DEFINE PECULIARITY OF IMMUNOPHENOTYPE AT THE ACUTE LYMPHOBLASTIC LEUKEMIA IN PATIENTS CHILDREN BY DINT OF METHOD FLOWING CYTOFLUORIMETRY

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In the research of acute lymphoblastic leukemia using the method of flowing cytofluorimetry, it is necessary to evaluate the immunophenotypic features of tumor cells and determine variant the directivity of T and B cellular linearity.

The aim of our study is to elicit and analyze immunophenotype T and B cellular linearity at acute lymphoblastic leukemia in sick children of the Kyrgyz Republic(Kirgizia)using flowing cytofluorometry.

MATERIALS AND METHODS:

In the group of research from November 2016 to September 2018 with acute lymphoblastic leukemia have entered - 69 children patients, the of their -25 female, male -44, aged 1.5 to 16 years, who were passing research in the Department of Pediatric Oncology of the National Center of Oncology and Hematology at the Ministry of Health Kyrgyz Republic (Kirgizia) and in the Department of Pediatric Hematology of the Osh Interregional Clinical Children's Hospital in Osh. Immunophenotyping was conducted in Bishkek.

The study was spended for the first time and further immunophenotyping in children patients with acute leukemia continues.

METHOD BY DINT OF FLOWING CYTOFLUORIMETRY:

The material for the study is the bone marrow. Immunophenotyping of leukemia(blast)cells performed on a flow cytofluometery Cytomics FC500 (Beckman Coulter, USA) using monoclonal antibodies Beckman Coulter.

RESULTS AND DISCUSSION:

At the conducting research, the diagnosis of acute lymphoblastic leukemia was established by us on the basis of clinical data and complex laboratory-diagnostic showing.

In the diagnosis of acute B-lymphoblastic leukemia/lymphoma, the main task in process research install the B-linear the directivity of tumor cells.

Among children of patients with acute lymphoblastic leukemia in Kyrgyz Republic (Kirgizia), was elicitation pro-B-ALL (BI) –5% of cases, common (BII) - 91% of cases, Burkitt Lymphoma in 4% of cases.

In acute T-lymphoblastic leukemia/lymphoma, tumor cells have a phenotype similar to T-linear precursors.

When using antibodies of the ε-heavy chain of antigens CD, a T-linear directivity is established based on the detection of membrane or cytoplasmic expression of CD3.

In the Kyrgyz Republic (Kirgizia) in sick children elicitation acute T-ALL pre-T-ALL (TII)-in 67% of cases, cortical (TIII) - in 25% of cases, mature cells in 8% of cases.

Thus, in the Kyrgyz Republic(Kirgizia) by frequency prevalence of acute lymphoblastic leukemia in the childhood B-ALL /lymphoma predominate on comparison with acute lymphoblastic leukemia T-ALL /lymphoma.

Immunophenotyping using flow cytofluorimetry is one of the important methods of differential diagnosis in the elicitation of variant immunophenotype, the features of their current and for the timely selection of therapy.

CONCLUSION:

1. Research bone marrow in sick children with acute leukemia by dint of method flowing cytofluorimetry.
2. Identify variant T and B of cell linearity by dint of method flowing cytofluorimetry.

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