Abstract:

OBJECTIVE: To determine the relationship between HIV-1 infection and cervical intraepithelial neoplasia (IN) among women at relatively low risk for both conditions. DESIGN: A case-control study comparing women with cytological evidence of IN (cases) with those without IN (controls) and HIV-1 serostatus as the principal exposure of interest. METHODS: A total of 4058 women attending two family planning clinics in Nairobi, Kenya between October 1989 and May 1991 were enrolled following HIV pretest counseling and informed consent. Structured interviews by trained nurses and medical students were used to obtain data on social, demographic, contraceptive practice and sexual behavior variables. A Papanicolaou smear specimen for cervical cytology and an endocervical swab for gonorrhea culture were obtained. HIV-1 serostatus was determined by enzyme-linked immunosorbent assay and confirmed by Western blot; syphilis serostatus was determined by the rapid plasma reagin test. RESULTS: Eighty-two of the 4058 (2.02%) women had cytological evidence of IN. We observed a significant positive association between HIV-1 infection and IN that remained after controlling for sexual behavior, contraceptive practices and other potential confounding variables (odds ratio, 2.78; 95% confidence interval 1.32-5.85). clinical symptoms and signs were uncommon among the HIV-1-seropositive women, suggesting that they were still in the early stages of the infection. CONCLUSION: The risk of IN among women even in the early stages of HIV-1 infection is increased.