Early HCV fibrosis suggests need for early treatment

By David Douglas

NEW YORK (Reuters Health) - In the early stages of chronic infection with hepatitis C virus (HCV), fibrosis stage on biopsy may help predict which patients should be treated promptly and which can wait, according to researchers at the Centers for Disease Control and Prevention (CDC).

"With the recent introduction of oral, curative, but highly expensive antiviral drugs, a priority research question is comparative benefits and harms of treating patients with HCV infection at the time of diagnosis versus waiting to treat only those patients who show early signs of progression of liver disease or other manifestations of HCV infection," write Drs. Fujie Xu and Anne C. Moorman and colleagues at the CDC in Atlanta, in a report online September 28 in Clinical Infectious Diseases.

"Furthermore," they continue, "after some payers introduced policies to limit access to treatment in reaction to the high cost of newer regimens, there is an ongoing debate whether delaying therapy is justifiable, and thus, data about the progression of untreated early-stage HCV infection from large and diverse cohorts are critical."

Data for the study came from nearly 2800 patients mono-infected with HCV who were participants in the Chronic Hepatitis Cohort Study (CHeCS). Results of liver biopsies, taken at a mean age of about 51 years, were available for all patients.

Over a mean observation period of five years, 261 patients (9.3%) died and 34 (1.2%) received liver transplants.

Based on the fibrosis stage (Metavir F0-F4) at the beginning of observation, the estimated risk of progression to hepatic decompensation or hepatocellular carcinoma was 37.2% in F4 patients. In F3 patients, the corresponding risk was 19.6%. In those with F2, it was 4.7% and for F0/F1, it was 2.3%.

The strongest predictors of progression were a baseline biopsy of F3 or F4 and a platelet count below normal.

The team further noted, "The proportions of patients who had comorbidities, abnormal liver and renal function tests, and low platelets grew with increasing fibrosis stage, and in the F4 group, only about half (55.9%) did not have any Charlson comorbidity diagnosed."

The researchers concluded that the findings "can help inform the debate regarding the comparative benefits and harms of treating HCV patients at the time of diagnosis versus waiting to treat only those patients who show early signs of progression of liver disease (e.g. F2) or other manifestations of the infection."

Commenting by email, Dr. Zobair M. Younossi told Reuters Health that the results are "consistent with what has been published and is known about HCV from studies that have been reported from tertiary care centers. What is surprising is that even HCV patients with early fibrosis still developed some adverse outcomes over a relatively short period of time."

Dr. Younossi, who is chairman of the Department of Medicine at Inova Fairfax Hospital and vice president for research at Inova Health System, Fairfax, Virginia, went on to say, "We now know that HCV is a systemic disease with both hepatic and non-hepatic or extrahepatic manifestations. We also know that both the hepatic and non-hepatic manifestations of HCV are associated with clinical outcomes (mortality), patient-reported outcome (impairment of quality of life and work productivity), and costs (direct costs and indirect costs related to loss of work productivity of HCV infected patients)."

"Although I believe this is an important study assessing the 'hepatic outcomes' of HCV," Dr. Younossi concluded, "it does not include extrahepatic and patient-experience outcomes of HCV. When assessing the total burden of HCV, it is important that all these important outcomes are considered. There is no doubt that patients with advanced liver fibrosis (F3 and F4) should be prioritized for treatment, but given the important non-hepatic impact of HCV, all HCV patients deserve treatment consideration. It is critical that a national strategy must be devised to eradicate all HCV infections from the country that can be implemented over five- to 10-year period."

Drs. Xu and Moorman, both corresponding authors, did not respond to requests for comments.

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