

Anti-herpetic antivirals appear safe in early pregnancy

Antiviral agents used to treat herpes simplex virus (HSV) and herpes zoster infections do not appear to be associated with an increased risk of birth defects when taken during early pregnancy, according to a large nationwide cohort study in Denmark.

"Maternal use of anti-herpetic antiviral drugs in the first trimester of pregnancy was not associated with an increased risk of birth defects," said study co-author Dr. Björn Pasternak, of the Statens Serum Institute, Copenhagen, Denmark.

The researchers' analysis of registry data for 837,795 live-born infants in Denmark between 1996 and 2008 found no link between the use during pregnancy of the anti-herpetic agents acyclovir, famciclovir or valacyclovir and the occurrence of major birth defects, after adjusting for several variables. Of 1,804 pregnancies exposed to one of these antivirals at any time during the first trimester, 40 infants (2.2 percent) had a diagnosis of major birth defect, as compared with 19,920 of 835,991 (2.4 percent) unexposed pregnancies. [JAMA 2010;304(8):859-866]

Further analyses did not reveal any associations between exposure to antivirals during pregnancy and 13 different subgroups of birth defects. However, the number of exposed cases in each subgroup was small, said Pasternak. "Much larger studies are needed to address risks of specific defects. Nonetheless... we believe that the study has public health implications, as it is important to know that women pregnant in the first trimester can be treated with antivirals with relative safety."

Acyclovir was the most commonly used drug during the study and the most extensively documented antiviral overall. "Therefore, acyclovir should be the drug of choice in the treatment of herpes infections in the first trimester of pregnancy," said Pasternak.

According to a World Health Organization (WHO) report published in 2008, around 28 million women between the ages of 15 and 49 years in the Southeast Asian region are afflicted with HSV type 2 infection. This compares with 13.7 million in Western Europe, 4.1 million in Japan and 0.9 million in Australia.

"HSV and zoster remain prevalent and obstetricians [in Asia] will continue to see women who first contracted this in early pregnancy," said Dr. Wee Horng Yen, consultant and deputy head of the department of obstetrics and gynecology, and director of the Women's Wellness Centre at KK Women's and Children's Hospital, Singapore. Standard practice here is to use acyclovir cautiously before 20 weeks of gestation, he added.