Adalimumab levels detected in cord blood and infants exposed in utero

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Adalimumab (ADA), a drug often prescribed for women with Crohn's disease, actively crosses the placenta during the final trimester of pregnancy and remains in a newborn's bloodstream for at least three months, researchers at the University of California San Francisco have found.

The new study has implications for pregnant women and their obstetricians and pediatricians because ADA is known to decrease the immune system's ability to fight infection. Infants exposed in utero should be monitored closely for infection in the first six months of life and should not receive any live-virus vaccines during that time, cautioned lead researcher Uma Mahadevan, MD.

"Since there is some placental transfer of adalimumab before birth, you have to be vigilant in the first six months of life for the baby," said Dr. Mahadevan, an associate professor of medicine. "However, our findings do not suggest that a pregnant woman should discontinue the drug. Stopping it actually can be more harmful to both baby and mother because of the risk of miscarriage, preterm birth and low birth weight if the Crohn's disease flares."

The study followed five pregnant women with Crohn's disease who were taking ADA. On the day of delivery, ADA levels were measured in the mother, newborn and cord blood. In all cases, the cord blood showed higher levels than the maternal levels - indicating transfer from the mother - and significant ADA levels were found in three of the newborn samples. Levels continued to be checked in the infants until ADA could no longer be identified.

"At a minimum, it can be detected to three months from birth," Dr. Mahadevan noted.

Dr. Mahadevan said future studies should explore the effects of medications during children's initial years as well as potential risks later in life because