Opioid Epidemic May Be Driving Rise in Hep B Among Women in Appalachia

An analysis of hepatitis B testing among women of childbearing age found a declining national rate but increases in several states.

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New diagnoses of hepatitis B virus (HBV) among women of childbearing age have declined nationally in recent years yet have risen in a few Appalachian states, Healio reports. This finding has led researchers to theorize that the opioid epidemic, which has dramatically driven up new cases of hepatitis C virus (HCV), may also be leading to a rise in new HBV infections.

Both HCV and HBV can be transmitted through the sharing of injection drug needles, syringes and other drug paraphernalia. While there is no vaccine for HCV, there is one for HBV. So the opioid epidemic's effects on the latter virus's spread will hopefully remain relatively muted, given how widespread the use of the vaccine has been.

Publishing their findings in Clinical Infectious Diseases, a research team led by Tatyana Kushner, MD, of the division of liver diseases at the Icahn School of Medicine at Mount Sinai in New York City, conducted a retrospective analysis of HBV test results according to Quest Diagnostics data among women of childbearing age between 2011 and 2017.

The data set included test results for 8,871,965 women. A total of 25.3% were born before 1980 and thus were born before the universal application of the hep B vaccine. Otherwise, 55.1% were born between 1980 and 1991, for whom the vaccine was recommended at adolescence; and 19.6% were born after 1992, when the vaccine was first recommended for newborns.

Between 2011 and 2017, the national diagnosis rate of acute, or recently acquired, hep B infections remained stable but rose in Kentucky, Alabama and Indiana. During this period, the national prevalence of chronic HBV infection decreased from 0.83% to 0.19%, while it increased in Mississippi, Kentucky and West Virginia—states heavily impacted by the opioid epidemic.

Among all women tested, 46.8% had evidence of vaccine-induced protection against HBV. However, this so-called seroprotection rate declined during the study period. The steepest decline was seen among those born after 1992: from a 48.5% seroprotection rate in 2011 to 38.5% in 2017, a 21.6% decline.

The study authors are concerned that the HBV vaccine's effects may wane over time. Additional research is needed to determine whether booster vaccinations may be needed, in particular among those at high risk for the virus.

To read the Healio article, click here.

To read the study abstract, click here.

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