NEUROLOGIC EVALUATION OF NON-HODGKIN'S LYMPHOMA ADULT PATIENTS: A PROSPECTIVE STUDY (Abstract)*. **Thesis. São Paulo, 1995.**

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This research study was elaborated on account of the scientific interest in the interrelation of nervous, immune and endocrine systems. Non-Hodgkin's lymphomas carry, to a great extent, this interrelation of nervous, immune and endocrine systems. The association of non-Hodkin's lymphomas with acquired immune deficiency syndrome (AIDS) is a working model of this interrelation.

This prospective study was performed from 1990 to 1993 and included 67 patients. Most of the patients were originally from the Hematology and Hemotherapy Department of the University of São Paulo Medical School.

The patient sample was predominantly white and no subject was younger than 18 years. Low, intermediate and high malignancy degrees of non-Hodgkin's lymphomas were recorded according to the *Working Formulation* in all 67 patients. In 11 males, anti-HIV antibodies were detected in the serum and none of them was older than 61 years. Yet, none of these 11 patients had a low degree non-Hodgkin's lymphoma but a primary central nervous system non-Hodgkin's lymphoma of intermediate degree was recorded in one patient.

All patients were submitted to neurologic evaluation, even those patients who did not report any complaints. Cerbrospinal fluid (CSF) analysis was carried out on 63 patients.

There was an incidence of neurologic signs and symptoms in 42 (62.7%) of the 67 patients studied.

Neoplastic cells in the CSF were detected in 6 patients (6.5%) and total proteins concentration in the CSF was increased in 27 patients (42.8%).

Twenty-four out of 63 CSF samples were tested for an electrophoretic profile of the proteins. An elevation of gamma globulin was recorded in 6 samples (25%). In two samples, the gamma globulin distribution demonstrated restricted heterogeneity oligoclonal bands.

The association of CSF changes (presence of neoplastic cells, increased protein concentration and/or increased gamma globulin content) with localized thoraco-lumbar pain and abnormal muscle strength in lower limbs of patients with no HIV antibodies detected was statistically significant. The presence of neurologic exam-detected cranial nerve dysfunction (III, IV and VI cranial nerves) showed a positive correlation with the recording of the neoplastic cells in the CSF.

The present study herein differs from other studies because the neurologist was not brought into the cases due to the development of neurologic complications. To the contrary, the patients were maintained in the Hematology Division as they were submitted to periodic neurologic exams throughout all the different phases of the disease.

Special attention was given to the early recognition of lymphoma manifestations in the central nervous system albeit the presence of distinguished metabolic-nutritional dysfunctions, cardiovascular failure, infectious state and side-effect from drugs.

The *Working Formulation* which takes into consideration the malignancy degree of the non-Hodgkin's lymphoma was employed herein. Malignancy degree was determined according to the correlation of recorded morphologic features and survivor curves. The patients were included in this study independent of whether anti-HIV antibodies were found in the serum.

KEY WORDS: **non-Hodgkin's lymphoma, adult patients, neurologic evaluation (prospective), cerebrospinal fluid, acquired immunodeficiency syndrome (AIDS).**

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