

P-05

**A CASE-CONTROL STUDY OF HTLV-1 INFECTION AMONG BLOOD DONORS IN SALVADOR, BAHIA, BRAZIL – ASSOCIATED RISK FACTORS AND TREND TOWARDS DECLINING PREVALENCE.**

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**Objective:** Previous data suggests that Salvador, the capital of the State of Bahia, a northeastern state of Brazil, has the highest prevalence of HTLV-1 infection in blood donors among the Brazilian cities. The aim of this case-control study was to identify the determinants of risk for HTLV-1 infection among blood donors in the city of Salvador.

**Methods:** Between January 2000 and December 2003 504 blood donors with a positive screening test for HTLV-1 infection were invited. Of those, 154 returned and had a Western Blot performed, of which 139 were found to be positive (false positive screening rate 9,9%). Using a standardized questionnaire, a single interviewer obtained information on demographic, socio-economical and educational characteristics, as well as sexual behavior from 91 out of the 139 WB-positive and from 194 HTLV-1-negative blood donors.

**Results:** Overall prevalence of HTLV-1 infection among blood donors was 0,48%. Multivariate analysis revealed female gender (OR 3.79 [95% CI 1.61-8.88], p=0.002), low family income (OR 3.37 [95% CI 1.17-9.66], p=0.02), self-reported history of STD (OR 6.15 [95% CI 2.04-18.51], p=0.001), 2 or more sexual partners during life (OR 9.29 [95% CI 2.16-39.94], p=0.0020), and inconsistent use of condoms (OR 4.73 [95% CI 1.98-11.26], p=0.0004) as risk factors for HTLV-1-1 infection.

**Conclusion:** In accordance with previous data in the literature, our results point to an association between low socio-economical level, poor education and unsafe sexual behavior with HTLV-1 infection. We observed a lower overall prevalence of HTLV-1 infection when compared to previous data