Drug-Drug Interactions with Antiretroviral Drugs in Pregnant Women Living with HIV: Are They Different from Non-Pregnant Individuals?

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 4604828
Author(s) Bukkems, Vera E.; Colbers, Angela; Marzolini, Catia; Molto, Jose; Burger, David M.
Author(s) at UniBasel Marzolini, Catia ;
Year 2020
Title Drug-Drug Interactions with Antiretroviral Drugs in Pregnant Women Living with HIV: Are They Different from Non-Pregnant Individuals?
Journal Clinical pharmacokinetics
Volume 59
Number 10
Pages / **Article-Number** 1217-1236
Although the separate effects of drug-drug interactions and pregnancy on antiretroviral drug pharmacokinetics have been widely studied and described, their combined effect is largely unknown. Physiological changes during pregnancy may change the extent or clinical relevance of a drug-drug interaction in a pregnant woman. This review aims to provide a detailed overview of the mechanisms, magnitude, and clinical significance of antiretroviral drug-drug interactions in pregnant women.; We performed a literature search and selected studies that compared the magnitude of drug-drug interactions with antiretroviral drugs in pregnant vs non-pregnant women.; Forty-eight papers examining drug-drug interactions during pregnancy were selected, of which the majority focused on pharmacokinetic boosting. Other selected studies examined the drug-drug interactions between efavirenz and lumefantrine, efavirenz and tuberculosis drugs, etravirine and tenofovir disoproxil fumarate, atazanavir and tenofovir disoproxil, and mefloquine and nevirapine in pregnant compared to non-pregnant women. The clinical significance of antiretroviral drug-drug interactions changed during pregnancy from a minimal effect to a contra-indication. In almost all cases, the clinical significance of a drug-drug interaction was more relevant in pregnant women, owing to the combined effects of pregnancy-induced physiological changes and drug-drug interactions leading to a lower absolute drug exposure.; Multiple studies show that the clinical relevance of a drug-drug interaction can change during pregnancy. Unfortunately, many potential interactions have not been studied in pregnancy, which may place pregnant women living with human immunodeficiency virus and their newborns at risk.
Publisher Springer
ISSN/ISBN 0312-5963 ; 1179-1926
URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7550380/
edoc-URL https://edoc.unibas.ch/78778/
Full Text on edoc No;
Digital Object Identifier DOI 10.1007/s40262-020-00914-x
PubMed ID http://www.ncbi.nlm.nih.gov/pubmed/32696442
ISI-Number WOS:000551018200002
Document type (ISI) Journal Article, Review