

Why Smokers Might Need to Watch Their Hearing

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Smoking, poor blood sugar control and abdominal obesity tied to hearing impairment

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(dailyRx News) Smokers, if you need another reason to quit, here's one that might surprise you: Quitting might save your hearing.

A new study found that several factors — including smoking — were linked to hearing loss. The other factors included fat around the midsection and poor blood sugar control.

"As if smokers did not need another motivation to quit smoking, here is a new study that links cigarettes to hearing loss," said David Winter, MD, chief clinical officer, president and chairman of the board of Baylor Health Care System's HealthTexas Provider Network, in an interview with dailyRx News. "The mechanism is not clear, but cigarette smoke has been associated with blood supply deficiencies and that may be the causation here. Obesity centered around the waist and poorly

controlled diabetes mellitus also were found related to hearing loss. Interestingly, long term exposure to loud noises was not associated with hearing loss in this study."

Hearing impairment is relatively common in older adults. It often results from changes in the cochlea, a structure in the inner ear.

Karen J. Cruickshanks, PhD, of the School of Medicine and Public Health at the University of Wisconsin, led this study. Dr. Cruickshanks and team analyzed data on 1,925 people who had normal hearing when the study began. These patients ranged in age from 43 to 84.

Patients answered surveys about lifestyle factors like smoking and exercise. The researchers also collected data on blood pressure, waist circumference, weight and hemoglobin A1c (HbA1c) — a measure of average blood sugar over time. Study patients also underwent hearing tests.

Dr. Cruickshanks and colleagues found that patients who smoked were more likely to develop hearing loss than nonsmokers or those who had stopped smoking at least five years prior to the hearing test. People who had stopped smoking within five years of the hearing test had a slightly increased risk of hearing impairment compared to nonsmokers.

The research team found that the amount a patient smoked did not appear to affect hearing loss.

People who were obese or had a larger waist circumference had an increased risk of hearing loss compared to those who were not obese, Dr. Cruickshanks and team found.

Study patients who had diabetes and poor blood sugar control were also more likely to develop hearing loss than those with good blood sugar control. Although people with diabetes had a slightly raised risk of hearing loss compared to those who did not have diabetes, blood sugar control appeared to be a more important factor.

An HbA1c level of 12 or above was tied to a doubled risk of hearing impairment compared to those with normal blood sugar. Even people with "high normal" blood sugars — HbA1c averaging 6.1 to 8 — had a slightly raised risk of hearing loss.

Dr. Cruickshanks and team said future studies in which patients change lifestyle factors like smoking should include hearing tests to determine whether the changes improve or prevent hearing impairment.

This study was published in the May issue of the *Journal of the American Geriatric Society*.

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