

## A473 Epstein-Barr virus lesions of the central nervous system during HIV infection

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### **ABSTRACT:** EPSTEIN-BARR VIRUS LESIONS OF THE CENTRAL NERVOUS SYSTEM DURING HIV INFECTION.

According to the official data there are more than 176 thousands cases of HIV infection in Ukraine. 35 thousand of them- AIDS and more 20 thousands died because of AIDS. Approximately 70% HIV positive persons have neurological disorders, more frequently these changes are discovered only after death. In 10-20% cases CNS disorders are the first manifestations of HIV/AIDS. In the same time clinically expressed manifestations are rare comparing to the morphological changes in the brain tissue. Aim of the research. To analyze the morbidity of CNS lesion by Epstein Barr virus in HIV patients with mortal outcome, who were treated in RIDH in 2009-2011 years.

**MATERIALS AND METHODS:** HIV patients, age 28-32 years, with CNS lesion (DNA of VEB was founded in SCF in all cases), autopsy material from dead HIV positive patients with CNS lesion (meninges and brain tissue). Hematoxylin and eosin stain, by Nysle.

**RESULTS:** Analyzing clinical manifestations of a severe course of VEB infection with the background of immunodeficiency caused by HIV, we observed that the severity of the disease was connected not only to the intoxication and meningeal syndromes, but to the encephalitic syndrome as well. It was expressed by pathological reflexes, strabismus, anisocoria, mydriasis, symptoms of pyramidal deficiency of extremities. In the terminal period we observed the cerebral herniation in the foramen magnum in all died patients. First of all it was expressed by worsening of the consciousness disorders, tachycardia, blood pressure drop, breathing rhythm disorders and respiratory standstill. The brain tissue lesion was noticed in every patient with the severe course of VEB infection accompanied by HIV infection. It was also confirmed by following autopsy. The following changes were observed in all cases during patho-anatomic investigation. Tension, edema, and full blood vessels of the dura mater. The pia mater was thin, pale, transparent and tense, with harshly expanded vessels; the convolitional pattern was implicit; underneath – harshly increased quantity of slightly opalescent liquid. Around cerebellum was noticed a furrow as a result of the cerebral herniation in the foramen magnum. In the cross sectional view the brain tissue was pale, swollen. In the case 1 in the region of medial surface of the right cerebellum hemisphere was observed a large area of destruction of grey and yellow color with dark red spots. In all cases were noticed single and multiple sites of destruction of deep brain tissue structures from 0.2 up to 7 cm size of different localization. In the cases were patients stayed in the hospital less than 16 days the lateral ventriculi were restricted, containing minor quantity of transparent liquid. Conversely, in the cases were patients stayed longer in the hospital the lateral ventriculi were distinctly extended, containing a large amount of transparent liquid. Also basal brain vessel were thin walled and irregularly full blooded in all cases.