Antiretrovirals for HIV Don’t Raise Birth Defect Risk

A 30-year retrospective review of abnormalities among infants born to women using antiretrovirals shows low, consistent levels.

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The risk for birth defects among infants born to HIV-positive women using antiretroviral therapy is the same as those born to women in the U.S. general population, according to a 30-year review presented at the Conference on Retroviruses and Opportunistic Infections (CROI) 2021.

Since 1989, the Antiretroviral Pregnancy Registry has been a repository for information about women with HIV, the antiretroviral (ARV) regimen they are taking and their pregnancy outcomes. The registry tracks incidents of birth defects by trimester and by specific drug to catch any signals of an increased rate of birth defects after clinical trials are completed. Almost no HIV medicines are tested in pregnant women, so these after-market registries are essential.

So researcher William Short, MD, of the Perelman School of Medicine at the University of Pennsylvania, and colleagues used the registry’s database to assess risk for birth defects among children born to women on HIV treatment.

Of 20,437 live births recorded through July 31, 2020, a total of 580 infants were born with an abnormality, a 2.8% frequency. This is consistent with the rate for women in the United States as a whole, which the Centers for Disease Control and Prevention estimates at 3%, or about 1 in every 33 infants.

What’s more, there were no variations in rates of birth defects by trimester: 2.8% in the first trimester and 2.8% in the second and third trimester combined. And the researchers found no particular pattern in the defects reported or associations with specific medicines. However, because the registry is voluntary, it’s likely the findings don’t reflect all live births for women using HIV treatment during pregnancy.

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