

Atrial fibrillation recurrence lower with sleep apnea treatment

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Illustration of obstruction of ventilation. Credit: Habib M'henni / public domain

The use of continuous positive airway pressure was associated with a

significant reduction in the recurrence of atrial fibrillation in patients with obstructive sleep apnea, according to an analysis of data from past research published today in the *Journal of the American College of Cardiology: Clinical Electrophysiology*.

Researchers from the New York University Langone Medical Center in New York City performed a meta-analysis of seven studies including 1,087 [patients](#) to determine if continuous positive airway pressure (CPAP) reduced the recurrence of [atrial fibrillation](#) in patients with [obstructive sleep apnea](#).

The analysis found that CPAP use was associated with a 58 percent relative risk reduction in atrial fibrillation recurrence in patients with obstructive [sleep apnea](#) regardless of their primary treatment. While a large randomized trial still needs to be done, the researchers believe the data shows CPAP has potential to be a third treatment option for atrial fibrillation.

"Our study confirms the expanding body of evidence that treatment of modifiable risk factors has a significant impact on the long-term suppression of atrial fibrillation regardless of the type of therapy offered," said Larry A. Chinitz, M.D., professor of medicine and cardiac electrophysiology at the New York University School of Medicine and one of the study authors.

"Active screening for obstructive sleep apnea in all patients who undergo treatment for atrial fibrillation is imperative as the use of CPAP will influence the outcome of therapy and likely reduce some of the cardiovascular morbidity associated with atrial fibrillation," Chinitz said. "Technology for home screening of sleep apnea needs to be made widely available and become as routine as measurements of blood pressure and blood sugar levels in diabetics."

Anti-arrhythmic drugs and [catheter ablation](#) with pulmonary vein isolation, a procedure that removes a faulty electrical pathway from sections of the heart, are the most common treatments available to maintain a normal sinus rhythm in patients with atrial fibrillation. Obstructive sleep apnea is a risk factor that is associated with both the onset of atrial fibrillation and its recurrence even after catheter ablation.

"Sleep apnea, along with several other conditions including hypertension, obesity, and diabetes, actively contribute to the onset and progression of atrial fibrillation. This study provides important evidence that we need to identify and treat these associated conditions if our more direct efforts to suppress the arrhythmia by antiarrhythmic drugs or ablation are to be effective," said David J. Wilber, M.D., editor-in-chief of the *Journal of the American College of Cardiology: Clinical Electrophysiology*.

Previous studies evaluated the effect of CPAP use to reduce atrial fibrillation recurrence and suggested positive outcomes. However, these studies often had small sample sizes with varying results and there remained a need to comprehensively evaluate available data to determine the impact of CPAP use on atrial fibrillation.

Provided by American College of Cardiology

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