Maternal HCV Infection Tied to Adverse Neonatal Outcomes

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — In pregnancy, maternal hepatitis C virus infection may have a negative impact on both maternal and neonatal health, results from a population-based study in Washington State demonstrated.

“Further prospective studies are needed, but I think this brings up the question of whether screening needs to be reevaluated in pregnant women,” Dr. Steven Pergam said at the annual meeting of the Infectious Diseases Society of America.

Voluntary recommendations by the American College of Obstetricians and Gynecologists and the Centers for Disease Control and Prevention have recommended screening high-risk patients. This is based mainly on the risk of perinatal transmission. Universal screening has been modeled in a number of studies and it has not been felt to be cost effective,” Dr. Pergam added.

He and his colleagues used Washington State singleton birth records and Comprehensive Hospital Abstract Reporting System data from 2003-2005 to identify hepatitis C virus (HCV) infection in mothers. “HCV infection was added to the Washington State birth database in 2003, providing us a great opportunity to look at some of these outcomes,” said Dr. Pergam, a fellow in infectious diseases at the University of Washington, Seattle.

The researchers matched HCV-positive mothers in a ratio of 1:4 with HCV-negative counterparts to develop gestational diabetes.

HCV-positive mothers who had excess weight gain during pregnancy, according to Institute of Medicine guidelines, were 2.5 times more likely than their HCV-negative counterparts to develop gestational diabetes.

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DR. PERSGAM

COMPARISON

HCV-positive mothers born to HCV-negative mothers were 2.2 times more likely to have low birth weight, 1.5 times more likely to be small for gestational age, 2.8 times more likely to require neonatal care unit admission, and 2.4 times more likely to require assisted ventilation.

A subanalysis of infants born to 124 drug using HCV-positive mothers was 2.4 times more likely to require neonatal intensive care unit admission, and 2.2 times more likely to be small for gestational age. Of the 240,131 singleton births studied, 506 were born to HCV-positive mothers with a mean age of 30 years and were matched with 2,022 born to HCV-negative mothers with a mean age of 28 years.

Some registries also collect data on retrospective reports, which are less representative of the target population because they can be biased toward the reporting of more unusual and severe outcomes. However, they may be helpful in detecting unusual patterns of birth defects.

In the chart below are the pregnancy registries listed on the Food and Drug Administration Web site, which provides additional details on the registries, such as fax numbers, links to other Web sites, and mailing addresses (www.fda.gov/womens/registries).

Because the strength of a registry is based on numbers, I encourage health care professionals to enroll appropriate patients in these registries whenever possible.

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