

hospital. From January 1990 through February 1991, 10 patients developed tuberculosis and five patients died, prompting an investigation of possible nosocomial transmission. *Mycobacterium tuberculosis* isolates from the patients were compared by restriction fragment length polymorphism (RFLP) by a polymerase chain reaction method. The source case was a renal transplant patient who had post-transplant exposure at another hospital. The source patient was subsequently rehospitalized on the renal transplant unit; the diagnosis of TB and institution of isolation precautions were delayed.

Epidemiologic and RFLP analysis showed transmission from the source patient to five other renal transplant patients and one HIV-infected patient. *M tuberculosis* isolates from another four patients had other RFLP patterns. The median incubation period for TB in renal transplant patients was 7.5 weeks (range, 5 to 11). Bronchoscopy and intubation of the source patient and inadequate ventilation on the renal transplant unit are believed to have increased the risk of transmission in this outbreak.

FROM: Jereb JA, et al. *J Infect Dis* 1993;168:1219-1224.

Increase in Coccidioidomycosis Cases Reported Following California Earthquake

Following the January 17, 1994, earthquake in Los Angeles, more than 30 cases of coccidioidomycosis have been reported. The outbreak is unusual because it was precipitated by the earthquake rather than the more typical cause, drought and wind that results in the release of the dustborne fungus. The 6.7 magnitude earthquake and its aftershocks produced large clouds of dust in the San Fernando Valley.

Coccidioidomycosis, often referred to as "valley fever," mostly affects residents of rural areas of the Southwest, a parched region where the fungus thrives in the soil. One of the worst outbreaks of the disease occurred in 1977 in central California's heavily agricultural San Joaquin valley, where during a bad drought the fever killed at least 20 people.

FROM: *New York Times* February 23, 1994.

Joint Commission's 1994 Ambulatory Care Manual Includes Quality Improvement and Infection Control Standards

The Joint Commission on Accreditation of Health

Care Organizations' 1994 *Accreditation Manual for Ambulatory Health Care* has new standards defining the role of organization leaders in quality assessment and improvement activities, a new chapter on infection control, and revised scoring guidelines that address key issues related to the granting of clinical privileges. Ginger Whitlock, director of Joint Commission's Office of Ambulatory Care Accreditation Services, said, "The standards on the surveillance and control of infections have been combined into a single chapter to foster a more systematic approach to this important function."

AAMI Issues New Document on Shipping Contaminated Devices

The Association for the Advancement of Medical Instrumentation (AAMI) has published a new document, *Safe Handling of Biologically Contaminated Medical Devices in Nonclinical and Clinical Settings*, approved in December 1993, that provides guidance for the safe handling and decontamination of devices that are returned to the manufacturer or a third party (eg, a test house) for servicing or for evaluation of suspected malfunctions. Such devices pose health hazards to postal/shipping personnel and to the manufacturer's employees and are subject to special decontamination and labeling requirements under the Occupational Safety and Health Administration's bloodborne pathogen standard.

The AAMI report contains recommendations both for the hospital personnel who must prepare contaminated devices for shipping and for the manufacturer's representatives who are responsible for receiving and servicing such equipment. The new publication also includes special considerations applying to devices that are transferred from hospital to hospital or that require in-hospital repair/servicing by the manufacturer's representatives or clinical biomedical engineering personnel.

AAMI also has published a new edition of its standard, *Good Hospital Practice: Steam Sterilization and Sterility Assurance*, that provides guidance for hospitals and healthcare facilities.

To order, contact Tiffany Rubinstein (extension 217) at (800) 332-2264 or (703) 5254890. Order codes: Safe Handling of Contaminated Devices: TIR10-006-MM; Steam Sterilization: ST46-006-MM).

Female-to-Female Sexual Transmission of HIV Reported

Dr. Josiah D. Rich and colleagues from Boston's Brigham and Women's Hospital recently reported

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