

Abstract

BACKGROUND: The prevalence of cervical squamous intraepithelial lesions (SIL) among HIV-infected women on antiretroviral therapy in sub-Saharan Africa has not been well described. **METHODS:** HIV-infected women enrolled in an HIV treatment clinic in Nairobi, Kenya were offered free cervical screening with Papanicolaou (Pap) smear testing if they were 30 to 39 years of age and on antiretroviral therapy. Women with SIL were compared to those without SIL with univariate analyses and logistic regression. **RESULTS:** Of 595 eligible women, 267 accepted Pap testing and had available cytology results, of whom 258 (97%) were on a non-nucleoside reverse transcriptase inhibitor (NNRTI) based regimen. Median duration of antiretroviral therapy was 13 months [interquartile range (IQR), 8-19]. Abnormal cytology was found in 123 women (46%) with 70 women (26%) having low grade squamous intraepithelial lesions (LSIL), 22 (8%) high grade squamous intraepithelial lesions (HSIL), 30(11%) atypical squamous cells of unknown significance (ASCUS) and 1 (0.4%) atypical glandular cells (AGC). Women with SIL had lower median CD4 cell count (239 vs 287 cells/mm³; P=0.02), lower income (<70 USD per month: 57% vs 38%; P=0.01), and less regular condom use (24% vs 40%; P=0.02) compared to those with no SIL. Duration and type of antiretroviral regimen were not significantly associated with SIL. **CONCLUSION:** SIL is prevalent among women on antiretroviral therapy and is associated with immunosuppression, low income, and less frequent condom use. Cervical cancer screening and counseling on condom use should be routinely offered to HIV-infected women in antiretroviral treatment clinics in Africa.