

A risk factor for Alzheimer's disease hastens death among those with HIV

A study out this week suggests that apoE4 hastens the death of people infected with HIV, possibly by allowing the virus easy entry into cells.

The defective lipid carrier apoE4 is implicated in predisposition to Alzheimer's disease, the worsening of several nervous system diseases and the promotion of cardiovascular disease risk. Now it seems that this same defective lipid carrier plays a part in the prognosis of HIV infection.

Apolipoprotein E carries cholesterol and lipoproteins through the plasma and cerebrospinal fluid to cells. One version of the protein, apoE3, just do this, but two other versions, E2 and E4, are associated with different diseases. People have two copies of the gene for apoE, but having even one copy of the gene for apoE4 is a major risk factor for Alzheimer's disease.

As long ago as 1998, a study found that HIV infected people with one copy of apoE4 were twice as likely as people without the gene to develop HIV associated dementia.

This study looks at the effect of apoE4 status on survival 10 years after the diagnosis of HIV. Among participants, almost all of the 27 patients who had two copies of the gene had died, but among those with other genetic combinations, even with one apoE4 gene, nearly half were still alive. Patients with two apoE4 genes also developed AIDS-related diseases, such as toxoplasmosis, twice as fast as those without the gene. Linking apoE4 to HIV progression could lead to new drugs, according to researchers.

For more, visit: <https://www.bizcommunity.com>