

Researchers identify possible treatment window for memory problems

February 27 2013

Researchers have identified a possible treatment window of several years for plaques in the brain that are thought to cause memory loss in diseases such as Alzheimer's. The Mayo Clinic study is published in the Feb. 27 online issue of *Neurology*.

"Our study suggests that plaques in the brain that are linked to a decline in memory and thinking abilities, called beta amyloid, take about 15 years to build up and then plateau," says lead author Clifford Jack, Jr., M.D., a Mayo Clinic radiologist, and the Alexander Family Professor of Alzheimer's Disease Research at Mayo Clinic.

For the study, 260 people ages 70 to 92 had two or more brain scans over an average of 1.3 years to measure [plaque buildup](#) in their brains. Of the participants, 22 percent had impaired thinking abilities or memory at the start of the study.

The study found that the rate of buildup accelerates initially, then slows before plateauing at high levels. The rate of [plaque accumulation](#) was highest in those with mid-range levels at the start of the study. Those with low levels or high levels of the plaques as the study began had lower rates of plaque buildup.

The study also found that the rate of buildup of plaques was more closely tied to the total amount of [amyloid plaques](#) in the brain than other risk factors, such as the level of cognitive impairment, age and the presence of the [APOE gene](#), a gene linked to Alzheimer's disease.

"Our results suggest that there is a long treatment window where medications may be able to help slow buildup of the amyloid plaques that are linked to [cognitive decline](#)," Dr. Jack says. "On the other hand, trying to treat the plaque buildup after the amyloid plaque load has plateaued may not do much good."

Provided by Mayo Clinic

Citation: Researchers identify possible treatment window for memory problems (2013, February 27) retrieved 2 May 2024 from <https://medicalxpress.com/news/2013-02-treatment-window-memory-problems.html>

<p>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.</p>
--