УДК 616.4.616.1

DEFINITION OF IMMUNOPHENOTYPIC SINGULARITY IN PATIENTS CHILDREN AT THE ACUTE LEUKEMIA OF UNCLEAR LINEARITY METHOD BY DINT OF FLOWING CYTOFLUORIMETRY

Baratova D.A[1-2] , Mamatysaeva U.A[3-2] .
[1]"Eurasian Center of Oncohematology,Immunology and Therapy“ Saint-Petersburg, Russia.
[2] "National register of hematopoietic stem cells Kirgizia" Saint-Petersburg, Russia.
[3]National Center of Oncology and Hematology” Bishkek, Kyrgyz Republic.

At the research of acute leukemia of unclear option linearity by method of flowing cytofluorimetry, it is necessary to evaluate the immunophenotypic singularity of the tumor cells and to determine the specific characteristic distinctive feature of one of the lines of differentiation.

The aim of our study is the frequency of detection and analyze option of the a linearity immunophenotype in acute leukemia of unclear linearity in patients children of the Kyrgyz Republic (Kirgizia) by dint of method of flowing cytofluorimetry.

MATERIALS AND METHODS:

Researched from November 2016 to November 2018 with acute myeloid leukemia and with acute lymphoblastic leukemia – 99 (female-41,male-58) and of them unclear linearity- 3 patients of children (female -1 and male floor- 2), the total group made up 102 patients of children, all citizens of the Kyrgyz Republic (Kirgizia), in aged from 1,.5 years to 16 years, who were examined at the Department of Pediatric Oncology of the National Center of Oncology and Hematology of the Ministry of Health of the Kyrgyz Republic (Kirgizia) and at the Department of Pediatric Hematology of the Osh Interregional Clinical Children's Hospital, city Osh, in St. Petersburg were a consulted in the doctors of the Eurasian Center of Oncohematology, Immunology and Therapy. Immunophenotyping by dint of method of flowing cytofluorimerty was spended in city Bishkek Kyrgyz Republic (Kirgizia).

Research spends the first time and further immunophenotyping by method of flowing cytofluorometry in patient’s children 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 cytofluometer Cytomics FC500 (Beckman Coulter, USA) using monoclonal antibodies Beckman Coulter.

RESULTS AND DISCUSSION:

At the spend us research the diagnosis of acute leukemia of unclear linearity (with a mixed phenotype, undifferentiated) was established on the basis of a aggregate of clinical, complex laboratory-diagnostic data and the results obtained by dint method of flowing cytofluorimetry in the comparing with cytochemical, immunohistochemical, molecular genetic and morphological

indicators. At the making a diagnosis, in the beginning a little it is difficult to judge and appreciate, belong whether tumor cells to one lines of the differentiation.

In acute undifferentiated leukemia, tumor cells do not have linear-specific antigens, and in acute leukemia with a mixed phenotype (mixed phenotype leukemia), the blast cells simultaneously possess right away specific two, three characteristic lines.

Thus, in the Kyrgyz Republic(Kirgizia),therefore to on the results of the study, in comparison with acute myeloid (AML) and acute lymphoblastic leukemia(B-ALL/lymphoma,T-ALL/lymphomaa), is less often diagnosed acute leukemia of unclear linearity(acute leukemia with a mixed phenotype about -1,1% of cases are detected and acute undifferentiated leukemia - 0% of cases).

CONCLUSION:

1. Research the bone marrow in patient's children with acute leukemia of unclear linearity by method of flowing cytofluorimetry.
2. Screening study of tumor cells to determine the linear direction and to identify the immunological variant of acute leukemia.
3. Is necessary use wide panel of antibodies to for specify and install the immunological variant of acute leukemia.
4. In parallel to spend cytogenetic, molecular-genetic and morphological studies.

The work is submitted to the International Scientific Conference «Priority areas of science, technology and engineering», April 08-15, 2019, Italy (Rome), came to the editorial office on 27.02.2019