Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States

Downloaded from https://aidsinfo.nih.gov/guidelines on 9/13/2019

Stopping Antiretroviral Drugs during Pregnancy (Last updated December 7, 2018; last reviewed December 7, 2018)

Panel's Recommendations
• If an antiretroviral (ARV) drug regimen must be stopped during pregnancy (e.g., for severe toxicity), all ARV drugs should be stopped simultaneously, and antiretroviral therapy should be reinitiated as soon as possible **(AIII)**.
Rating of Recommendations: *A = Strong; B = Moderate; C = Optional*
Rating of Evidence: *I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion*

Discontinuation of antiretroviral (ARV) drug regimens during pregnancy may be indicated in some situations, including serious drug-related toxicity, pregnancy-induced hyperemesis that is unresponsive to antiemetics, or acute illnesses or planned surgeries that preclude oral intake. Other reasons for discontinuation of ARV drug regimens during pregnancy include lack of available medication or patient request. If an ARV drug regimen must be stopped for any reason, all ARV drugs should be stopped simultaneously and antiretroviral therapy (ART) should be reinitiated as soon as possible, whether restarting the same regimen or a new regimen.

Discontinuation of therapy could lead to an increase in viral load, with possible disease progression and decline in immune status. There may also be adverse consequences for the fetus, including increased risk of *in utero* transmission of HIV. An analysis from a prospective cohort of 937 mother-child pairs found that interruption of ART during pregnancy, including interruption in the first and third trimesters, was independently associated with perinatal transmission of HIV. In the first trimester, the median time at interruption was 6 weeks' gestation and length of time without therapy was 8 weeks (interquartile range [IQR], 7–11 weeks); in the third trimester, the median time at interruption was 32 weeks and length of time without therapy was 6 weeks (IQR, 2–9 weeks). Although the perinatal transmission rate for the entire cohort was only 1.3%, transmission occurred in 4.9% of mother-child pairs (95% CI, 1.9% to 13.2%; adjusted odds ratio [aOR] 10.33; $P = 0.005$) with first-trimester interruption and 18.2% (95% CI, 4.5% to 72.7%; aOR 46.96; $P = 0.002$) with third-trimester interruption.[1]

Continuation of all drugs during the intrapartum period generally is recommended. Women who are having elective cesarean delivery can take oral medications before the procedure and restart drugs following surgery. Because most drugs are given once or twice daily, it is likely that no doses would be missed or that the postpartum dose would be given a few hours late at most.

Efavirenz can be detected in blood for longer than 3 weeks after discontinuation.[2,3] If an efavirenz-containing regimen must be stopped for more than a few days due to toxicity, clinicians should consider assessing the patient for rebound viremia and potential drug resistance.[4]

In the rare case in which a woman has limited oral intake that does not meet food requirements for certain ARV agents, decisions about the ART administered during the antepartum or intrapartum period should be made on an individual basis and in consultation with an HIV treatment expert and a clinical pharmacologist who is experienced with ARV medications.

References

1. Galli L, Puliti D, Chiappini E, et al. Is the interruption of antiretroviral treatment during pregnancy an additional major risk factor for mother-to-child transmission of HIV type 1? *Clin Infect Dis*. 2009;48(9):1310-1317. Available at: http://www.ncbi.nlm.nih.gov/pubmed/19309307.

2. Sadiq ST, Fredericks S, Khoo SH, Rice P, Holt DW. Efavirenz detectable in plasma 8 weeks after stopping therapy and subsequent development of non-nucleoside reverse transcriptase inhibitor-associated resistance. *AIDS*. 2005;19(15):1716-1717. Available at: http://www.ncbi.nlm.nih.gov/pubmed/16184054.

3. Ribaudo HJ, Haas DW, Tierney C, et al. Pharmacogenetics of plasma efavirenz exposure after treatment discontinuation: an Adult AIDS Clinical Trials Group Study. *Clin Infect Dis*. 2006;42(3):401-407. Available at: http://www.ncbi.nlm.nih.gov/pubmed/16392089.

4. Geretti AM, Fox Z, Johnson JA, et al. Sensitive assessment of the virologic outcomes of stopping and restarting non-nucleoside reverse transcriptase inhibitor-based antiretroviral therapy. *PLoS One*. 2013;8(7):e69266. Available at: http://www.ncbi.nlm.nih.gov/pubmed/23874928.