Do People With HIV Fare Worse After Being Cured of Hepatitis C?

The risk of liver complications appears similar for HIV-positive and HIV-negative people, but those with HIV had more non-liver problems.

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People living with HIV fare no worse than their HIV-negative counterparts when it comes to liver disease complications and liver-related death after being treated for hepatitis C, but they do appear more likely to die of other causes, according to a report last week at the Digital International Liver Congress.

Previous studies have found that people with HIV and hepatitis C virus (HCV) coinfection tend to have more severe liver disease and respond less well to HCV treatment than those with hep C alone, but much of this research was done years ago, before the advent of effective antiretroviral treatment for HIV and direct-acting antiviral (DAA) therapy for HCV. Less is know about outcomes among people with HIV and HCV who receive optimal treatment.

Mathieu Chalouni, of the University of Bordeaux in France, presented findings from a study comparing the risk of liver disease complications, liver-related death and non-liver-related mortality—deaths due to any other cause—in people with HIV/HCV coinfection versus those with HCV alone (known as monoinfection) after DAA treatment. Liver-related events included liver decompensation (when the organ can no longer perform its vital functions), hepatocellular carcinoma (HCC; the most common type of liver cancer) and liver transplantation.

The analysis included 592 people with HIV/HCV coinfection in the French HEPAVIH cohort. They were each matched by age and sex with four people with HCV monoinfection (total 2,049) in the HEPATHER cohort. All were treated with DAAs between March 2014 and December 2017 and had available data on sustained virological response, or continued undetectable HCV viral load after finishing treatment, which is considered a cure.

About three quarters of the participants in both groups were men, and the median age was 43. More than half in both groups had HCV genotype 1, but people with coinfection were more likely to have genotype 4. HIV-positive people were more likely than HIV-negative people to smoke (61% versus 49%, respectively) and much more likely to drink alcohol (53% versus 2%).

Nearly 30% of participants in the coinfection group and about 40% in the monoinfection group had

liver cirrhosis. People who had previously received liver transplants were excluded from the study, and those with a prior history of liver disease complications were not included in the analysis of liver-related events.

Most participants were treated with Harvoni (sofosbuvir/ledipasvir) or Sovaldi (sofosbuvir) plus Daklinza (daclatasvir). Almost everyone—93% in the HIV/HCV coinfection group and 95% in the HCV monoinfection group—was cured of hep C.

After a median follow-up period of 2.8 years, 17 people (2.8%, or 12.4 per 1,000 people) in the coinfection group and 66 people (3.2%, or 13.4 per 1,000) in the monoinfection group experienced liver-related events. The HIV-positive participants had a somewhat lower risk of these complications, but the difference was not statistically significant, meaning it could have been driven by chance.

Eight people in the coinfection group (1.4%, or 5.6 per 1,000) and 28 in the monoinfection group (1.4%, or 4.9 per 1,000) died of liver-related causes. But people with HIV had more than double the risk of non-liver-related death: 18 people (3.0%, or 12.5 per 1,000) in the coinfection group and 28 people (1.4%, or 4.9 per 1,000) in the monoinfection group died of other causes.

A recent Spanish study showed that people with HIV/HCV coinfection were substantially less likely than those with HCV alone to develop liver cancer after being cured of hep C (1.2% versus 3.0%, respectively).

However, according to a recently published report that provides more detail about Chalouni and colleagues' research, people with HIV had a more than threefold higher risk of developing other types of cancer. Fifteen people with HIV/HCV coinfection and 26 with HCV monoinfection developed non-liver cancers after being cured of hep C; six and one, respectively, developed such cancers prior to being cured; and one person who was not cured in each group developed non-liver cancers. Among those with coinfection, two developed AIDS-defining cancers (cervical cancer and non-Hodgkin lymphoma).

Chalouni noted that, overall, the higher risk of non-liver-related death in the coinfection group did not appear to be explained by AIDS-defining conditions. He suggested it might be attributable to chronic inflammation and immune system dysregulation among people with HIV as well as a higher rate of behavioral risks such as smoking and alcohol consumption.

Click here to view the presentation.

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