Valacyclovir suppressive therapy reduces plasma and breast milk HIV-1 RNA levels during pregnancy and postpartum: a randomized trial.


Abstract

BACKGROUND: The effect of herpes simplex virus type 2 (HSV-2) suppression on human immunodeficiency virus type 1 (HIV-1) RNA in the context of prevention of mother-to-child transmission (PMTCT) interventions is unknown.

METHODS: Between April 2008 and August 2010, we conducted a randomized, double-blind trial of twice daily 500 mg valacyclovir or placebo beginning at 34 weeks gestation in 148 HIV-1/HSV-2 coinfected pregnant Kenyan women ineligible for highly active antiretroviral therapy (CD4 > 250 cells/mm(3)). Women received zidovudine and single dose nevirapine for PMTCT and were followed until 12 months postpartum.

RESULTS: Mean baseline plasma HIV-1 RNA was 3.88 log(10) copies/mL. Mean plasma HIV-1 was lower during pregnancy (-.56 log(10) copies/mL; 95% confidence interval [CI], -.77 to -.34) and after 6 weeks postpartum (-.51 log(10) copies/mL; 95% CI, -.73 to -.30) in the valacyclovir arm than the placebo arm. Valacyclovir reduced breast milk HIV-1 RNA detection at 6 and 14 weeks postpartum compared with placebo (30% lower, P = .04; 46% lower, P = .01, respectively), but not after 14 weeks. Cervical HIV-1 RNA detection was similar between arms (P = .91).

CONCLUSIONS: Valacyclovir significantly decreased early breast milk and plasma HIV-1 RNA among women receiving PMTCT.