First trimester exposure to antithyroid drugs associated with birth defects

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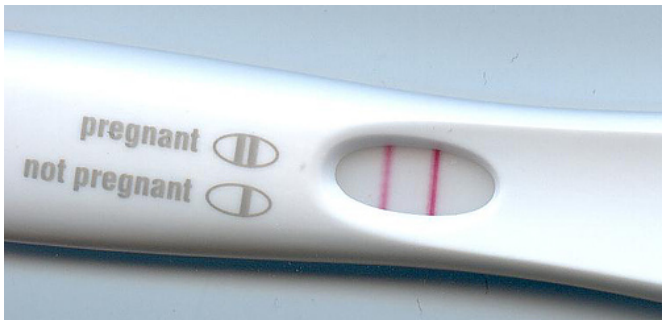

Pregnancy test. Credit: public domain

Taking antithyroid drugs (ATDs) during the first trimester of pregnancy is associated with an increased risk for birth defects, particularly for women receiving prescriptions for methimazole (MMI) or both MMI and propylthiouracil (PTU). The findings are published in *Annals of Internal Medicine*.

Researchers from Sungkyunkwan University School of Medicine, Gangnam-gu, Seoul, Korea, conducted a nationwide cohort study to examine the association between maternal prescriptions for ATDs and congenital malformations in live births. The study included a cohort of 2,886,970 pregnancies linked to live-born infants in 2,210,253 women between 2008 and 2010. Of those, 12,891 pregnancies were exposed to ATDs during the first trimester. The data showed that prenatal exposure to MMI and PTU during the first trimester resulted in relative increases in the risk for congenital malformations of 31% and 16%, respectively. The increased risk for malformations associated with MMI remained among those who switched to PTU several months before their pregnancy or during the first trimester.

The researchers conclude that ATD exposure during the first trimester of pregnancy is associated with significantly increased risk for congenital malformations. These findings confirm the importance of minimizing MMI use in the first trimester and suggest that the current recommendation of switching from MMI to PTU after pregnancy detection should be reconsidered.

More information: *Annals of Internal Medicine* (2018). http://annals.org/aim/article/doi/10.7326/M17-1398

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