

Infections may lead to faster memory loss in Alzheimer's disease

September 7 2009

Getting a cold, stomach bug or other infection may lead to increased memory loss in people with Alzheimer's disease, according to research published in the September 8, 2009, print issue of *Neurology*, the medical journal of the American Academy of Neurology.

The study found that people who had respiratory, gastrointestinal or other infections or even bumps and bruises from a fall were more likely to have high blood levels of tumor necrosis factor- α , a protein involved in the inflammatory process, and were also more likely to experience memory loss or other types of cognitive decline than people who did not have infections and who had low levels of the protein.

The blood levels and cognitive abilities of 222 people with [Alzheimer's disease](#) with an average age of 83 were measured at the beginning of the study and three more times over six months. Caregivers were interviewed to determine whether the participants had experienced any infections or accidental injury that could lead to inflammation.

A total of 110 people experienced an infection or injury that led to inflammation during the study. Those people experienced memory loss that was at twice the rate of those who did not have infections or injuries.

People who had high levels of the protein in their blood at the beginning of the study, which may indicate chronic inflammation, had memory loss at four times the rate of those with low levels of the protein at the start

of the study. Those who had high levels of the [protein](#) at the start of the study who also experienced acute infections during the study had [memory loss](#) at 10 times the rate of those who started with low levels and had no infections over the six-month period.

"One might guess that people with a more rapid rate of cognitive decline are more susceptible to infections or injury, but we found no evidence to suggest that people with more severe dementia were more likely to have infections or injuries at the beginning of the study," said study author Clive Holmes, MRCPsych, PhD, of the University of Southampton in the United Kingdom. "More research needs to be done to understand the role of tumor necrosis factor-alpha in the brain, but it's possible that finding a way to reduce those levels could be beneficial for people with Alzheimer's disease."

Source: American Academy of Neurology ([news](#) : [web](#))

Citation: Infections may lead to faster memory loss in Alzheimer's disease (2009, September 7) retrieved 9 April 2024 from <https://medicalxpress.com/news/2009-09-infections-faster-memory-loss-alzheimer.html>

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