Abstract

Background. To date the effect of pregnancy on the immune activation of CD8 T cells that may affect HIV disease progression has not been well studied and remains unclear. *Objective*. To determine the effect of pregnancy on CD8 T lymphocyte activation and its relationship with CD4 count in HIV infected pregnant women. *Study Design*. Case control. *Study Site*. AMPATH and MTRH in Eldoret, Kenya. *Study Subjects*. Newly diagnosed asymptomatic HIV positive pregnant and nonpregnant women with no prior receipt of antiretroviral medications. *Study Methods*. Blood samples were collected from the study participants and levels of activated CD8 T lymphocytes (CD38 and HLA-DR) were determined using flow cytometer and correlated with CD4 counts of the study participants. The descriptive data focusing on frequencies, correlation, and cross-tabulations was statistically determined. Significance of the results was set at . *Results*. HIV positive pregnant women had lower activated CD8 T lymphocyte counts than nonpregnant HIV positive women. Activated CD8 T lymphocyte counts were also noted to decrease in the second and third trimesters of pregnancy. *Conclusion*. Pregnancy has a significant suppression on CD8+ T lymphocyte immune activation during HIV infections. Follow-up studies with more control arms could confirm the present study results.