Fatty Liver Disease Tied to Metabolic Health Conditions in People With HIV

As with HIV-negative individuals, non-alcoholic fatty liver disease is tied to diabetes and irregular blood lipids in those with HIV.

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Just as with HIV-negative individuals, non-alcoholic fatty liver disease (NAFLD) is associated with metabolic, or metabolism-related, health conditions among those living with the virus, including higher rates of diabetes and irregular blood lipids.

The study that reached this conclusion was led by Giada Sebastiani, MD, of McGill University Health Centre in Montreal, and published in the Journal of Infectious Diseases.

Sebastiani and her colleagues enrolled 485 people with HIV who did not have hepatitis B or C viruses (HBV or HCV). Upon entering the study, 38% of the participants had fatty liver disease, and 17% had non-alcoholic steatohepatitis (NASH), the more severe form of NAFLD. Fifteen percent were suspected to have substantial fibrosis (scarring) of the liver, and 2.5% had cirrhosis, the most severe form of fibrosis.

The median age of the cohort was 50 years old. Seventy-six percent were men. Fifty percent were white, 35% were Black and 11% were Latino. The median body mass index (BMI) was 26.5 (a BMI of 25.0 to 29.9 indicates an individual is overweight but not obese).

Those participants who had NAFLD when they entered the study were older, more likely to be white, had been diagnosed with HIV for longer and had a higher median BMI than those who did not have fatty liver disease.

The participants were followed for a median of 40 months. For each 100 cumulative years of follow-up, there were 2.2 diagnoses of type 2 diabetes, 4.2 diagnoses of high blood pressure, 5.3 diagnoses of irregular blood lipids and 2.7 diagnoses of chronic kidney disease.

People with NAFLD at the study’s outset, compared with those who did not have the condition, were more likely to be diagnosed with diabetes (4.7 versus 0.9 diagnoses per 100 cumulative years) and irregular blood lipids (8.2 versus 4.0 diagnoses) during follow-up.

After adjusting the data to account for various differences between the study members, the
investigators found that having fatty liver disease was associated with a 5.1-fold greater likelihood of being diagnosed with diabetes and a 2.4-fold greater likelihood of being diagnosed with irregular blood lipids.

In another analysis, the investigators controlled for age and Black ethnicity and found that having substantial liver fibrosis and having high blood pressure were associated with a respective 2.7-fold and 4.2-fold greater likelihood of being diagnosed with diabetes.

The study authors concluded that “early referral strategies and timely management of metabolic risk may improve outcomes” among people who have HIV (but not HBV or HCV) and NAFLD.

To read the study abstract, click here.

To learn more about fatty liver disease, click here.