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Whether male circumcision reduces the risk of acquiring human immunodeficiency virus (HIV) infection remains controversial. STUDY DESIGN: As there have now been a number of studies conducted that have examined this issue, we undertook to review their findings. Thirty epidemiological studies identified in the literature that investigated the association between male circumcision status and risk for HIV infection was reviewed. RESULTS: Eighteen crosssectional studies from six countries reported a statistically significant association, four studies from four countries found a trend toward an association. Four studies from two countries found no association. Two prospective studies reported significant associations, as did two ecological studies. In studies in which significant associations were demonstrated, measures of increased risk ranged from 1.5 to 8.4. The groups in which positive associations were found included sexually transmitted disease (STD) clinic and hospital patients, outpatient clinic and HIV screening clinic attenders, long-distance truck drivers, and general community members. CONCLUSION: Potential sources of error, assessment of causality, implications of the findings, and future research needs are discussed. Because a substantial body of evidence links noncircumcision in men with risk for HIV infection, consideration should be given to male circumcision as an intervention to reduce HIV transmission. PIP: Physicians from Kenya and Canada searched the MEDLINE and the MacMillan New Media AIDS CD-ROM databases to identify and review all the published literature examining the association between male circumcision and the risk for HIV infection. They found 30 epidemiological studies. Eighteen cross-sectional studies from the Cote d'Ivoire, Kenya, Rwanda, Uganda, US, and Zambia reported a significant association between the presence of the foreskin and risk for HIV infection (e.g., odds ratio = 2.4; p = .05 among male sexually transmitted disease [STD] patients in Zambia). These studies reported an increased risk (odds ratios or relative risks) ranging from 1.5 to 8.4. Four other cross-sectional studies (The Gambia, Mexico, Tanzania, and the US) found a trend towards an association. No association existed in 4 other studies (2 from Rwanda and 2 from Tanzania). The 2 prospective studies (both from Kenya) and the 2 ecological studies from Africa reported positive associations between presence of the foreskin and risk for HIV infection. 26 of the 28 nonecological studies examined HIV-1, while the other 2 examined both HIV-1 and HIV-2. All but 2 studies looked at heterosexual transmission. Population groups studied included male STD patients, male patients of hospital outpatient clinics, male patients of a hospital casualty department, male long-distance truck drivers, heterosexual and homosexual men attending HIV screening clinics, men living in rural communities, women attending family planning clinics, and women with pelvic inflammatory disease. Potential sources of error in the studies were sexual behavior related to religious practice or ethnicity, misclassification of circumcision status where it cannot be directly observed, and STDs. These findings suggest that, since current measures to reduce HIV transmission are not sufficiently effective, it may useful, at least in the short term, to introduce or expand the practice of male circumcision.