Curative Hep C Treatment Benefits Non-Liver Health and Survival in HIV

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For people living with both HIV and hepatitis C virus (HCV), not only does curative hepatitis C treatment reduce the risk of liver-related disease and death, but it also helps limit HIV disease progression and deaths not related to liver disease, according to a Spanish study published ahead of print by Clinical Infectious Diseases.

Several studies have demonstrated that a sustained virologic response (SVR) to hepatitis C therapy—an HCV viral load that remains undetectable for 24 weeks following completion of treatment, indicating that the infection has been cured—improves liver scarring (fibrosis) and reduces the risk of liver-related complications. This has been confirmed among people living with only HCV, as well as those coinfected with both HCV and HIV.

As HCV has been found to hasten the development of AIDS-related complications and death in people living with HIV, Juan Berenguer, MD, of the Hospital General Universitario Gregorio Maranon in Madrid and his colleagues set out to determine whether an SVR following hepatitis C treatment also had an effect on HIV disease progression and mortality.

Berenguer's team turned to a cohort involving 1,600 people coinfected with HIV and HCV who received standard HCV treatment—pegylated interferon plus ribavirin—between 2000 and 2008 at one of 19 clinical care centers in Spain. A total of 626, or 39 percent, of the patients included in the analysis experienced an SVR following hepatitis C treatment.

In brief, 75 percent were male, and the average age was 40. Twenty-three percent had prior AIDS-defining conditions; the average CD4 count at cohort entry was 527 cells; and 70 percent had undetectable HIV viral loads. Patients had been infected with HCV for an average of 18 years, and 61 percent were infected with the hardest-to-treat HCV genotypes 1 or 4. Roughly 5 percent were considered to be heavy alcohol drinkers, and moderate-to-severe liver fibrosis was evident in about 40 percent before hepatitis C treatment was started.

After an average follow-up period of five years, Berenguer and his colleagues confirmed that failure to achieve an SVR was associated with a significantly higher number of liver-related events. Whereas nearly 14 percent of non-SVR patients experienced any liver-related problem—including

liver decompensation, liver cancer or liver transplantation—fewer than 2 percent of SVR patients went on to experience similar complications.

The researchers also found higher rates of various non-liver health complications among those who didn't achieve an SVR. Slightly more than 4 percent of the non-SVR patients developed a new AIDS-defining illness during the average five-year follow-up period, compared with 1.4 percent of SVR patients. This difference was statistically significant, meaning it was too great to have occurred by chance.

There were significantly more deaths, from any cause, among non-SVR patients compared with those who were cured of their HCV infection: 9.2 versus 1.3 percent, respectively. Statistically, liver-related deaths, non-liver-related deaths and non-AIDS, non-liver-related deaths were all more common among those who didn't achieve an SVR compared with those who did. And while there were five AIDS-related deaths among non-SVR patients, compared with zero SVR patients, the difference between the two was not statistically significant.

Risk calculations were also conducted. According to the researchers' analysis, the risk of new AIDS-defining conditions was nearly doubled in non-SVR patients, the risk of non-liver deaths was more than tripled and the risk of non-AIDS, non-liver-related deaths was more than twofold higher.

"[O]ur results suggest that eradication of HCV in HIV/HCV-coinfected patients is associated not only with a reduction in liver-related complications and mortality, but also with a reduction in HIV progression and mortality not related to liver disease," Berenguer and his colleagues conclude. "These findings support an increasingly strong rationale for earlier evaluation of new direct-acting antivirals against HCV in coinfected patients, a subgroup with a hugely unmet need for treatment."
