight reduction is recommended in all persons with OSA who are overweight and can result in remission or reduction in severity. Therefore, our findings still support the conclusion that CPAP alone will not lead to weight reduction, and that clinicians need to recommend or prescribe additional interventions to facilitate weight loss in their patients with OSA.

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