



THE IMPORTANCE OF IMMUNOHISTOCHEMISTRY IN THE DIAGNOSIS OF HODGKIN'S LYMPHOMA

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Hodgkin lymphoma is a neoplasm arising from lymphoid tissue with distinct morphological and immunohistochemical features. This type of tumor has a characteristic clinical and morphological feature that is inseparable from the treatment of lymphomas, leading to morphological changes. The presence of Reed-Sternberg cells and immunophenotypes are the main criteria for differentiating HL from other lymphoproliferative disorders.

The relevance of the problem. From the life of morphologists Hodgkin lymphoma is a type of tumor with characteristic cellular distributions and tissue structures at the microscopic level. Its main morphological features are large cells with two or more nuclei and a chromatin structure in the nucleus that resembles a "owl-eyed" appearance, i.e. Reed-Sternberg. Cellular examination is the detection of mononuclear cells organized in a single-nucleated form of Reed-Sternberg cells. They are tuberculous, and the infiltrate contains lymphocytes, eosinophils, histiocytes, neutrophils, and plasma cells. In some types of this tumor, elements of fibrosis, granuloma, and necrosis are found.

Materials obtained for the study are required. The incidence of the disease was reported to the Khorezm branch of Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology for the years 2019-2024.

Hodgkin lymphoma into clinical and morphological types helps determine diagnostic and therapeutic tactics:

Nodular lymphocyte predominance (NLPHL) – CD20+, CD45+ prognosis is good. Classic HL (CHL): a) Nodular sclerosis (NSHL) with the growth of connective tissue, the control of lacunar cells; b) Mixed cellular proliferation (MCHL) with a large number of Reed-Sternberg cells and the presence of necrosis; c) Lymphocyte-dominant (LRCHL) with a large number of lymphocytes, a small number of Reed-Sternberg cells; d) Lymphocyte-deficient type (LDCHL) - a lack of lymphocytes, the prognosis in this type is poor. Immunohistochemistry is a complementary component of the complete morphology and is helpful in differentiating it from Hodgkin lymphoma: a) In classic HL, CD15+, CD30+, CD20-, CD4 - are found, in the type with nodular lymphocyte predominance (NLPHL) with CD5+, CD20+, CD3+. The lymphogranulomatosis with lymphocyte depletion (lympho-deficiency) variant is called lymphocyte-deficiency classical Hodgkin lymphoma (LD-cHL) and is a variant in which



lymphoid tissue is lost, but Hodgkin/Reed-Sternberg events (HRS) may occur. LD-cHL is divided into two morphological forms: **reticular and diffuse fibrotic types**. It is distinguished. Epidemiologically and clinically, it occurs in patients older than 50 years and in immunodeficiencies (especially HIV). In this type of disease, "B-symptoms" (fever, sweating, weight loss) and splenomegaly are often observed.

In conclusion, it can be said that In the diagnosis of lymphogranulomatosis, **morphological features** primarily determine the cause of the disease, determine the prognosis and treatment tactics of the disease, and take into account all the factors that contribute to its development in comparative practice. **Lymphogranulomatosis with a decrease in lymphocytes is the most severe form in clinical and pathogenetic terms, requiring an individual approach.** This variant is characterized by late detection, resistance to supportive therapy, and the complexity of the treatment plan, requiring a wide range of strategies, such as intensive chemotherapy, immunotherapy, and transplantation.

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