Determining the development of non-Hodgkin lymphomas immunophenotyping based on monoclonal antibodies

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News

Malignant Lymphomas occupies a significant place in hemoblastosis, representing in most countries 40% of all hemoblastosis group. In Moldova lies malignant lymphomas 50% of all forms of hemoblastosis. Recent years have been marked by the development of new methods of hematology research: immunophenotyping, immunohistochemistry, molecular genetics, which together with morphological studies have contributed to a better understanding of the pathogenic mechanisms of NHL.
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Of particular importance in this new theory has the pathogenesis of malignant lymphomas, according to which they develop single focal. The outbreak primary tumor in lymph nodes or extranodal appears (Waldeyer lymphatic ring, gastrointestinal tract, bones, spleen, etc.) due to pathological process which spreads in the body in some consecutive order. These data were used to develop new principles of patients treatment in the early stages of the healing.
General aspects

Immunophenotyping of blood cells allows the completion of the malignant lymphoma cell line and the area of damage. Diagnosis of malignant B-cell lymphomas can be established with certainty by immunophenotyping and immunohistochemistry. Further investigation of cytogenetic and molecular biology are mandatory for a complete diagnosis.

Immunophenotyping is absolutely essential in the current diagnosis of lymphoma as their new classification is based on the determination of line B or T/NK on the phase of differentiating malignant lymphomas and the area of damage.
Our study group consisted of 82 patients with the diagnosis determined malignant lymphoma non-Hodgkin. The purpose of determining the dynamic expression of antigens differentiation lymphoid who have expressed more or less, those monoclonal antibodies in differentiating cell line labeled monoclonal antibody. Identified the optimum treatment for survival, reduction of the malignancy and increase the quality of life in these patients.
Materials and methods

Immunophenotyping indirectly by labeling the cells will be carried out using monoclonal antibodies conjugated to fluorescent markers.

This panel includes monoclonal antibodies CD19 (B-lymphocytes), CD20(B-cells), CD22(B-cells), CD23 (B cells-activated), CD5 (T-lymphocytes mature), CD10 (sample-lymphocytes), HLA-DR(B-lymphocytes, T-active), CD38(B-cells, activated lymphocytes), CD21 (B-cells), CD15(neutrophils).
Results

As a result, in the 82 cases investigated malignant lymphoma non-Hodgkin's, 64 (78.04%) of cases a marked expression significantly increased the CD20 antigen, in 12 cases (14, 63%) was moderate or increased expression of CD19 antigen, in 6 cases (7, 3%) or labeled compound or moderately elevated expression CD10, CD38 antigen.
Conclusions

Immunophenotyping of blood cells allows us completion malignant lymphoma cell line and the area of damage.

Our study group consists of 82 patients with undetermined non-Hodgkin malignant lymphoma, 82 cases of lymphoma, B-cell malignancies (100%), 64 cases of small cell lymphoblastic lymphoma (78.04%), 12 cases of B-cell lymphoma precursory (14.63%), 6 cases with follicular non-Hodgkin's malignant lymphoma (7.3%).

The peculiarities of the investigation coincided broadly with literature data and that there is B cell lymphoblastic lymphoma in 85% of malignant lymphoma cases.

A final conclusion is premature to estimate, the lot being incomplete and the correlation of each factor with the survival and response to the treatment is absolutely necessary for some substantial observations.
Thank you