

Statins may protect against memory loss

July 28 2008

People at high risk for dementia who took cholesterol-lowering statins are half as likely to develop dementia as those who do not take statins, a new study shows.

The study consisted of older Mexican-Americans in Sacramento, Calif., who suffered from metabolic conditions that put them at risk for developing dementia, Alzheimer's or cognitive impairment without dementia, said Mary Haan, epidemiology professor at the University of Michigan School of Public Health and lead author of the study. Some of the risk factors for dementia include high cholesterol, Type 2 diabetes, obesity and hypertension.

"The bottom line is that if a person takes statins over a course of about 5-7 years, it reduces the risk of dementia by half, and that's a really big change," said Haan, who notes that the study did not look at statins as a treatment for existing dementia, only as a preventative. Statins are drugs that specifically lower LDL or bad cholesterol.

The longitudinal study was originally funded in 1997 to look at metabolic and vascular conditions like hypertension and diabetes and their effect on the risk of dementia and Alzheimer's disease. Earlier landmark findings by Haan's group of the same study cohort established that certain metabolic and vascular disorders predicted Alzheimer's and dementia. For instance, people with Type 2 diabetes are up to three times more likely to develop Alzheimer's disease, they found.

In this current study, Haan's group set out to measure whether taking

statins over time lowered the development of dementia in that same high-risk population. The resulting paper, "Use of Statins and Incidence of Cognitively Impaired Not Demented and Dementia in a Cohort Study," will appear in the July 29 issue of *Neurology*.

"In older people you have so many different chronic conditions, especially in this group, that the chance of any intervention having an effect is fairly limited," Haan said. "Say you're 75 or 80 and you've got six diseases. How much is a treatment really going to help? This showed if you started using statins before the dementia developed you could prevent it in about half of the cases."

It's likely that many people taking statins have already benefited unknowingly from the dementia fighting properties, she said. Haan hopes the study will help fuel randomized trials to test statins and their ability to prevent dementia.

Of 1,674 participants who were free of dementia at the start of the study, 27 percent, or 452 people, took statins at some point in the study. Over the five-year follow up period, 130 participants developed dementia or cognitive impairment. Researchers adjusted for factors such as education, smoking status, the presence of a particular gene thought to predict dementia, and history of stroke or diabetes.

"We aren't suggesting that people should take statins for purposes other than what they are indicated for, but hopefully this study and others will open the door to statin testing for dementia and other types of cognitive impairment," Haan said.

It's not clear exactly how statins work to decrease the development of dementia. An emerging risk factor for dementia is high insulin, Haan said, and one theory is that statins may work on those insulin pathways in a way that lowers the high insulin levels in the brain that can lead to the

classic Alzheimer's pathology.

Statins lowered the risk of dementia in all participants, but the statins had more of an impact on the group at high risk due to metabolic syndrome. The next step, Haan said, is to determine exactly how the statins work on the biochemical pathways involved in dementia.

Source: University of Michigan

Citation: Statins may protect against memory loss (2008, July 28) retrieved 8 May 2024 from <https://medicalxpress.com/news/2008-07-statins-memory-loss.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.