Testing People With Diabetes Can Detect More Liver Disease

Using a two-part testing plan could help identify those with advanced liver fibrosis among people with type 2 diabetes.

September 18, 2020 By Sukanya Charuchandra

Incorporating a two-tier assessment for liver disease into annual reviews for people with type 2 diabetes significantly increases diagnosis rates, researchers reported at the recent Digital International Liver Congress.

“The Gateshead pathway incorporates two-stage liver fibrosis assessment into routine diabetic review in primary care,” Dina Mansour, MD, of the Queen Elizabeth Hospital in Gateshead, United Kingdom, said in the presentation. “It provides a systemic, standardized approach to identify diabetic patients with advanced liver disease.”

Non-alcoholic fatty liver disease (NAFLD) and its more severe form, non-alcoholic steatohepatitis (NASH), develop due to fat accumulation in the liver. These conditions 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. With no effective approved medical therapies, disease management is dependent on lifestyle changes such as weight loss and exercise.

People with type 2 diabetes have a higher risk of developing advanced liver fibrosis, especially when they have a history of alcohol use disorder. They are also subject to frequent blood tests, making it easier to screen for biomarkers. Previous research has found that screening for NAFLD accompanied by lifestyle modification in people with type 2 diabetes can be cost effective.

Mansour and her colleagues ran a pilot study that included two types of liver fibrosis tests for those undergoing diabetes testing in a primary care setting. The study population included 477 people with type 2 diabetes who were recruited at two primary care clinics in North East England. The group received a diabetic review between April 2018 and September 2019.

Initially, those over age 35 were scored using the FIB-4 liver fibrosis index, which incorporates age, platelet count and ALT and AST liver enzyme levels. Those people who exceeded the normal FIB-4 values for their age then received noninvasive FibroScan imaging, which measures liver stiffness to estimate the degree of fibrosis. Those with abnormally stiff livers (a score over 8) were guided

toward specialists. If advanced fibrosis or cirrhosis was detected, they were enrolled in monitoring programs.

The research team found that the overall rate of advanced fibrosis or cirrhosis was 4.6%. This indicated a sevenfold jump in the diagnosis of people with advanced liver disease compared with the standard approach.

“Making FIB-4/FibroScan accessible through electronic medical records in primary care allows liver fibrosis assessments to be embedded into routine assessment of diabetic patients and ensures the correct patients are referred to secondary care,” the study authors concluded.

“We identified a significant number of patients with advanced liver disease, over half of whom had normal ALT, who would have been missed if only national guidelines had been followed,” Mansour said in a press release.

Click here to view the abstract presentation.

Click here to view a brief lecture on the study.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.hepmag.com/article/testing-people-diabetes-can-detect-liver-disease