Curing Hepatitis C Improves Liver Cancer Outcomes

People treated with direct-acting antivirals had better overall survival than those whose hepatitis C remained untreated.

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People who were treated for hepatitis C with direct-acting antivirals lived longer after receiving potentially curative therapy for liver cancer even if they experienced cancer recurrence, according to findings published in the Journal of Viral Hepatitis.

Chronic hepatitis C virus (HCV) infection can lead to serious liver complications, including hepatocellular carcinoma (HCC), the most common type of liver cancer. Treating HCV with direct-acting antiviral therapy is known to improve liver function and lower the risk of developing liver cancer in the first place and experiencing cancer recurrence in people who were not previously treated for HCC. Takamasa Ohki, MD, PhD, of the Mitsui Memorial Hospital in Japan, and colleagues studied the impact of antiviral therapy on people treated for recurrent liver cancer.

Initially, the researchers recruited 146 individuals with HCC arising from HCV. These participants had undergone potentially curative treatment with radiofrequency ablation, a procedure that destroys tumor cells with high-energy radio waves. They then received direct-acting antiviral (DAA) therapy for HCV between January 2015 and December 2017. The researchers compared this group with a control group comprising 184 individuals with HCV-related liver cancer who were treated with radiofrequency ablation but did not receive antiviral therapy between January 2009 and July 2014 (before DAAs were available). DAAs can cure hepatitis C in most people, including those with advanced cirrhosis or liver cancer.

Ultimately, after matching patients for age, sex, liver function and HCC severity, the researchers short-listed 47 people in each group. Across this study population, 64% were men, the median age was 75 years and 87% were categorized as Child-Pugh class A, indicative of less severe cirrhosis. The median number of tumors was one, and the median tumor diameter was 20 milimeters; these individuals had experienced cancer recurrence a median of three times. The primary endpoint for the study was time to curative treatment failure—described as the time between starting potentially curative cancer treatment and when that therapy was prematurely stopped (for example, because it was no longer working or could no longer be tolerated).

For people who received DAA therapy, 94% and 73% were still benefiting from curative HCC
treatment at one year and three years, respectively. The cumulative overall survival rates for this group were 94% and 73% at one and three years.

For people in the control group not treated with DAAs, 73% and 37% were still benefiting from liver cancer treatment at one and three years, respectively. The cumulative overall survival rates for this group were 73%, and 37% at one and three years.

So people who were treated for HCV with direct-acting antiviral therapy experienced longer times to cancer treatment failure and better overall survival rates.

“Eradication of HCV using DAAs prolonged not only time to curative treatment failure but overall survival even in [HCV-related hepatocellular carcinoma] patients with multiple courses of recurrence,” wrote the researchers.

Click here to read the study abstract in the Journal of Viral Hepatitis.

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