

Hepatitis C Treatment Can Improve Liver Function in People With Decompensated Cirrhosis

More than 80% of participants were cured and 25% regained liver function in a real-world HCV elimination program in India.

March 4, 2024 By [Sukanya Charuchandra](#)

Free and easy access to direct-acting antiviral therapy for [chronic hepatitis C](#) led to a high cure rate for people with decompensated liver cirrhosis in the Punjab region of India, researchers reported at [the AASLD Liver Meeting](#). What's more, a quarter of those who received treatment had restored liver function.

Over time, chronic hepatitis C virus (HCV) infection can cause serious liver disease, including [cirrhosis](#) and [liver cancer](#). At late stages, patients may develop decompensated cirrhosis, meaning the liver can no longer carry out its vital functions. This can lead to complications such as portal hypertension (high blood pressure in the main vein that supplies the liver), ascites (fluid buildup in the abdomen), bleeding varices (enlarged veins) in the esophagus or stomach and hepatic encephalopathy (brain impairment).

Madhumita Premkumar, MD, of the Postgraduate Institute of Medical Education and Research in Chandigarh, and colleagues evaluated patients with HCV-related decompensated cirrhosis who were treated as part of program that offers free generic direct-acting antivirals (DAAs) as part of public health policy to eliminate chronic hepatitis C. A previous study showed that more than 90% of participants have been cured overall, but outcomes among those with decompensated cirrhosis needs further evaluation.

Between April 2018 and December 2022, more than 6,500 people with cirrhosis were seen at the center. More than 60% were men, and the average age was 53 years. Most (78%) lived in urban areas and contracted HCV via unsafe injections, though injection drug use was uncommon.

Of these, the researchers recruited 1,152 patients with decompensated cirrhosis for this analysis. At baseline, almost all had a history of ascites, 25% had experienced variceal bleeding and 17% had a history of hepatic encephalopathy. People with HIV or hepatitis B coinfection and those who already had hepatocellular carcinoma (the most common type of liver cancer) were excluded from the analysis.

Most participants (82%) achieved a sustained virologic response—an undetectable viral load 12 weeks after completing treatment—which is considered a cure. This is lower than the cure rate seen in many studies, but the researchers noted that especially difficult cases are referred to their center. After treatment, the patients were monitored every six months using viral, biochemical and imaging tests. The researchers also assessed the occurrence of clinical events and new diagnoses of liver cancer.

Over a median four years of follow-up, 25% of treated patients experienced recompensation, or improvement of liver function. In particular, 86% had a resolution of ascites, though just 24% were able to stop taking diuretic medications to reduce fluid buildup. Nearly a third saw their MELD score fall below 10, indicating a low risk of dying soon from liver disease. Participants who were older, had a history of prior treatment failure or had worse liver dysfunction at the time of treatment were less likely to regain liver function.

The likelihood of portal hypertension progression was low, at 14%. While 16% of patients with a history of variceal bleeding had recurrent bleeds, no one without such history developed new bleeding. There were 13 recurrent episodes of hepatic encephalopathy, but no new first-time episodes. Over four years of follow-up, 145 people died, six underwent liver transplantation and 29 new cases of hepatocellular carcinoma were diagnosed.

“The Punjab HCV Model demonstrates that recompensation of cirrhosis is achievable,” but these patients should still receive regular liver cancer surveillance, as their risk remains elevated, the researchers concluded. “Patients with cirrhosis should be followed up following virological cure for new decompensations and hepatocellular carcinoma, which should be integrated in public healthcare policy for HCV elimination,” they recommended.

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