The Relationship between Asthma and Obstructive Sleep Apnea (OSA) - A Pilot Study

Sleep apnea may lead to poor asthma control

Findings show obstructive sleep apnea may be a common reason for chronic asthma, suggesting clinicians should screen for the condition.

**Description:** Asthma represents a significant public health burden, with 450,000 reported cases in Wisconsin. Many asthmatic individuals also report sleep disturbances, including symptoms of obstructive sleep apnea (OSA) such as snoring and daytime sleepiness. This project aimed to study the relationship of OSA with asthma, including the prevalence of OSA symptoms and their relationship with asthma control.

**Results:** The investigators found that a high risk of OSA was associated, on average, with nearly three times higher odds for not-well-controlled asthma, when accounting for the presence of obesity and other factors known to worsen asthma. The associations were similar, regardless of the way of assessing asthma control. The findings suggest that obstructive sleep apnea is common and frequently unrecognized in asthma patients, outlining a need for clinicians to screen for it in those patients who have difficulty achieving adequate asthma control. The connections between OSA and asthma found through this project may suggest a new understanding of the causes of poor asthma control.

**Timeline for Application of Results:** Less than 3 years

**Next Steps:** The investigators have received $237,000 to collaborate with the NIH-National Heart, Lung, and Blood Institute’s Asthma Clinical Research Network and Severe Asthma Research Program to further test these findings.

*The results of this study were published in the journal Chest.*