Cirrhosis Linked to Increased Mortality, Liver Complications in People With NAFLD

People with fatty liver disease and advanced fibrosis also had a greater incidence of diabetes.

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Cirrhosis, or severe liver scarring, was linked to a higher risk of all-cause death and liver complications in people with non-alcoholic fatty liver disease (NAFLD), according to findings from an observational study published in the The New England Journal of Medicine.

“This is the first clear picture of the true rates of outcomes in those with [non-alcoholic fatty liver disease],” Arun Sanyal, MD, of the Virginia Commonwealth University School of Medicine in Richmond, said in a press release.

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 the buildup of scar tissue (fibrosis), cirrhosis (advanced scarring) and even liver cancer. Fatty liver disease is linked to metabolic abnormalities, including insulin resistance and type 2 diabetes. With no effective approved medical therapies, disease management is dependent on lifestyle changes such as weight loss and exercise.

Sanyal and colleagues conducted a study that looked at a population representative of the full spectrum of fatty liver disease severity (NCT01030484). They analyzed the mortality rate and other clinical outcomes.

The researchers followed 1,773 adults with NAFLD for four years. As the fibrosis stage increased, the risk of all-cause death rose: Those with advanced fibrosis or cirrhosis experienced higher mortality. Mortality rose from 0.32 deaths per 100 person-years for those with absent to moderate fibrosis (Stage F0 to F2) to 0.89 deaths and 1.76 deaths per 100 person-years, respectively, for those with advanced fibrosis (Stage F3) and cirrhosis (Stage F4).

Those with more advanced fibrosis also had higher rates of liver complications, including hepatocellular carcinoma, the most common type of liver cancer. These complications included gastrointestinal bleeding, fluid accumulation in the abdomen (ascites) and brain damage (hepatic

encephalopathy).

Those with cirrhosis also had a higher incidence of type 2 diabetes and were more likely to develop kidney dysfunction. However, the occurrence of cardiac events and non-hepatic cancers were comparable across different stages of liver fibrosis. Liver complications were linked to all-cause mortality after adjusting for age, sex, race, diabetes status and fibrosis severity.

The results have implications for both the identification and treatment of non-alcoholic fatty liver disease, according to the researchers.

“Historically, many primary care physicians and diabetes specialists have felt that, because the roots of [fatty liver] disease lie in insulin resistance, then if we treat the diabetes we’ve already taken care of the problem,” said Sanyal. “And what this shows is that, even within an especially obese, diabetic population, those who have advanced fibrosis are dying of liver disease. Just treating diabetes doesn’t get the job done.”

Click here to read the study abstract in the The New England Journal of Medicine.

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