

Hep B Ups Death Risk Compared With Hep C, but Tenofovir Seems Protective

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✖ People with chronic hepatitis B virus (HBV) infection have twice the risk of dying from liver-related diseases as people with chronic hepatitis C virus (HCV)—including those also infected with HIV—according to a study presented Wednesday, March 2, at the 18th Conference on Retroviruses and Opportunistic Infections (CROI) in Boston. However, the introduction of tenofovir (found in Viread, Truvada and Atripla) as a common part of antiretroviral (ARV) therapy in 2003 has significantly reduced the risk of dying in people with HBV.

In the last decade, deaths from liver-related causes have eclipsed all other causes of death in people with HIV. This is largely due to the fact that roughly 10 percent of all people with HIV have chronic HBV infection and nearly a third of people with HIV are coinfecting with HCV, and that both types of hepatitis are far more aggressive and deadly in people with HIV than in people who don't have HIV.

Though overall death rates are well documented from both types of hepatitis, few studies have compared deaths from HBV with deaths from HCV in people coinfecting with HIV. To explore this, Oluwaseun Falade-Nwulia, MD, MPH, of Johns Hopkins University in Baltimore, and her colleagues examined the medical records of 680 men who have sex with men (MSM) enrolled in the Multicenter AIDS Cohort Study (MACS), some of whom were HIV-positive and some of who were HIV-negative.

In the group, 337 people had chronic HBV infection, of whom 229 (68 percent) were coinfecting with HIV. Roughly the same amount, 343 people, had chronic HCV infection, of whom 243 (71 percent) were also infected with HIV. The average age of participants with HBV was 32, and most were white. Meanwhile, the average age of those with HCV was 38, and the majority were black or Latino. There were 51 liver-related deaths during a seven-year follow-up period—36 in people with HBV and 15 in people with HCV. The majority were in people coinfecting with hepatitis and HIV.

When Falade-Nwulia and her colleagues took into account a variety of factors that can affect liver health, such as age and alcohol and drug consumption, they found that people with HBV—whether coinfecting with HIV or not—were more than twice as likely to die from liver-related deaths as people with HCV. However, most of the increased risk of death occurred between 1984 and 2002, before the use of tenofovir became widespread among people with HIV.

People with HBV who took tenofovir had a reduced risk of dying, the researchers noted, particularly in more recent years. Tenofovir is an approved medication to treat HBV, as are the ARV medications lamivudine (found in Epivir, Combivir, Trizivir and Epzicom) and emtricitabine (found in Emtriva, Truvada and Atripla). The researchers also found that liver-related deaths from HBV were about 93 percent lower in people with CD4 counts over 350 compared with people who had CD4s under 200.

The researchers summed up: “These data support the following in the HIV-infected population: screening for HB; immunization to protect against HBV infection; [and] treatment of HIV-HBV coinfecting individuals with [an ARV regimen] that includes agents with potent anti-HBV activity.”