HCV Infections Among Infants Vastly Underreported

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Hepatitis C virus (HCV) infection among infants is vastly underreported, suggesting the need for routine testing in pregnant women, a new study from the Centers for Disease Control and Prevention (CDC) has found.

"The data from this study may inform ongoing discussions of HCV screening for all pregnant women to protect their health and that of their offspring," the researchers write.

Kathleen N. Ly, MPH, from the Division of Viral Hepatitis, Centers for Disease Control and Prevention, Atlanta, Georgia, and colleagues report their findings in an article published online May 9 in the *Annals of Internal Medicine*.

They analyzed data from two of the largest population data sets available in the United States: the National Notifiable Diseases Surveillance System (NNDSS) from 2006 to 2014 and the Quest Diagnostics Health Trends national database from 2011 to 2014.

The researchers included 171,801 women of reproductive age (15 - 44 years) and 1859 children (aged 2 - 13 years) with HCV infection reported to the NNDSS and 2.1 million reproductive-aged women and 56,684 children who underwent HCV testing by Quest Diagnostics.

Between 2006 and 2014, the number of reproductive-aged women with acute HCV infection reported to the NNDSS rose 3.4-fold, from 249 per year to 848. Similarly, the number of past or present cases reported doubled, from 15,301 to 30,191.

"[B]y 2012, the total number of cases reported in reproductive-aged women surpassed that of women aged 45 to 64 years," the researchers write.

During 2011 to 2014, Quest Diagnostics tested 581,255 pregnant women; of those, 4232 (0.73%; 95% confidence interval [CI], 0.71% - to 0.75%) had HCV infection.

"Although no HCV treatments have been approved by the U.S. Food and Drug Administration for use in pregnant women, clinical trials of promising drugs are under way. Pregnancy may be the only time a young woman is seen by a clinician, so some clinicians already are screening pregnant women known or suspected to be at risk for HCV infection according to current guidelines," the researchers explain.

During the same period, Quest Diagnostics tested 57,136 children (86,783 tests) aged 2 to 13 years. Of those, 882 (1.54%; CI, 1.44% - 1.65%) had past or present HCV infection, 432 (0.76%; CI, 0.69% - 0.83%) had current infection, and 56,252 (98.45%; CI, 98.35% - 98.55%) were not currently infected.

The researchers note that the rate of infection was 3.2-fold higher among those aged 2 to 3 years (1.62%; CI, 1.34% - 1.96%) compared with those aged 12 to 13 years (0.50%; CI, 0.41% - 0.62%).

When the researchers applied the Quest HCV infection rate to annual live births from 2011 to 2014, they estimated an average of 29,000 women (CI, 27 400 - 30 900 women) infected with HCV who gave birth to 1700 infants (CI, 1200 - 2200 infants) with the infection annually.

"In contrast, only about 200 childhood cases per year are reported to the NNDSS, which may suggest a need for wider screening for HCV in pregnant women and their infants, as is recommended for HIV and hepatitis B virus. However, recommendations for screening in pregnant women and clearer testing guidelines for infants born to HCV-infected mothers do not exist at this time," the authors write.

"Today...recognizing the infection in pregnant women and neonates is possible, and clinical trials of antiviral therapy may show safety and efficacy in pregnant women and in children," Alfred DeMaria Jr, MD, from the Massachusetts Department of Public Health, Jamaica Plain, writes in an accompanying editorial. "Rather than silence, HCV infection calls out for public health action directed at all aspects of the epidemic, including consideration of screening pregnant women."

He continues, "At the very least, screening of pregnant women for HCV infection risk factors, as well as risk-based testing, requires more emphasis. Another issue in need of attention is the lack of authoritative, consensus-based recommendations for the identification, testing, and case management of newborns of infected mothers."

The authors and editorialist have disclosed no relevant financial relationships.

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