Fluarix Bests Pneumovax in Protecting Newborns

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San Francisco — Immunizing pregnant women with the trivalent inactivated influenza vaccine instead of the pneumococcal polysaccharide vaccine was associated with better outcomes in the women and their infants, based on preliminary results from a randomized, controlled trial presented in a poster at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Compared with women immunized with the pneumococcal polysaccharide vaccine, those given the trivalent inactivated vaccine had 28% fewer cases of respiratory illness with fever. Among their infants, those born to women given the trivalent vaccine had a 62% reduction in proven influenza illness and 38% fewer cases of respiratory illness with fever.

Influenza immunization of pregnant women in the third trimester is recommended in the United States; however, "there appears to be no prospective evaluation of this strategy and its effect on illness in women and their infants," a group of researchers led by Dr. Mark C. Steinhoff wrote in their poster presentation.

As part of a study on maternal immunization practices in Dhaka, Bangladesh, Dr. Steinhoff and his associates at the Johns Hopkins University School of Hygiene and Public Health, Baltimore, randomized 340 women in their third trimester to receive either trivalent inactivated influenza vaccine (Fluarix) or pneumococcal polysaccharide vaccine (Pneumovax) between August 2004 and March 2005. The researchers conducted weekly interviews with the mothers and followed the mothers and their infants for 6 months after birth to record illnesses. They also asked the mothers to bring infants with illness to a clinic for evaluation and treatment.

When acute febrile respiratory illnesses occurred, the researchers collected nasal swabs and conducted rapid testing for influenza A and B.

Throughout the study period, 25 of the 137 influenza tests were positive in the infants. Of these, 18 occurred in infants whose mothers received the pneumococcal polysaccharide vaccine and 7 were in those whose mothers got the trivalent inactivated influenza vaccine. This difference represented a 62% reduction in proven influenza illness for infants whose mothers received the influenza vaccine.

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In the influenza vaccine group, 145 infants developed respiratory illness during the course of the study, compared with 232 infants in the pneumococcal polysaccharide vaccine group. The difference represented 38% fewer cases of respiratory illness with fever in infants whose mothers who took the influenza vaccine.

In addition, 83 mothers in the influenza vaccine group developed respiratory illness with fever during the course of the study, compared with 114 mothers in the pneumococcal polysaccharide vaccine group. This translated into 28% fewer cases of respiratory illness with fever in mothers who took the influenza vaccine.

Neither vaccine had a substantial clinical impact on diarrheal illnesses in the infants and mothers.

The researchers have not yet analyzed the serologic data collected for the study.

Dr. Steinhoff is a professor of pediatrics and international health at Johns Hopkins University School of Hygiene and Public Health. ■

NIH Launches Consortium on Clinical Research

The National Institutes of Health has announced the launch of a national consortium focused on transforming how clinical research is conducted in the hopes of providing patients with new treatments more quickly and effectively. Twelve institutions have received funding thus far, with the goal of having about 60 linked institutions by 2012. For more information, visit www.ncrr.nih.gov/clinicaldiscipline.asp. ■