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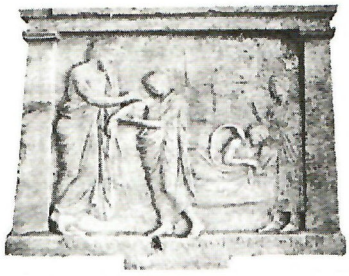

INTERNATIONAL INSTITUTE OF ANTICANCER RESEARCH

BRAIN TUMOUR INVASION

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ABSTRACTS

PRIMITIVE CEREBRAL LYMPHOMA IN AN EBV-POSITIVE CHILD AFFECTED BY AIDS

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Primary central nervous system (CNS) lymphoma, an otherwise rare paediatric tumor, has been reported with increasing frequency in children with acquired immunodeficiency syndrome (AIDS): The Authors describe one case of primary cerebral lymphoma in a 16 months-old infant with serological confirmation of AIDS and Epstein-Barr virus (EBV). The patient was infected congenitally by the human immunodeficiency virus (HIV). At the age of 7 months he contracted lymphocytic interstitial pneumonia, hepatopathy and serological positivity of EBV. At the age of 10 months he developed neurologic symptoms such as spastic tetraparesis and involvement of the seventh left cranial nerve, with persistent fever. Cerebral computed tomography (CT) and nuclear magnetic resonance (NMR) showed multiple nodular lesions, suggesting toxoplasmic localizations, even if serological evidence was negative. He received treatment with preventive antiviral and specific antiparasitic therapy, stopped for the appearance of cutaneous maculopapular erythema. Neurologic symptoms deteriorated swiftly and he died after repeated general convulsive crisis. Gross examination of the brain disclosed white-greyish multiple nodular lesions (right

parietal lobe and hyppocampus, left temporal lobe and caudatum, both basal ganglia, pons, brainstem and cerebellum), with a maximum diameter of 3 cm and reduced consistency. Microscopic examination of the lesions was consistent with polymorphic malignant non-Hodgkin lymphoma, localized in the cerebral parenchyma, leptomeninx, choroid plexus, with extensive foci of necrosis and demyelinization. Immunohistochemistry showed that the lymphoma was of the B phenotype (L 26 positive ++; UCH-L1 positive +; CD 68 positive ++; CD 30 negative; CD 45 RA negative).

The involvement of CNS is known as a late manifestation of AIDS, particularly in children, and opportunistic infections have been encountered with increasing incidence. Early primary cerebral lymphoma is rare in pediatric patients. EBV infection could be promoting factor for this complication. The early age, the extension and widespread infiltration of cerebral structures and the wide areas of necrosis and demyelinization, suggesting high grade of tumoral malignancy and invasion, were remarkable in this case, even if HIV-encephalopathy could not be found. In spite of modern diagnostic techniques, a correct diagnosis was not put and the subsequent therapy could have increased the tumoral aggressiveness. Cerebral malignant lymphoma must always be suspected according to neurological and cerebral lesions in immunosuppressed patients with serological positivity for EBV, also in pediatric age. Recent literature confirms the growing incidence of this pathology. An earlier diagnosis is important for right and timely therapy.