

Successful Hepatitis C Treatment Lowers Heart and Kidney Disease Risk

People who were cured with antivirals had lower rates of several serious health conditions.

July 7, 2025 By [Sukanya Charuchandra](#)

Successful treatment for [hepatitis C](#) doesn't just protect the liver—it may also lower the risk of serious health conditions such as stroke, heart attack, kidney disease and neurocognitive decline. These findings, highlighting the wider health benefits of early hepatitis C detection and care, were published in [JAMA Network Open](#).

It is well known that chronic hepatitis C virus (HCV) infection can lead to serious liver complications, including [cirrhosis](#) and [liver cancer](#). It has been linked to several extrahepatic manifestations, or conditions that affect parts of the body beyond the liver. Dahn Jeong, PhD, of the University of British Columbia, and colleagues analyzed the association between curing hepatitis C treatment with direct-acting antivirals and the risk of symptoms or conditions outside the liver.

For this population-based retrospective cohort study, the researchers used data from 22,576 people with chronic HCV between 1990 and 2021. [Direct-acting antivirals](#) that can be used without interferon were first approved in 2013. The drugs cure more than 95% of people who complete treatment.

The average follow-up period was 2.5 years. Across the cohort, 66% were men, and the average age was 42 years. A total of 11,953 received antiviral therapy and attained a sustained virological response (SVR), or continued undetectable HCV viral load, which is considered a cure. Another 386 received treatment but did not achieve SVR, and 10,237 remained untreated.

The researchers matched people who were treated to those who remained untreated or were treated but not cured according to the year of their HCV diagnosis. They assessed the incidence of five different extrahepatic manifestations: chronic kidney disease and end-stage kidney disease, type 2 diabetes, stroke, major cardiac events and neurocognitive disorders.

Overall, type 2 diabetes was the most common condition, followed by major cardiac events, kidney disease and neurocognitive disorders.

People who were successfully treated with antiviral medications were less likely to develop

extrahepatic health problems than those who weren't treated. For every 1,000 person-years, treated patients had fewer cases of kidney disease (15 versus 21), stroke (6 versus 9), major heart problems (19 versus 27) and neurocognitive problems (10 versus 19). However, hepatitis C treatment didn't seem to reduce the risk of developing type 2 diabetes (9 versus 6 cases). People who were cured also had lower rates of extrahepatic health conditions compared with those who were treated but did not achieve SVR.

"The potential extrahepatic benefits of HCV treatment highlighted in this study provide additional rationale for enhanced efforts to identify and overcome barriers to care, including reducing stigma, increasing clinician awareness, addressing socioeconomic challenges, and implementing innovative care models to improve overall health of people affected by HCV," the study authors concluded.

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