



Post-Transplant Antiviral Therapy for Hepatitis C Offers Long-Term Benefits

Nearly all study participants were cured after re-treatment following liver transplantation.

December 12, 2023 By [Sukanya Charuchandra](#)

People successfully treated with direct-acting antiviral therapy for [hepatitis C](#) after a liver transplant experienced long-term improvements in fibrosis, liver function and survival, according to study findings published in the journal [Viruses](#).

Over time, chronic hepatitis C virus (HCV) infection can lead to serious complications, including [cirrhosis](#) and liver failure necessitating a [transplant](#). Direct-acting antivirals (DAAs) can cure more than 90% of patients, but the treatment's long-term impact on people who have undergone liver transplantation is less well understood.

Martina Gambato, MD, of the Azienda Ospedale-Università Padova in Italy, and colleagues examined the progression of liver fibrosis and survival among people who received antiviral therapy after transplantation.

As part of a retrospective study, the researchers identified 136 people who received a liver transplant and were treated with direct-acting antiviral therapy between May 2014 and January 2019.

All participants were tracked for up to three years after the completion of HCV treatment, for an average of 51 months. They were treated with available DAA regimens according to Italian and European guidelines in place at the time. About 40% received sofosbuvir (Sovaldi) plus ribavirin, which is now considered suboptimal. (Modern DAA therapy consists of at least two antivirals without ribavirin.)

The researchers assessed clinical and virological features at baseline and at multiple timepoints during follow-up. Using liver biopsies and transient elastography imaging (FibroScan), they evaluated liver fibrosis when the study began and at least a year after the end of treatment.

The researchers found that the sustained virologic response, or an undetectable HCV viral load 12 weeks after completing treatment (SVR12)—which is considered a cure—was 78% after the first round of therapy and 96% after retreatment of those who needed a second course.

Participants who achieved SVR showed improvements on biochemical liver function tests after transplantation and continued to do so through three years of follow-up. They also had lower liver stiffness—a measure of fibrosis—and almost half of those with advanced fibrosis improved by up to two stages.

However, the researchers noted that people who already had portal hypertension (a sign of decompensated cirrhosis) before starting antivirals had reduced survival, even after SVR12.

“The long-term follow-up data demonstrated that SVR12 was associated with an improvement in hepatic function, liver fibrosis and post-liver transplant survival, regardless of the baseline liver fibrosis,” wrote the researchers.

Click here for more news about [hepatitis C treatment](#).

© 2026 Smart + Strong All Rights Reserved.

<http://beta.docker.hepmag.com/article/posttransplant-antiviral-therapy-hepatitis-c-offers-longterm-benefits>