Genital ulceration as a risk factor for human immunodeficiency virus infection.

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Abstract:

Among 115 heterosexual men who presented with genital ulcers to a sexually transmitted disease clinic in Nairobi, Kenya, the prevalence of serum antibody to HIV was 16.5%. A past history of genital ulcers was reported by 12 (63%) of 19 men with antibody to HIV versus 30 (31%) of 96 without antibody (P = 0.008). HIV infection was also positively associated with lack of circumcision, but was not associated with the etiology of the current genital ulcer. Logistic regression analysis (adjusted for age, number of recent sex partners, recent prostitute contact, circumcision, tribal ethnic identity, past history of urethritis, and current diagnoses) confirmed only the association between prior history of genital ulcer disease and HIV infection; (P = 0.04, odds ratio 2.35, 95% confidence limits, 1.01-5.47). The incidence of genital ulcers, particularly chancroid, is much higher in parts of Africa than in Europe or North America. This may contribute to the increased risk of heterosexual transmission of HIV in Africa. Aggressive control of chancroid and syphilis may offer one very feasible approach to reducing transmission of HIV in this region.