

that a 24-year-old woman, whose only known risk factor was sex with a woman who died of AIDS, tested HIV positive.¹ The patient also had sexual relationships with four other women, none of them known to be at risk for HIV. The patient said she had no history of intravenous drug use, blood transfusion, or surgical or dental intervention.

From November 1987 to June 1989, the patient had been in a monogamous relationship with a 38-year-old woman with a history of intravenous drug use. The partner died from complications of AIDS in June 1989, at which time the younger woman was tested for HIV and found to be positive. The two women lived together for the term of their relationship, but did not share toothbrushes or razors. Their sexual activity consisted of digital and oral stimulation of genitalia and the shared use of a vibrator.

In December 1987, the younger woman was diagnosed with a case of herpes simplex, which resolved on treatment with acyclovir. In April of 1988, she developed a transient febrile illness, accompanied by a generalized rash that lasted about 1 week. Rich and colleagues concluded that the young woman contracted HIV via homosexual activity, although the mode of transmission cannot be proven definitely.

The authors cited another report of female-to-male transmission of HIV in a couple who engaged exclusively in oral sexual activities.² The authors noted that it is possible that the mechanism of transmission is mucosal contact with infected blood, saliva, or vaginal secretions. It has been demonstrated that the dendritic cells present in the female genital region have a high concentration of HIV and theoretically are capable of transmission of virus with direct vaginal-vaginal or oral-vaginal contact in the absence of trauma or lesions associated with sexually transmitted disease. Neither the patient nor the partner had evidence of trauma or laceration. Dr. Rich commented that female homosexual contact is an inefficient mechanism for such transmission.

REFERENCES

1. Rich JD, et al. *Clin Infect Dis* 1993;17:1003-1005.
2. Spitzer PG. *N Engl J Med* 1989;320:251.

Uncircumcised Men at Higher Risk of HIV Infection

Uncircumcised homosexual men were found to have a twofold greater risk of HIV infection. Researchers Joan Kreiss and Sharon Hopkins of the University of Washington and the Seattle-Ring County Department of Public Health surveyed 502 homosexual men regarding their circumcision status. Participants were

recruited from among the patient populations of several Washington AIDS clinics. Of the 502 participants, 316 were HIV positive. Eighty-five percent of the sample was circumcised.

HIV infection was significantly associated with uncircumcised status, nonwhite race, intravenous drug use, sexual contact with an intravenous drug user, number of male partners, frequency of unprotected receptive anal intercourse, and a history of genital herpes, anal herpes, or syphilis. Using logistic regression analysis, the adjusted odds ratio for the association between HIV infection and uncircumcised status was 2.0 (CI₉₅, 1.0, 4.0). The authors found that the twofold increased risk for HIV infection remained even after controlling for the potentially confounding effects of race, intravenous drug use, and history of syphilis.

The authors noted that their results are consistent with those of other investigators who have found an association between uncircumcised status and syphilis among heterosexual men or unselected men attending STD clinics. The authors offer a number of explanations for the increased risk. First, it has been shown recently in a primate model that the stratified squamous epithelium of the foreskin of rhesus macaques contains a high concentration of Langerhans cells and macrophages, which bear CD4 receptors and are target cells for simian immunodeficiency virus infection. Second, the preputial sac may provide a protected environment that allows for more prolonged exposure of male genital epithelium to the genital or rectal secretions of the infected partner. Finally, the foreskin or the glans penis of uncircumcised men may be more susceptible to trauma during intercourse compared with that of circumcised men, which is covered with a stratum comeum layer.

FROM: Kreiss JK, Hopkins SG. *J Infect Dis* 1993;168:1404-1408.

Gloves Protect Hands from Contamination Even When Leaks Present

Under conditions of routine use, gloves were found to function effectively as a protective barrier even when leaks were present. Investigator Robin Olson and colleagues from the epidemiology division at Harbor-view Medical Center in Seattle also found that latex gloves were associated less frequently with leaks and hand contamination. Since hand contamination occurred after 13% of exposures and cannot be readily identified by healthcare workers, these researchers recommend that routine hand washing be done after each patient contact regardless of glove use.

To test the effectiveness of vinyl and latex gloves