Hep C Is Linked to Kidney Disease but Treatment Mitigates the Risk

Among the hep C population, other factors associated with chronic kidney disease include being older and having diabetes or HIV.

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People with hepatitis C virus (HCV) have a higher risk of chronic kidney disease (CKD) than the general public but can lower their risk by treating the virus.

Publishing their findings in the journal Hepatology, researchers conducted a retrospective cohort analysis of the Truven Health MarketScan Database of U.S. residents in medical care, covering 2008 to 2015. They assembled a cohort of 56,448 people with hep C and a comparison group, matched one to three, of 169,344 people who did not have the virus.

A total of 1,455 people in the hep C group were diagnosed with CKD during the study's follow-up period, compared with 2,518 people in the non–hep C group. This translated to respective diagnosis rates of 1.036 percent per year and 0.572 percent per year.

After adjusting the data for various factors, the study authors found that having hep C was associated with a 1.27-fold increased likelihood of a CKD diagnosis.

Seventy-nine percent of the individuals with hep C were not treated for the virus, while a respective 6.6 percent, 6.3 percent and 8.3 percent were treated with interferon-based dual treatment, interferon-based triple treatment or all-oral direct-acting antiviral (DAA) treatment.

Among the hep C population, those who received the minimum effective length of hep C treatment had a 30 percent lower risk of being diagnosed with CKD. However, when the researchers broke down their data into the three types of hep C treatment, they found no statistically significant shift in CKD risk associated with taking DAAs, meaning any apparent shift in risk could have occurred by chance. The study authors theorized that the reason they were not able to determine how DAAs were associated with CKD risk is that the follow-up time for those who took these drugs was less than for those who took the older, interferon-based forms of hep C treatment.

The following factors were associated with the accompanying increased likelihoods of a CKD diagnosis: being age 60 or older, 2.12-fold increased risk; having diabetes, 1.79-fold; having congestive heart failure, 2.14-fold; having peripheral vascular disease, 1.2-fold; having

cerebrovascular disease, 1.2-fold; having hypertension, 2.43-fold; having HIV, 1.93-fold; abusing alcohol, 1.27-fold; having decompensated cirrhosis of the liver, 1.91-fold; having received an organ transplant, 3.19-fold; and having anemia, 2.2-fold.

To read the study abstract, click here.

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