In Very Rare Cases, Some Hep C May Remain After a Cure

However, the presence of such persistent virus has not been found to be associated with liver damage.

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In extremely rare instances, people with HIV who have ostensibly been cured of hepatitis C virus (HCV) may retain very low levels of the virus for some time afterward, aidsmap reports. However, such persistent virus has not been tied to liver damage.

Publishing their findings in Nature Scientific Reports, a research team led by Antonio Rivero-Juárez, MD, of Unidad de Enfermedades Infecciosas in Córdoba, Spain, conducted a prospective longitudinal study of 123 people with HIV and HCV coinfection who were treated for hep C between 2015 and 2018 at hospitals in the Andalusia region of Spain.

All participants had achieved a sustained virologic response—an undetectable hep C viral load—24 weeks after completing therapy, which is known as an SVR24 and is considered a cure. More than 12 months had passed since all achieved this benchmark.

During the study, all participants received HCV viral load testing at least yearly. To detect very low levels of virus, the investigators used ultrasensitive droplet digital PCR testing—a means of extracting viral RNA—of samples of the participants' serum and peripheral blood mononuclear cells (PBMCs). If the samples came up positive, they were then tested for HCV antigenomic strand, which indicates the presence of virus with the capacity to replicate.

The participants had achieved an SVR24 a median of 51 months before entering the study; 43% had been cured more than five years prior. Eighty-two percent of the participants were male, and all but one were receiving HIV treatment. Eighty-three percent had been treated for HCV with interferon and ribavirin, and the remainder received direct-acting antiviral therapy.

One participant, who had achieved an SVR24 69 months prior to joining the study, tested positive for HCV RNA upon entering the study but only in PBMCs and not in serum; the antigenomic strand test was negative. At that first visit, the HCV level in PBMCs was 12,034 positive droplets, a figure that declined to 10,404; 4; and 0 positive droplets at the three subsequent study visits, respectively.

This person never had any positive tests for HCV in serum. However, at the second visit—but at none of the other visits—the antigenomic strand test was positive.

During the study, this person's CD4 cells increased from 291 to 558. The individual did not experience any increase in liver stiffness (an indicator of liver fibrosis) or any elevations in liver enzymes. These findings suggest that the persistent very low-level virus was not associated with any liver damage.

"In conclusion," the study authors wrote, "HCV RNA persistence in PBMCs is not a common event in HIV/HCV-coinfected patients with long-term SVR after evaluation with an ultrasensitive procedure such as [droplet digital PCR testing]. Only one patient had viral persistence, and this did not lead to HCV-related clinical complications, such as late relapse or liver fibrosis progression."

The researchers also stated that testing for residual HCV with such ultrasensitive tests among people who have been treated for the virus and deemed cured may be warranted prior to the donation or organs or blood donation from such individuals as well as for women seeking to conceive a child.

To read the aidsmap article, click here.

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