Fatty Liver Disease Linked to Greater Risk for Dementia

People with NAFLD who had heart disease or had a stroke had higher rates of dementia.

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Non-alcoholic fatty liver disease (NAFLD) and the risk for dementia appear to be associated, especially in people who also have cardiovascular problems, according to findings published recently in Neurology.

Arising from the accumulation of fat in the liver, NAFLD and its more severe form, non-alcoholic steatohepatitis (NASH), are responsible for a growing proportion of advanced liver disease worldwide. As a result of inflammation, NAFLD can lead to liver fibrosis), cirrhosis and even liver cancer. With no effective approved medical therapies, disease management is dependent on lifestyle changes such as weight loss and exercise.

NAFLD and dementia are sometimes linked to the same risk factors, such as metabolic abnormalities. Dementia can have multiple causes, including impaired blood flow to the brain due to cardiovascular disease; this is known as vascular dementia.

Since a direct association between fatty liver disease and dementia is unclear, Hannes Hagström, MD, PhD, of the Karolinska Institute in Stockholm, and colleagues explored potential links.

Using Sweden's National Patient Register, the researchers recruited people who were at least 65 years old between 1987 and 2016. In order to conduct a matched-cohort study, the team matched each person with NAFLD with up to 10 individuals of the same age, sex and municipality who did not have a NAFLD diagnosis.

Ultimately, the researchers included 2,898 people with NAFLD and 28,357 matched individuals from the general population. The average age of the study population was 70 years, and 55% were women. Some 3.6% of people with NAFLD had liver cirrhosis. The group with NAFLD was more likely to have various metabolic and cardiovascular conditions, including high blood pressure, diabetes and a history of stroke.

Over a follow-up period of 5.5 years, 145 people with NAFLD (5.0%) and 1,291 people in the control group (4.6%) were diagnosed with dementia. After 10 years, 7.5% of people with NAFLD and 5.5% of the matched group developed some type of dementia.

Compared with the control group, people with NAFLD had a 38% higher rate of dementia overall and a 44% higher risk for vascular dementia, but the risk for Alzheimer's disease did not differ. Higher dementia rates were observed in people diagnosed with NAFLD before age 85; however, those who were diagnosed later showed no significant increase in dementia risk.

What's more, people with NAFLD who had heart disease were at significantly higher risk for dementia, and those who had had a stroke were about three times more likely to develop dementia.

"In this large matched cohort study of individuals aged 65 years and older, we found that NAFLD was associated with an increased rate of all-cause dementia, with some evidence suggesting that the main effect was due to vascular dementia," wrote the researchers. "Comorbid cardiovascular diseases (e.g., NAFLD with stroke or heart disease) seemed to exacerbate the impact of NAFLD on dementia risk."

Click here to read the study in Neurology.

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