Epstein-Barr virus (EBV) among Human Immunodeficiency Virus (HIV) infected individuals in Ogbomoso, South-Western Nigeria


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Introduction: The Epstein - Barr virus (EBV), also called Human Herpes Virus (HHV-4), is a virus of the Herpes family, and is one of the most common viruses in humans. It is the best known cause of infectious mononucleosis. In AIDS patients, several distinct additional EBV-associated diseases may occur and some particular forms of malignancies.

Objective: To determine the seroprevalence of EBV in Human Immunodeficient Virus (HIV) -infected individuals

Methodology: Two hundred and seventy eight HIV-infected individuals in Ogbomoso, Oyo State were screened for EBV during the period of August to November, 2014 after obtaining their consent. The sera of the subjects were subjected to serological assay using Enzyme-Linked Immunosorbent Assay (ELISA).

Results: The mean age of the subjects was 39.5 ±0.48 years and the mean CD4+ was 384.27 ±17.77 cells/µl. Out of 278 subjects tested, 11 (4%) were positive for anti-EBV IgM. Anti-EBV IgM was highest in the age group 41-50years, 5 (5.81%); females, 8 (4.85%); students (14.21%); and CD4+ 350-500 cells/µl, 4 (36.36%). The multivariate analysis using age and the CD4 count shows highest prevalence (27.27%) among the age range (41-50) years with the CD4+ count of 350- 500 cells/µl.

Discussion: The result from this study has established that EBV IgM is present among individuals infected with HIV in Ogbomoso.