

# **POSTER PRESENTATION**

**Open Access** 

# Follow-up of HTLV-1 positive individuals in the GIPH cohort (1997-2013): Proviral load was not a prognostic marker for HAM/TSP

Poliane C Gonçalves<sup>1</sup>, Gabriela S Freitas<sup>1,2\*</sup>, Luiz CF Romanelli<sup>1</sup>, Fernando A Proietti<sup>1</sup>, Anna B Carneiro-Proietti<sup>1</sup>, Marina L Martins<sup>1</sup>

*From* 16th International Conference on Human Retroviruses: HTLV and Related Viruses Montreal, Canada. 26-30 June 2013

## **Background**

HTLV-1 proviral load (PVL) is considered a risk marker for diseases.

### Methods

Quantification of HTLV-1 PVL was performed in 151 samples of 38 asymptomatic carriers (AC) collected at different times during follow-up (6.1 to 14.8 years, mean 10) and in samples of five individuals who developed HAM/TSP during follow-up (2.6 to 11.3 years, mean 7.2). We used SYBR Green and number of proviral copies/ 10,000 cells. Fluctuation of proviral load level was defined at 0.5 log or more.

### Results

PVL was stable in 52.6% (20/38) and floated in 47.4% (18/38) subjects. In AC, the median of PVL in the 1st sample was 85 and in the last 59 (p = 0.59). Among those individuals with low PVL who showed fluctuation, it remained low (£1%) in 77.8%. In 60% with high PVL who showed fluctuation, it remained high during follow-up. 10 patients developed HAM/TSP during the follow-up, and PVL was quantified before and after in 5 cases. Median of PVL in the 1st sample was 445, and in the last sample 98 (p = 0.56). In all cases, PVL was higher in the asymptomatic period, declining after onset of HAM/TSP.

### **Conclusions**

PVL reaches a plateau, characteristic of each individual; high PVL appears to be followed by decrease and stabilization in lower levels. Although PVL is supposedly a risk marker for HAM/TSP, it had modest prognostic value in our cohort; changes in clinical status and PVL did not coincide, besides occurrence of high stable PVL in AC. Hemominas/FAPE-MIG/DECIT/MS.

### Authors' details

<sup>1</sup>GIPH (Interdisciplinary HTLV Research Group); Hemominas, Belo Horizonte, Minas Gerais, Brazil. <sup>2</sup>Faculdade da Saúde e Ecologia Humana (FASEH), Vespasiano, Minas Gerais, Brazil.

Published: 7 January 2014

doi:10.1186/1742-4690-11-S1-P23

Cite this article as: Gonçalves *et al.*: Follow-up of HTLV-1 positive individuals in the GIPH cohort (1997-2013): Proviral load was not a prognostic marker for HAM/TSP. *Retrovirology* 2014 11(Suppl 1):P23.

# Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at www.biomedcentral.com/submit



<sup>1</sup>GIPH (Interdisciplinary HTLV Research Group); Hemominas, Belo Horizonte, Minas Gerais. Brazil

Full list of author information is available at the end of the article



<sup>\*</sup> Correspondence: gabrielaaseabra@gmail.com