



POSTER PRESENTATION

Open Access

The levels of apoptosis markers in different HIV infected patients groups

Eksteina Ilze Sondore^{*†}, Valentina Viksna Ludmila[†], Rozentale Baiba Ivanovs, Andrejs Januskevica, Inga Zeltina, Indra Sture Gunta

From 17th International Symposium on HIV and Emerging Infectious Diseases (ISHEID) Marseille, France. 23-25 May 2012

Introduction

HIV-1 infection is characterized by a progressive loss of CD4+ T cells. The role of apoptotic processes was identified recently, but a limited information is available so far. The aim of this study was to compare levels of apoptosis markers - cytochrome C (CC) in different HIV infected patient groups.

Methods

There were 69 HIV infected patients enrolled in the study and divided into four groups according to CD4+ T cell count and presence of opportunistic infections (OI): 19 patients with CD4+ T cell count above 200 c/mcl without OI, 15 patients with CD4+ T cell count below 200 c/mcl without OI, 7 patients with CD4+ T cell count above 200 c/mcl with OI, 28 patients with CD4+ T cell count below 200 c/mcl with OI. Opportunistic infections included tuberculosis, cryptococcosis, CMV infection, PCP. The serum levels of cytochrome C were determined. Comparisons between groups were made using paired T- test.

Results

CC levels were not significantly different between groups with CD4+ cell count above and below 200 c/mcl (with opportunistic infections $0,5 > p > 0,4$, without opportunistic infections $p = 0,5$). Levels of CC were not significantly influenced by presence of opportunistic infections (with CD4+ cell count above 200 c/mcl $p = 0,6$, with CD4+ cell count below 200 c/mcl $p = 0,7$). We found significant difference of CK18 levels between group without opportunistic infections and CD4+ cell count above 200 c/mcl ($210,58 \pm 26,98$ u/l) and group without opportunistic infections

and CD4+ cell count above 200 c/mcl ($132,95 \pm 14,09$ u/l), $p = 0,02$, as well as between group without opportunistic infections and CD4+ cell count below 200 c/mcl ($132,95 \pm 14,09$ u/l) and group with opportunistic infections and CD4+ cell count below 200 c/mcl ($174,56 \pm 20,83$ u/l), $0,02 > p > 0,01$.

Conclusion

The results obtained from our study demonstrate elevation of levels of apoptosis serum markers early in HIV infection which anticipate further decrease of CD4 cell count.

Published: 25 May 2012

doi:10.1186/1742-4690-9-S1-P20

Cite this article as: Sondore et al.: The levels of apoptosis markers in different HIV infected patients groups. *Retrovirology* 2012 **9**(Suppl 1):P20.

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



* Correspondence: ilze.viruss@inbox.lv

† Contributed equally

Infectologist at Infectology Center of Latvia, Riga, Latvia