

Snoring May Be Early Sign of Future Health Risks

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DETROIT – Here's a wake-up call for snorers: Snoring may put you at a greater risk than those who are overweight, smoke or have high cholesterol to have thickening or abnormalities in the carotid artery, according to researchers at Henry Ford Hospital in Detroit.

The increased thickening in the lining of the two large blood vessels that supply the brain with oxygenated blood is a precursor to atherosclerosis, a hardening of the arteries responsible for many vascular diseases.

"Snoring is more than a bedtime annoyance and it shouldn't be ignored. Patients need to seek treatment in the same way they would if they had sleep apnea, high blood pressure or other risk factors for cardiovascular disease," says lead study author Robert Deeb, M.D., with the [Department of Otolaryngology-Head & Neck Surgery](#) at Henry Ford.

"Our study adds to the growing body of evidence suggesting that isolated snoring may not be as benign as first suspected. So instead of kicking your snoring bed partner out of the room or spending sleepless nights elbowing him or her, seek out medical treatment for the snorer."

The study reveals changes in the carotid artery with snorers – even for those without sleep apnea – likely due to the trauma and subsequent inflammation caused by the vibrations of snoring.

Study results will be presented Friday at the 2013 Combined Sections Meeting of the Triological Society in Scottsdale, Ariz. It has been submitted to The Laryngoscope journal for publication.

Obstructive sleep apnea (OSA) – a sleep disorder that occurs due to the collapse of the airway in the throat during sleep and causes loud snoring and periodic pauses in breathing – has long been linked to cardiovascular disease, along with a host of other serious health issues.

But the risk for cardiovascular disease may actually begin with snoring, long before it becomes OSA. Until now, there was little evidence in humans to show a similar connection between snoring and cardiovascular risk.

For the Henry Ford study, Dr. Deeb and senior study author [Kathleen Yaremchuk](#), M.D., reviewed data for 913 patients who had been evaluated by the institution's sleep center.

Patients, ages 18-50, who had participated in a diagnostic sleep study between December 2006 and January 2012 were included in the study. None of the participants had sleep apnea.

In all, 54 patients completed the snore outcomes survey regarding their snoring habits, as well as underwent a carotid artery duplex ultrasound to measure the intima-media thickness of the carotid arteries.

Carotid intima-media thickness, a measurement of the thickness of the innermost two layers of the arterial wall, may be used to detect the presence and to track the progression of atherosclerotic disease. Intima-

media thickness is the first sign of carotid artery disease.

Compared to non-snorers, snorers were found to have a significantly greater intima-media thickness of the carotid arteries, the study finds.

The study also revealed no statistically significant differences in intima-media thickness for patients with or without some of the traditional risk factors for cardiovascular disease – smoking, diabetes, hypertension or hypercholesterolemia.

“Snoring is generally regarded as a cosmetic issue by health insurance, requiring significant out-of-pocket expenses by patients. We’re hoping to change that thinking so patients can get the early treatment they need, before more serious health issues arise.”

The Henry Ford research team plans to conduct another long-term study on this topic, particularly to determine if there’s an increased incidence of cardiovascular events in patients who snore.

Along with Drs. Deeb and Yaremchuk, Henry Ford study co-authors are Paul Judge, M.D.; Ed Peterson, Ph.D.; and Judith C. Lin, M.D.

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