Incident Hepatitis C Virus Infections Among Users of HIV Preexposure Prophylaxis in a Clinical Practice Setting

To the Editor—Although hepatitis C virus (HCV) is most efficiently transmitted through percutaneous routes, sexual transmission of HCV is well documented among human immunodeficiency virus (HIV)-infected men who have sex with men (MSM) [1–4]. Sexual transmission of HCV also occurs among HIV-uninfected MSM [5, 6], with many reporting sexual contact with HIV-infected partners [7]. The Centers for Disease Control and Prevention recommends the use of preexposure prophylaxis (PrEP) with emtricitabine/tenofovir disoproxil fumarate for the prevention of HIV infection among at-risk MSM, with screening for HCV prior to PrEP initiation [8]. However, ongoing monitoring for HCV infection among PrEP users is not recommended. Here, we report on 2 incident HCV infections diagnosed among 485 HIV-uninfected MSM receiving PrEP at the Kaiser Permanente San Francisco Medical Center between February 2011 and December 2014. These infections occurred during 304 person-years of PrEP use, for an incidence rate of 0.7 per 100 person-years (95% confidence interval, .08–2.4).

Patient 1 was a 46-year-old MSM who initiated PrEP in August 2013. From August 2013 through July 2014, he was diagnosed with 2 episodes of syphilis, rectal gonorrhea, and rectal chlamydia. In June 2014, the patient reported receptive anal intercourse without a condom with a partner who had a penile piercing. In July 2014, he also reported receptive anal intercourse with multiple male partners in a group setting. The patient denied injection drug use, tattooing, or body piercings. His alanine aminotransferase (ALT) level increased from normal at baseline to 50 U/L in July 2014 and 549 U/L in September 2014. He reported an increase in fatigue over the preceding 2 months, as well as migratory arthralgias in his bilateral ankles and knees and a dull left flank pain for several weeks. In September 2014, HCV antibody was positive and HCV RNA was detected at 6938 IU/mL. Further testing confirmed the presence of HCV genotype 4 with repeat HCV RNA that remained detectable. The patient is currently being monitored for possible spontaneous viral clearance.

Patient 2 was a 37-year-old MSM who initiated PrEP in October 2013. Between October 2013 and November 2014, he was diagnosed with rectal chlamydia on 3 occasions, rectal gonorrhea on 2 occasions, and syphilis once. He denied injection drug use, tattooing, or body piercings. In March 2014, his ALT was newly elevated at 743 U/L, and he reported a 2-month history of nausea, weight loss, arthralgias, and fatigue. HCV antibody was positive, and HCV RNA was detected at 34.5 million IU/mL. Further testing confirmed the presence of HCV genotype 1 with a repeat HCV RNA of 2.8 million IU/mL. He was treated with 12 weeks of pegylated

interferon monotherapy, resulting in a sustained virologic response.

In both cases, no risk factors for HCV infection were reported other than sexual intercourse without condom use. These incident HCV infections suggest an important role for ongoing HCV monitoring for HIV-uninfected MSM receiving PrEP given the potential for sexual transmission in this population. Patients initiating PrEP should be counseled regarding the risk of sexually transmitted HCV.

Notes

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