

Study finds that CPAP therapy reduces acid reflux in people with sleep apnea

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A new study suggests that CPAP therapy may help improve the symptoms of nocturnal gastroesophageal reflux in patients with obstructive sleep apnea.

Results show that 62 of 79 [patients](#) (78%) with sleep apnea had symptoms of acid reflux at baseline. The mean heartburn score decreased by 62 percent among the sleep apnea patients who were adherent to CPAP therapy. The study also found a progressive reduction in heartburn score with increasing CPAP adherence, which was the only significant predictor for acid reflux reduction in the multiple regression analysis.

"We found that CPAP treatment improves nighttime acid reflux symptoms without any acid reducing medication," said lead author M. I. Ullah, MD, associate professor of medicine at University of Mississippi Medical Center in Jackson. "However, minimum CPAP usage of at least 4 hours per night for 25 percent of nights or more was needed to achieve any acid reflux benefit."

Study results are published in the Sept. 15 issue of the *Journal of Clinical Sleep Medicine*.

According to the American Academy of Sleep Medicine, [obstructive sleep apnea](#) (OSA) is a sleep-related breathing disorder characterized by repetitive episodes of complete or partial upper airway obstruction occurring during sleep. Common warning signs for sleep apnea include

snoring and gasping or choking during sleep, along with daytime sleepiness or fatigue. Gastroesophageal reflux symptoms also are sometimes reported by patients with sleep apnea. One treatment option for sleep apnea is continuous positive airway pressure (CPAP) therapy, which helps keep the airway open by providing a stream of air through a mask that is worn during sleep.

The study involved 79 veterans with obstructive sleep apnea who were prescribed treatment with CPAP therapy. Participants completed a questionnaire to assess the frequency of heartburn and acid regurgitation. All participants were re-evaluated in the sleep clinic during follow-up visits after 6 months of initial enrollment. Objective data from the CPAP machines were downloaded by the sleep technicians for accurate treatment adherence documentation. Those who demonstrated CPAP use of 4 or more hours per night for at least 70 percent of the nights were considered to be adherent to the treatment.

According to the authors, previous research studying the impact of CPAP therapy on acid reflux among patients with sleep apnea relied on self-reports of CPAP adherence. Therefore, this may be the first study to demonstrate with objective treatment adherence data that CPAP adherence improves nocturnal acid reflux symptoms.

More information: Sadeka Tamanna et al, Effect of CPAP Therapy on Symptoms of Nocturnal Gastroesophageal Reflux among Patients with Obstructive Sleep Apnea, *Journal of Clinical Sleep Medicine* (2016). [DOI: 10.5664/jcsm.6126](https://doi.org/10.5664/jcsm.6126)

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