

Common infections may increase risk for memory decline

February 13 2014

Exposure to common infections is linked to memory and brain function—even if the infections never made you ill, according to research presented at the American Stroke Association's International Stroke Conference 2014.

Researchers found an index of antibody levels caused by exposure to Chlamydia pneumoniae, Helicobacter pylori, cytomegalovirus, and herpes simplex viruses 1 and 2 was associated with worse cognitive performance, including memory, speed of mental processing, abstract thinking, planning and reasoning ability.

"We were very interested in what were the risk factors for <u>cognitive</u> <u>performance</u> and decline," said Clinton Wright, M.D., M.S., the study's lead researcher and scientific director of the Evelyn F. McKnight Brain Institute at the University of Miami.

Earlier studies have already linked certain infections to an increased risk of stroke and Alzheimer's disease. Researchers investigated if evidence of past exposure to these infections contributed to performance on tests of memory, thinking speed and other brain functions.

The study conducted <u>brain function</u> tests and took blood samples from 588 people who participated in the Northern Manhattan Study. Half of the participants then took <u>cognitive tests</u> again in five years.

Researchers believe exposure to these infections may be associated with



an increase in stroke risk, as well as an increase in atherosclerosis and inflammation, said Dr. Wright, who is also chief of the division of cognitive disorders and associate professor of neurology, neuroscience, and epidemiology and public health at the Leonard M. Miller School of Medicine at the University of Miami.

The study doesn't explain why the infections are related to worsening cognitive function. "It could be caused by an immune system response to the infections or the <u>infection</u> itself could result in clinical damage that we're not aware of," Wright said.

Wright, who conducted the study in collaboration with researchers at Columbia University, isn't suggesting that people take any action to combat these infections. "There is no evidence yet that treating these infections is beneficial," he said, because the initial exposure to the viruses may have happened decades earlier and the damage may be the result of a gradual process. "It would be great if treatment prevented these bad outcomes, but we're very far away from having that type of evidence." Further studies will need to be conducted to see if the findings are duplicated in other populations, he said, since most of the participants in the study—70 percent—were Hispanic.

Provided by American Heart Association

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