PP65 ANTIGENEMIA FOR CYTOMEGALOVIRUS INFECTION DIAGNOSIS IN AIDS PATIENTS

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ABSTRACT: Cytomegalovirus (CMV) is the most common opportunistic pathogen in AIDS patients, causing significant morbidity and mortality. Clinical manifestations of CMV disease are related to the injury site, such as retinitis, gastrointestinal tract impairment, hepatitis, pneumonia, myocarditis, and central and peripheral nervous system alterations. CMV-active infection diagnosis is difficult because, many times, no clinical manifestation is present. Pp65 antigenemia, described by Van der Bij (1988), is based on the direct detection of human CMV antigen in peripheral blood leucocytes by an immunocytologic-chemical method. This method is used to monitor CMV infection in immunosuppressed individuals, such as individuals that had bone marrow and solid organs transplant and AIDS patients. This work aimed at using the pp65 antigenemia technique for laboratory diagnosis of active infection caused by CMV in AIDS patients for standardization at Experimental Laboratory of Tropical Diseases of Botucatu School of Medicine, UNESP. Forty-three AIDS patients were assisted at the Tropical Diseases Area of the Department of Tropical Diseases and Imaging Diagnosis at Botucatu School of Medicine, UNESP, from May 2003 to May 2004. They were 30 males and 13 females. Their age ranged from 21 to 69 years old and they were divided into two groups: 28 patients with CD4 T lymphocytes count lower or equal to 100 cells/mm³; and 15 with CD4 T lymphocytes count higher than 100 cells/mm³. Patients were subjected to clinical and viral examinations, and serological test to detect IgM and IgG antibodies for CMV, besides pp65 antigenemia test. The results analysis showed that there was not a statistical difference between groups related to positive pp65 antigenemia for an early CMV infection diagnosis. Also, there was no interference as to the use or not of antiretroviral treatment when blood collection for the exam was performed; and a correlation between serology, by ELFA method, and pp65 antigenemia test was not observed. Pp65 antigenemia test was not useful for cytomegalovirus diagnosis in this group of patients with AIDS because most individuals with positive tests did not show compatible symptoms. This may be explained by the few number of positive cells found in the antigenemia test, which is related to asymptomatic infection, and not by the CMV disease diagnosis, or it is due to the fact that the study was not performed in an evolutive way, following cases along time.

KEY WORDS: Aids, pp65 antigenemia, human cytomegalovirus, laboratorial diagnosis, HIV

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