

## **Pregnancy outcomes in women exposed to atovaquone-proguanil in first-trimester pregnancy**

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**Background:** Current UK malaria prophylaxis guidelines do not advise atovaquone-proguanil (A/P) in first trimester pregnancy. In practice, experts may recommend it where benefits outweigh the risks. Robust safety evidence in first trimester is lacking, and available evidence is mixed.

**Aim:** to determine pregnancy outcomes for women exposed to A/P in first-trimester pregnancy.

**Methods:** All health professional queries between 2016 and 2018 to the UK's expert centres for malaria prophylaxis advice (the National Travel Health Network and Centre, and the Malaria Reference Laboratory) resulting in a recommendation for A/P as prophylaxis in first-trimester pregnancy were identified. Attempts were made in March 2020 to re-contact the enquirer to determine whether the pregnant traveller had been prescribed A/P, and if confirmed, a questionnaire was sent to ascertain the outcome of the pregnancy.

**Results:** Of 51 relevant queries, 16 were contactable, with four able to confirm A/P prescription. All four were visiting friends/relatives in Africa. Departure gestation ranged from 8-12 weeks. One traveller had a miscarriage two days after prescription of A/P, whilst three had no documented adverse pregnancy outcomes. In comparison, it's estimated 1 in 8 known pregnancies result in miscarriage in the UK.

**Conclusion:** One miscarriage and three uneventful pregnancies were identified following four prescriptions of A/P malaria prophylaxis in first-trimester pregnancy. This project will change practice as better data collection systems will now be implemented. Prospective research is needed to better determine if there is any link between A/P and adverse pregnancy outcomes in first trimester pregnancy.