

**CLINICAL AND ANAMNESTIC ANALYSIS OF THE MULTIPLE OCCURRENCE OF B-LYMPHOCYTE FORM AMONG CHILDREN'S LYMPHOCYTE LEUKEMIA.**

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**Annotation:** Lymphocytic leukemia in children is a disease that is more common than other oncological diseases. In order to conduct a clinical and anamnestic analysis in such diseases, the following examination plan is drawn up for patients: a complete blood count, a chest puncture, an immunophenotyping method to identify the B-lymphocyte subpopulation, and an immunohistochemical examination to identify blast lymphocytes.

**Key words:** Lymphostar leukemia in children, puncture of the sternum, detection of B-lymphocytes, blast lymphocytes.

**БОЛАЛАР ЛИМФОЦИТАР ЛЕЙКОЗИ ОРАСИДА В-ЛИМФОЦИТАР ШАКЛИ КЎП УЧРАШИНИ КЛИНИК-АНАМНЕСТИК ТАҲЛИЛИ.**

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**Аннотация:** Болаларда лимфоцитар лейкоз бошқа онкологик касалликларга нисбатан кўп учрайдиган хасталик ҳисобланади. Бундай касалликларда клиник-анамнестик таҳлил ўтказиш учун касалларда қуйидагича текширув режаси тузилади: қоннинг умумий таҳлили, тўш суягини пункция қилиш, В-лимфоцитлар субпопуляциясини аниқлаш бўйича иммунофенотиплаш усулини ўтказиш, бласт лимфоцитларни аниқлаш учун иммуногистохимё текшируви ўтказиш керак бўлади.

**Калит сузлар:** Болаларда лимфоцитар лейкоз, тўш суягини пункция қилиш, В-лимфоцитлар, бласт лимфоцитларни аниқлаш.

**КЛИНИКО-АНАМНЕСТИЧЕСКИЙ АНАЛИЗ МНОЖЕСТВЕННОЙ ВСТРЕЧАЕМОСТИ В-ЛИМФОЦИТАРНОЙ ФОРМЫ СРЕДИ ДЕТСКИХ ЛИМФОЛЕЙКОЗОВ.**

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**Аннотация:** Лимфолейкоз у детей – заболевание, встречающееся чаще других онкологических заболеваний. Для проведения клиничко-анамнестического анализа при данном заболевании пациентам проводится следующий план обследования: общий анализ крови, пункция грудной клетки, иммунофенотипирование для определения субпопуляции В-лимфоцитов и иммуногистохимическое исследование для выявления бластных лимфоцитов.

**Ключевые слова:** Лимфостарный лейкоз у детей, пункция грудины, выявление В-лимфоцитов, бластных лимфоцитов.

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**Relevance:** In order to raise the level of medical services to a new level, important tasks have been set: "...to strengthen family health, protect motherhood and childhood, expand access to quality medical services for mothers and children, provide them with specialized and high-tech medical care, and further implement comprehensive measures to reduce infant and child mortality." Lymphocytic leukemia in children is a more common disease than other oncological diseases. In order to conduct a clinical and anamnestic analysis in such diseases, the following examination plan is drawn up for patients: a general blood test, a chest puncture, an immunophenotyping method to determine the B-lymphocyte subpopulation, and an immunohistochemical test to determine blast lymphocytes.

**Purpose:** To study the immunophenotypic characteristics and aberrant expression of acute lymphoblastic leukemia, which develops from B-lymphocyte progenitors, and compare them with literature data.

**Results and their discussion:** In the initial stage of B-lymphocyte development in the bone marrow, immunoglobulin genes located on chromosomes 2, 22, and 14 are incorporated into bone marrow stem cells. Subsequently, the development of B-lymphocytes is controlled by several factors, including the transcription factor E2A (E-box binding protein 2A), early B-cell factor 1 (EBF1), PU.1 (purine box factor 1), the Ikaros gene, the PAX5 domain protein, and CXCL12. The development of these factors is dependent on interleukin-7.

The first cell in the B-lymphocyte lineage is the pro-B-cell. IL-7 and stromal cells are important for the correct differentiation of B-lymphocytes. The pro-B-cell expresses CD45 and is converted to CD22, CD34, and CD38 by transferase. In the next stage of B-cell differentiation, CD10, CD34, CD79a, CD38 are expressed and they are called Pro-BI cells. It is at this stage that immunoglobulin genes are recombined. In the next stage, pre-B II cells appear, which express CD20. Mature B lymphocytes express a number of immunoenzymatic markers, namely CD20, CD45, CD10, CD38, and in rare cases, CD21, CD5, CD81. Mature B lymphocytes mainly express IgD IgM.

As is known, acute lymphoblastic leukemia, which develops from B-lymphocyte progenitors, is the most common tumor in children and is characterized by the proliferation of cells that are morphologically not characteristic of the B-lineage. Malignant leukemia cells express antigens of lymphocyte progenitors of varying degrees on their surface membranes. The common-B variant accounts for 80%, pre-B for 14%, and pro-B for 6% (8). Currently, a highly accurate immunophenotyping method, flow cytometry, is used to detect this tumor. This method requires highly selective monoclonal antibodies. Immunophenotyping studies in B-cell lymphocytic leukemia have shown that CD19<sup>+</sup> or CD79a<sup>+</sup> or CD22<sup>cyt</sup> markers are detected in most B-lineage lymphocyte clones. As shown in Table 4, pro-B lymphocyte clones express markers to a low degree, and pre-B lymphocytes express cytoplasmic immunoglobulin M. A number of cytoplasmic chains were observed to be expressed from mature B lymphocytes.

**Conclusion:** It has been confirmed that lymphocytic leukemia in children occurs mostly in boys, at the age of 3-4 years. According to the results of blood analysis and clinical and anamnestic analysis, it was found that among children's lymphocytic leukemia, B-lymphocytic form is more common.

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