

To evaluate the prevalence and correlates of human immunodeficiency virus (HIV)-infected cells in urethral secretions, samples were collected from 106 HIV-seropositive men with and without urethritis. HIV DNA was detected by polymerase chain reaction in 27% of 184 urethral specimens and was associated with CD4 cell depletion ( $P$  for trend, .03) and with urethritis (odds ratio [OR], 2.4; 95% confidence interval [CI], 1.2-4.6) or gonorrhea (OR, 2.9; 95% CI, 1.5-5.8). Two multivariate models were constructed that included age, CD4 cell count  $< 200/\text{mm}^3$ , and either urethritis or gonococcal infection. Detection of HIV-infected cells in urethral secretions was independently associated with  $< 200$  CD4 cells/ $\text{mm}^3$  (OR, 2.2; 95% CI, 0.9-5.2;  $P = .05$ ) and urethritis (OR, 2.7; 95% CI, 1.3-5.3;  $P = .003$ ) in the first model and with gonococcal infection (OR, 3.2; 95% CI, 1.6-6.4;  $P < .001$ ) in the second model. Successful treatment of gonococcal urethritis was associated with a 2-fold reduction in urethral HIV DNA (44% vs. 21%;  $P = .02$ ). Thus, treatment of gonococcal urethritis may be an effective strategy for reducing HIV transmission.