

Human immunodeficiency virus infection among high-risk seronegative prostitutes in Nairobi

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Abstract:

To determine the frequency and duration of antibody-negative human immunodeficiency virus (HIV) infection among heterosexually exposed African women, 56 HIV-seronegative female prostitutes in Nairobi were studied. Polymerase chain reaction (PCR) was used to detect HIV DNA in peripheral blood at enrollment, and women were followed prospectively with serologic testing to determine HIV seroincidence. Six women (11%) were infected with HIV by PCR criteria at enrollment. Seroconversion occurred in 5 of these subjects within 1-12 months, while the sixth remained seronegative when last evaluated at 5 months. The cumulative annual seroconversion rate in the entire cohort was 38%. Using maximum likelihood analysis, the mean interval between HIV infection and seroconversion was estimated to be between 3 and 4 months, similar to that described for homosexual men and blood product recipients in the United States. Prolonged HIV infection in the absence of antibodies appears to be uncommon in this setting