

# Hearing Loss Tied to Diabetes in Study

## But it's unclear whether the disease or the drugs that treat it are the cause

**FRIDAY, Nov. 16, 2012** (HealthDay News) -- People with diabetes may have a higher risk of hearing problems than those without the disease, a new research review confirms.

Combining the results of 13 past studies, Japanese researchers found that impaired hearing was twice as common among people with diabetes compared to those without. And the effects of older age did not seem to explain it.

The link between diabetes and hearing loss was actually stronger among people who were 60 or younger than among older adults. In the younger group, people with diabetes had a 2.6 times higher likelihood of impaired hearing.

That's an interesting finding, said Dr. Joel Zonszein, director of the Clinical Diabetes Center at Montefiore Medical Center in New York City.

It's consistent with the idea that poor blood sugar control -- which damages blood vessels and nerves throughout the body -- and not simply old age might explain why people with diabetes have more hearing problems, said Zonszein, who was not involved in the study.

Still, he said, "this is an observational association, and additional studies are needed to clarify the relationship between diabetes and prevalence of hearing impairment."

Findings from "observational" studies, where researchers compare diabetics with non-diabetics, cannot prove a cause-and-effect relationship. They can only show a correlation between diabetes and hearing problems.

What's more, Zonszein said, no one knows yet whether gaining better control over your blood sugar will curb any risk of hearing loss.

The findings, published online this week in the *Journal of Clinical Endocrinology & Metabolism*, are based on studies involving more than 20,000 people from the United States, Asia, Australia and Brazil. All but one study found an association between diabetes and a higher prevalence of hearing problems.

In one national sample of Americans, for example, close to half of adults with diabetes had some degree of hearing loss compared with about 20 percent of their diabetes-free counterparts.

Across the studies, neither age nor exposure to a noisy workplace explained the connection between diabetes and hearing loss, said Chika Horikawa, a dietitian at Niigata University in Japan, who led the analysis.

There could still be explanations other than diabetes itself, Horikawa said. Certain medications many diabetics take, particularly blood-pressure-lowering diuretics, can affect hearing, Horikawa noted.

Another limit of the analysis, Zonszein said, is that many studies did not differentiate between people with type 1 and type 2 diabetes. Type 2 diabetes, which often is related to aging and obesity, is far more common than type 1, which is an immune-system disease that usually arises at a young age.

Still, Horikawa said, the findings suggest it may be a good idea for people with any form of diabetes to have their hearing tested. Some research suggests that hearing loss may increase the odds of depression and dementia, potentially adding an even greater load to the burden of diabetes.

In reality, routine screening is done infrequently. Primary care doctors may not even ask diabetic patients about their hearing, Zonszein said.

"We're not very good at detecting this during routine office visits," he said.

Diabetes is tied to a range of complications, including heart disease, kidney failure and vision loss from damage to the eyes' blood vessels.

During office visits, doctors usually focus on bigger-picture things such as overall blood sugar control, diet and weight control, Zonszein explained.

Routinely sending patients without obvious hearing problems for a screening test "might sound simple, but, practically speaking, it's difficult," Zonszein noted. People would have to take time off work to see a specialist, and, of course, there's a price tag, Zonszein pointed out.

For now, he suggested that people with diabetes be aware of any changes in their hearing. "Be proactive," Zonszein said. "If you notice any hearing loss, tell your doctor about it."

According to the American Diabetes Association, some common signs of impaired hearing include: frequently having to ask other people to repeat themselves, feeling that others are mumbling and cranking the TV or radio volume to levels that are too loud for the people around you.