

of human immunodeficiency virus type 1 DNA during pregnancy: association with immunosuppression, abnormal cervical or vaginal discharge, and severe vitamin A deficiency.

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Abstract

The presence of human immunodeficiency virus type 1 (HIV-1) in genital secretions may be a determinant of vertical HIV-1 transmission. Cervical and vaginal secretions from HIV-1-seropositive pregnant women were evaluated to determine prevalence and correlates of HIV-1-infected cells in the genital tract. HIV-1 DNA was detected by polymerase chain reaction in 32% of 212 cervical and 10% of 215 vaginal specimens. Presence of HIV-1 DNA in the cervix was associated with cervical mucopus and a significantly lower absolute CD4 cell count (354 vs. 469, $P < .001$). An absolute CD4 cell count <200 was associated with a 9.6-fold increased odds of cervical HIV-1 DNA detection compared with a count ≥ 500 (95% confidence interval, 2.8-34.2). Detection of vaginal HIV-1 DNA was associated with abnormal vaginal discharge, lower absolute CD4 cell count, and severe vitamin A deficiency. Presence of HIV-1-infected cells in genital secretions was associated with immunosuppression and abnormal cervical or vaginal discharge.