Protease Inhibitors During First Trimester Raise Risk of Premature Births

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Pregnant women's use of protease inhibitors (PIs) in the first trimester increases their risk of premature birth by over half, aidsmap reports; but triple nucleoside or non-nucleoside reverse transcriptase inhibitors (nukes/non-nukes) are not associated with these risks. Supporting findings from past research, the study was published in the online edition of The Journal of Infectious Diseases.

Researchers from the U.S. Pediatric HIV/AIDS Cohort Study (PHACS) examined expectant mothers' use of antiretrovirals during pregnancy. They found that out of 1,869 births of a single child (as opposed to twins), 346 (19 percent) were preterm births (before the end of the 37th week of pregnancy), 55 percent of which were spontaneous, meaning they occurred after preterm labor or the rupture of the amniotic sac without other complications. The investigators found that treatment with protease inhibitors during the first trimester increased the likelihood of preterm delivery by 55 percent and spontaneous premature delivery by 59 percent.

The PIs associated with premature birth include Invirase (saquinavir), Norvir (ritonavir, which is often used to "boost" the medication levels of other antiretrovirals) and Kaletra (lopinavir/ritonavir). Nukes and non-nukes were not associated with preterm delivery, nor was antiretroviral (ARV) use in the second or third trimesters of pregnancy.

"HIV disease progression or effects of combination ARV on the immune system among women with indications for initiation of therapy before pregnancy may contribute to increasing preterm birth risk," the researchers write in their study.

To read the aidsmap story, click here.

To read the study's abstract, click here.