

Clarithromycin and higher risk of miscarriage

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Researchers in Denmark have tied the use of the antibiotic clarithromycin to an increased risk of miscarriage—but not to an increased risk of birth defects.

“Based on the current knowledge,” the [researchers](#) wrote, “clarithromycin is not recommended for use in pregnancy. However, since ... clarithromycin is used in very common conditions and only half of pregnancies are planned, a substantial number of women risk exposure to clarithromycin in early pregnancy.”

Using Denmark’s Fertility Database, the researchers identified all women in the country who became pregnant between 1997 and 2007. This included 931,504 pregnancies (705,837 live births, 77,553 miscarriages, and 148,114 induced abortions). The country’s National Hospital Register was used to identify all women with records of miscarriages or induced abortions.

Prescription data were obtained from the National Prescription Register.

Of the 401 pregnant women who filled prescriptions for clarithromycin in their first trimester, 40 (10.0%) experienced a miscarriage and among those who had live births, 9 (3.6%) had offspring with malformations, compared with 3.5% of unexposed mothers who had offspring with malformations. This meant that there was no increased prevalence (odds ratio [OR] = 1.03; confidence interval [CI] 95% 0.52–2.00) of offspring with malformations after exposure to clarithromycin.

The hazard ratio (HR) for miscarriage after exposure to clarithromycin was 1.56 (CI 95% 1.14–2.13). However, there was no increased hazard of having a miscarriage after exposure to penicillin or erythromycin.

The researchers cautioned that they could not completely rule out that women exposed to clarithromycin might differ from unexposed women in aspects causally related to the outcome, including obesity, alcohol consumption, smoking, and antiphospholipid antibody syndrome.