**Asthma Associated with Risk of Obstructive Sleep Apnea**

Asthma was associated with a heightened risk of developing obstructive sleep apnea in a prospective epidemiologic study

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February 28, 2015 – Adults with asthma who were initially free of obstructive sleep apnea (OSA) symptoms developed sleep apnea with a higher incidence than did adults who did not have asthma, according to the results of a prospective, longitudinal study.

Mihaela Teodorescu, MD, of the James B. Skatrud Pulmonary / Sleep Research Laboratory at the William S. Middleton Memorial Veteran’s Hospital in Madison, Wisconsin, and colleagues reported the results of their study in the January 15, 2015, issue of the *Journal of the American Medical Association.*

As the authors report, previous studies had shown a mutually deleterious, bidirectional link between asthma and OSA. However, despite their previous association, asthma and OSA have never before been causally linked.

In their study, Teodorescu and colleagues recruited a random sample of adult subjects and assessed them for self-reported asthma as well as OSA. Recruited subjects were free of OSA, with an apnea-hypopnea index (AHI) of <5 events/h. Follow up occurred in 4-year intervals, and subjects were assessed for presence and duration of asthma and development of OSA, defined as an AHI >5 or treatment with positive airway pressure.

Of those study participants with asthma at the start of the study, 22 of 81 (27% [95% CI, 17%-37%]) experienced incident OSA within the first 4-year interval, compared with 75 of 466 nonasthmatics (16% [95% CI, 13%-19%]). Over the full course of the study, participants with asthma encountered an adjusted relative risk for OSA of 1.39 (95% CI, 1.06-1.82).

Taken together, these results suggest asthma is associated with an increased risk of developing OSA, indicating that studies “investigating the mechanisms underlying this association and the value of periodic OSA evaluation in patients with asthma are warranted.”

The authors hypothesize that mechanisms relevant to onset of OSA in asthmatic patients might include administration of corticosteroids to patients with asthma and sleep disruption that is concomitant with asthma symptoms.

*The authors of the study report no relevant financial conflicts of interest.*

Teodorescu M, Barnet JH, Hagen EW, Palta M, Young TB, Peppard PE. Association between asthma and risk of developing obstructive sleep apnea. *JAMA*. 2015;313(2):156–164. doi:10.1001/jama.2014.17822.