



POSTER PRESENTATION

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Human T-cell lymphotropic virus type 1 (HTLV-1) infection among couples of a cohort followed up in São Paulo, Brazil

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From 17th International Conference on Human Retroviruses: HTLV and Related Viruses
Trois Ilets, Martinique. 18-21 June 2015

This study proposes to investigate the vertical and sexual HTLV-1 transmission rate in a cohort followed up in São Paulo, Brazil. The latter 173 HTLV-1-infected patients were selected until July 2014 (27.2% of 636 HTLV-1-infected individuals). Data were recorded using RedCap (Research Electronic Data Capture), transported to SPSS – Statistical Package for Social Sciences (v 20) and subjected to statistical analysis. To compare results between groups, one-way analysis of variance (one-way ANOVA test) was used. The vertical transmission rate found among 73 individuals born to HTLV-1-positive mothers was 6.8%. HTLV-1 concordant couples were compared to HTLV-1 discordant couples. Those coinfected with HIV were excluded from the sample. Among 91 individuals with stable partnership and without HIV, 49% did not know about the current partner serology: 39% of wives and 54.5% of husbands have not been tested. The horizontal transmission rate of HTLV-1 among those tested couples was 55.3%. Among men 68.2% of its wives were seropositive for HTLV-1, while among women 44.0% of its husbands were seropositive. HTLV-1 concordant couples (cases, n=6) were also compared to HTLV-1 discordant couples (controls, n=14), with respect to HTLV-1 proviral load. Those without HTLV-1 proviral load were excluded. In turn, the control group was subdivided into two subgroups: discordant couples with male index partner (n=5) and discordant couples with female index partner (n=9). Because of the impossibility of defining whether sexual transmission had occurred from man to woman or woman to man, for group 1 (concordant couples) we

chose to use the average of the proviral loads of both partners in this group. Serodiscordant couples showed higher mean proviral loads (670 ± 515 cópias/104 peripheral blood mononuclear cell (PBMC)) compared with serodiscordant couples (282 ± 293 cópias/104 PBMC) ($p = 0.045$), probably associated with increased genital shedding of this virus and resulting increased risk of sexual transmission.

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Published: 28 August 2015

doi:10.1186/1742-4690-12-S1-P34

Cite this article as: Paiva et al.: Human T-cell lymphotropic virus type 1 (HTLV-1) infection among couples of a cohort followed up in São Paulo, Brazil. *Retrovirology* 2015 **12**(Suppl 1):P34.

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