

female sexual transmission of human immunodeficiency virus type 1

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Abstract:

In a study of human immunodeficiency virus type 1 (HIV-1)-uninfected African prostitutes, 83 (67%) of 124 seroconverted to HIV-1. Oral contraceptive use (odds ratio [OR], 3.1; 95% confidence interval [CI], 1.1-8.6; P less than .03), genital ulcers (mean annual episodes, 1.32 +/- 0.55 in seroconverting women vs. 0.48 +/- 0.21 in seronegative women; P less than .02) and Chlamydia trachomatis infections (OR, 3.6; CI, 1.3-11.0; P less than .02) were associated with increased risk of HIV-1 infection. Condom use reduced the risk of HIV-1 infection (OR, 0.11; CI, 0.05-0.27; P less than .0001). Stepwise logistic regression analysis confirmed independent associations between HIV-1 infection and oral contraceptive use, condom use, genital ulcers, and C. trachomatis. The presence of other sexually transmitted diseases may in part explain the heterosexual HIV-1 epidemic in Africa and may represent important targets for intervention to control HIV-1 infection