

cytoplasmatic and the viral genome is not inserted into the cell DNA. Cancer development is thus believed to depend on interaction of viral proteins with the cell cycle and/or to result from continuous liver cell damage and regeneration (cell turnover). HCV core, NS3A and NS5A proteins have been shown to inhibit p21^{waf} expression and p53 activity. In addition, HCV core protein inhibits cell apoptosis induced by TNF-alpha and Fas and NS5A transactivates cell cyclins and growth factors.

HIV-HCV coinfection induces significant changes in the natural history of HCV liver disease, rendering HCV persistence more likely, with higher levels of HCV viremia and faster progression of liver disease. This may be due to less effective anti-HCV CD₄⁺ and CD₈⁺ cell immune response, as well as to impaired dendritic cell function.

French studies have recently pointed out for a significant increase in HCV-related morbidity and mortality among people living with HIV/AIDS under HAART. Better knowledge about this infection and its relationship with cancer development is essential for the establishment of effective primary and secondary prophylaxis.

The Descriptive and Molecular Epidemiology of HHV-8 among Population Groups of the Amazon Region of Brazil

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The present study aimed to describe the epidemiology of *HHV-8* among population groups of the Amazon region of Brazil. Four Indian tribes (Kararao, Arara Laranjal, Tiriyo and Zo'e) and a group of HIV-1 infected and/or with AIDS from the urban population of Belém, Para, were tested for the presence of the virus, using serologic (enzyme immuno assay, ELISA, measuring antibodies to ORF59, early and late protein, lytic cycle, ORF65, late protein of the capsid, lytic cycle, K8.1A and K8.1B, variant forms of the envelope gp, lytic cycle and ORF73, latency maintenance protein) and molecular (gene amplification of the ORF26 and the variable region of VR1, gene K1 segments). The presence of antibodies to *HHV-8* was detected in 66 samples of the 221 tested of the Indian groups, namely, six (25%) in the Kararao, 18 (19.6%) in the Arara Laranjal, 24 (42.9%) in the Tiriyo and 18 (36.7%) in the Zo'e. Out of the 477 HIV-1 group, 74 (15.5%) were seroreactive to *HHV-8*. The ORF26 region was amplified in seven samples, one of the Arara Laranjal, one of the Tiriyo, two of the Zo'e and three of the HIV-1 infected group. Subtyping procedures showed the presence of subtypes C (Zo'e), E (Tiriyo) and B (HIV-1 infected). Serologic results confirm the high prevalence of *HHV-8* and the presence of three subtypes in the Amazon region of Brazil. It also describes, for the first time, the prevalence of *HHV-8* among HIV-1 infected and/or AIDS patients.

New Therapeutic Approaches for HIV and EBV Related Lymphomas

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Worldwide, more than 40 million individuals are infected with Human Immunodeficiency Virus (HIV). In impoverished countries the number of deaths due to AIDS has rapidly increased, however the infectious and malignant complications of HIV have fallen where potent antiretrovirals (ARV) are widely available. Nonetheless, the prolonged survival of many HIV carriers is likely to result in greater numbers of malignancies among these individuals. Nearly half of all cases of non-Hodgkin's lymphoma (NHL) in AIDS patients are associated with the presence of a gamma herpes virus, Epstein Barr Virus (EBV) or Human Herpes Virus Type 8 (HHV-8).

AIDS NHLs may be categorized into several subtypes. Large cell immunoblastic lymphoma (IBL) and diffuse large cell lymphoma (DLCL) generally occur in the setting of moderate to severe immunosuppression (CD₄⁺