

ABSTRACT

OBJECTIVES:

Herpes simplex virus types 1 and 2 (HSV-1/2) may have adverse consequences on HIV type 1 infection. We quantified the frequency of HSV reactivations in highly active antiretroviral therapy (HAART)-treated adults with HIV, and compared it with that in HAART-naïve patients.

SETTING:

2 academic hospital sites in Toronto, Canada.

PARTICIPANTS:

Asymptomatic HAART-naïve (n=44) or treated (with HIV RNA <50 copies/mL, n=41) adults with HSV-1 and/or 2, HIV coinfection.

OUTCOME MEASURES:

HSV-1 and HSV-2 shedding as measured by PCR on oral, genital and anal swabs self-collected daily for 28 days.

RESULTS:

Of the 85 participants, 88%, 67% and 53% were coinfecting with HSV-1, HSV-2 and both HSV types, respectively. Median (IQR) CD4 count was 516 (382, 655) cells/mm³. HSV (type 1 and/or 2) shedding occurred on a median (IQR) of 7.1% (0, 17.9%) of days in HAART users and 3.6% (0, 10.7%) of days in non-HAART users. No significant relationship was observed between HAART and HSV-1/2 shedding in univariable (OR=1.55, 95% CI 0.83 to 2.87) or multivariable negative binomial models adjusted for sex, baseline CD4 count, recent immigrant status and time since HIV diagnosis (adjusted OR, aOR=1.05, 95% CI 0.43 to 2.58). Similar null results were observed for HSV-2 shedding in HSV-2 seropositive participants (aOR=1.16, 95% CI 0.40 to 3.36) and HSV-1 shedding in HSV-1 seropositive participants (aOR=0.70, 95% CI 0.14 to 3.47).

CONCLUSIONS:

HSV reactivations persist despite suppressive HAART among adults coinfecting with HSV and HIV. Clinical trials of suppressive anti-HSV therapy are warranted in this population.