



MEETING ABSTRACT

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The impact of HTLV-1 infection on clinical and immunological outcomes in patients coinfecting with HIV and hepatitis C virus

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Introduction

HIV, hepatitis C (HCV), and human T-cell lymphotropic virus I (HTLV-1) are associated with high global burdens of disease, notably in resource-poor locales. They share similar routes of transmission and cause chronic infections with associated morbidity. We performed a cross-sectional study to assess the impact of HTLV-1 infection on clinical outcomes in HIV/HCV co-infected patients.

Methods

We enrolled 102 (72.3%) with HIV/HCV co-infection (Group 1) and 39 (27.7%) triply infected with HIV, HCV, and HTLV-1 (Group 2). We reviewed medical records of two groups of patients followed in two outpatients services in Salvador, Brazil. We collected and compared demographic, behavioral-related information, immunological, virological and histological parameters for HIV-1 and HCV infection.

Results

Demographics, virological and immunological characteristics were similar in the two groups; a higher proportion of triply infected patients (Group 2) reported any history of injection drug use (IDU) compared to dually infected (Group 1) patients (75% vs. 45.8%; $p = 0.003$). No differences were seen between groups in HIV clinical outcomes (CD4 count and viral load). Alanine aminotransferase levels were significantly higher in HIV/HCV co-infected patients ($p = 0.045$). Liver fibrosis damage based on Metavir scores were similar between

groups (0.97) but were worse with lower CD4 cell count (under 200cells/mm³) ($p = 0.01$).

Conclusions

HIV/HTLV-1 and HIV/HCV coinfections may worsen clinical related outcomes, but virological and immunological outcomes were similar in both groups. Hepatic measures were worse in patients with more severe immunosuppression.

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