

seronegative Nairobi sex workers are susceptible to in vitro infection

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Abstract:

OBJECTIVE: To evaluate whether resistance to HIV-1 infection in a subset of highly exposed sex workers correlates with resistance at the cellular level. **DESIGN:** In vitro evaluation of susceptibility to infection by Kenyan HIV-1 isolates and cellular production of potential mediators of resistance. **SETTING:** Samples were collected in a primary care clinic in Nairobi. **PATIENTS:** Thirteen individuals from a cohort of sex workers with a similar risk of acquiring HIV infection and six unexposed controls. **INTERVENTIONS:** Subjects were provided with appropriate primary care and counselling on the prevention of sexually transmitted diseases. **RESULTS:** No inherent cellular resistance to infection was identified. CD8⁺ cells from a subset of subjects strongly inhibited viral replication. **CONCLUSIONS:** Lack of infection in this cohort was not attributable to factors inherent to CD4⁺ cells. Resistance to HIV infection is likely to be multifactorial, and products of CD8⁺ cells and unique features of mucosal sites probably contribute to this state.