

Sleep apnea tied to insulin resistance in young, lean men

August 29 2012



In healthy, lean, young men, the presence of obstructive sleep apnea correlates with insulin resistance and compensatory hyperinsulinemia to maintain normal glucose levels, according to a study published online Aug. 21 in *Diabetes Care*.

(HealthDay)—In healthy, lean, young men, the presence of obstructive sleep apnea (OSA) correlates with insulin resistance and compensatory hyperinsulinemia to maintain normal glucose levels, according to a study published online Aug. 21 in *Diabetes Care*.

Sushmita Pamidi, M.D., from the University of Chicago, and colleagues conducted a prospective study involving healthy men (age 18 to 30 years; [body mass index](#) [BMI], 18 to 25 kg/m²) who underwent laboratory polysomnogram followed by a morning [oral glucose tolerance test](#). Participants were stratified according to the presence or absence of ethnicity-based diabetes risk and family history of diabetes. Twelve men with OSA were selected and matched with 20 controls without OSA.

The researchers found that age, BMI, ethnicity-based diabetes risk, family history of diabetes, and level of exercise were similar for men with OSA and controls. Normal systolic and diastolic blood pressure and fasting lipid levels were seen in both groups. Despite having comparable glucose levels, men with OSA had 27 percent lower insulin sensitivity (estimated by Matsuda index) and 37 percent higher total [insulin secretion](#), compared with control subjects, after ingestion of glucose load.

"In young, lean, and healthy men who are free of cardiometabolic disease, the presence of OSA is associated with [insulin resistance](#) and a compensatory rise in insulin secretion to maintain normal glucose tolerance," the authors write. "OSA may increase the risk of type 2 diabetes independently of traditional cardiometabolic risk factors."

More information: [Abstract](#)
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Citation: Sleep apnea tied to insulin resistance in young, lean men (2012, August 29) retrieved 24 April 2024 from
<https://medicalxpress.com/news/2012-08-apnea-tied-insulin-resistance-young.html>

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