Abstract

Individual and sexual partner characteristics may increase the risk of abnormal cervical cytology among women in human immunodeficiency virus (HIV)-discordant relationships. Papanicolaou smears were obtained in a prospective cohort of Kenyan HIV-discordant couples. Of 441 women, 283 (64%) were HIV-infected and 158 (36%) were HIV-uninfected with HIV-infected partners. Overall, 79 (18%) had low-grade and 25 (6%) high-grade cervical abnormalities. Male herpes simplex virus type 2 (HSV-2) seropositivity and lower couple socioeconomic status were associated with cervical abnormalities (p < 0.05). HIV-uninfected women with HIV-infected male sex partners (CD4 > 350 cells/µL) had the lowest prevalence of high-grade cervical lesions. HIV-infected women (CD4 > 350 cells/µL) and HIV-uninfected women with HIV-infected partners (CD4 ≤ 350 cells/µL) were at similar intermediate risk (p > 0.05), and HIV-infected women (CD4 ≤ 350 cells/µL) had significantly higher risk of high-grade cervical abnormalities (p = 0.05). Women in HIV-discordant relationships have high rates of cervical lesions and this may be influenced by couple-level factors, including HIV status and CD4 count of the infected partner.