Hepatitis C Cure Cuts Complications in People With Advanced Cirrhosis

Sustained virological response reduces liver cancer and other liver-related events in people with decompensated cirrhosis with lower MELD scores.

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Curing hepatitis C can lower the risk of serious liver complications in people with decompensated cirrhosis, although the benefit appears limited to those with less advanced liver impairment, according to study findings published in Clinical Gastroenterology & Hepatology.

Over time, chronic hepatitis C virus (HCV) infection can lead to serious complications, including cirrhosis, liver cancer and the need for a liver transplant. Decompensated cirrhosis occurs when the liver can no longer carry out its vital functions. Direct-acting antiviral (DAA) therapy can cure more than 90% of people with chornic hepatitis C. Sustained virological response (SVR), considered a functional cure, is known to benefit people with compensated cirrhosis, but whether the same can be said for those with decompensated cirrhosis is unclear.

Lisa van Velsen, MD, of Erasmus University Medical Center in Rotterdam, and colleagues explored the link between SVR and liver-related events in people with current or prior decompensated cirrhosis due to hepatitis C, indicated by a Child-Turcotte-Pugh score of 7 or higher.

The study included 914 participants, with an average age of 55 years. Most (87%) had Child-Turcotte-Pugh stage B cirrhosis (moderately impaired liver function) and the median MELD (Model for End-stage Liver Disease) score—an indicator of liver transplant urgency—was 12.1. Over a follow-up period of 28 months, 834 people (91%) achieved SVR, but 98 of these individuals (12%) were excluded from further analyses because they had also developed liver cancer or underwent a liver transplant.

Over three years, the cumulative incidence of liver-related events for people who attained SVR was 48%, compared with 59% for those who were not cured. People who successfully cleared HCV were about 31% less likely to experience liver-related complications than those who did not attain SVR. Those who were successfully treated also fared better with respect to the risk of liver dysfunction, liver cancer, transplantation and death.

While achieving SVR significantly reduced the risk of serious liver complications in the population as a whole, this was only the case when treatment happened early enough. Among patients with

less severe liver impairment (MELD score below 15), those who cleared HCV had a much lower three-year cumulative incidence of liver-related events than those who did not (44% versus 58%), with older age, alcohol use, diabetes and low albumin levels linked to worse outcomes.

However, among patients who already had advanced liver impairment (MELD score of 15 or higher), HCV clearance made little difference, and complications occurred at nearly the same rate in those with and without a functional cure. What's more, even when treatment did improve liver scores (MELD dropping by 2+ points), that didn't translate into better outcomes. The cumulative incidence of liver-related events at three years was similar for people whose MELD scores were stable or increased and those whose scores dropped by at least 2 points.

"Our findings support DAA therapy in patients with decompensated HCV cirrhosis with a MELD score <15 but also suggest that DAA therapy could potentially have an unwanted negative effect in those with higher MELD scores, because these patients remain at risk for adverse liver-related events despite SVR, while they may be deprioritized for liver transplantation due to an SVR-related decrease in MELD score," wrote the researchers.

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