Abstract

Human papillomavirus (HPV) prevalence was estimated from 2,705 sexually active, uncircumcised, human immunodeficiency virus seronegative men aged 17-28 years in Kisumu, Kenya. HPV prevalence was 51.1% (95% confidence interval: 49.2-53.0%) in penile cells from the glans/coronal sulcus and/or shaft. HPV prevalence varied by anatomical site, with 46.5% positivity in the glans/coronal sulcus compared with 19.1% in the shaft (p < 0.0001). High-risk HPV was detected in 31.2% of glans and 12.3% of shaft samples (p < 0.0001). HPV16 was the most common type and 29.2% of men were infected with more than one HPV type. Risk factors for HPV infection included presence of C. trachomatis, N. gonorrhea, self-reported sexually transmitted infections, and less frequent bathing. Lifetime number of sexual partners and herpes simplex virus type-2 seropositivity were also marginally associated with HPV infection.

BACKGROUND:

We examined the effect of male circumcision on the acquisition of 3 nonulcerative sexually transmitted infections (STIs).

METHODS:

We evaluated the incidence of STI among men aged 18-24 years enrolled in a randomized trial of circumcision to prevent human immunodeficiency virus (HIV) infection in Kisumu, Kenya. The outcome was first incident nonulcerative STI during 2 years of follow-up. STIs examined were laboratory-detected Neisseria gonorrhoeae, Chlamydia trachomatis, and Trichomonas vaginalis infection.

RESULTS:

There were 342 incident infections among 2655 men followed up. The incidences of infection due to N. gonorrhoeae, C. trachomatis, and T. vaginalis were 3.48, 4.55, and 1.32 cases per 100 person-years, respectively. The combined incidence of N. gonorrhoeae and C. trachomatis infection was 7.26 cases per 100 person-years (95% confidence interval, 6.49-8.13 cases per 100 person-years). The incidences of these STIs, individually or combined, did not differ by circumcision status as a time-dependent variable or a fixed variable based on assignment. Risks for incident STIs in multivariate analysis included an STI at enrollment, multiple sex partners within <30 days, and sexual intercourse during menses in the previous 6 months; condom use was protective.

CONCLUSIONS:

Circumcision of men in this population did not reduce their risk of acquiring these nonulcerative STIs. Improved STI control will require more-effective STI management, including partner treatment and behavioral risk reduction counseling.