

gions were on average level. The overall incidence of AML of the child population of Grodno (–18,1%), Brest (–23,0%), and Mogilev (it is 21.4%) regions were below the national average.

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DIFFERENTIAL DIAGNOSIS OF LYMPHOMAS

Lymphoma is malignant tumors of lymphoid organs, that develop from lymphocytes, histiocytes and their precursors. This disease is a pathology which depends on the environment, because the incidence is increasing with deteriorating environmental conditions. Lymphoma is characterized by high aggressiveness of cells, high incidence and early metastasis. All malignant lymphomas are divided into two large groups, depending on the histological peculiarities, clinical implication and prognosis.

The first group includes a lymphogranulomatosis, or Hodgkin's lymphoma, or Hodgkin's Disease with cells such as multinucleated Reed–Sternberg cells. This group accounted for 25% of malignant lymphomas.

The second group includes non-Hodgkin's lymphomas which represent the majority of lymphomas.

Currently, a large number of methods of the disease diagnosis introduced into clinical practice. However, it is necessary to use a complex of methodical techniques for differential diagnosis to identify the disease at earlier stages.

There are comprehensive tests that are used in the differential diagnosis of lymphomas. It is medical history, physical examination and biopsy.

These tests include laboratory analysis, computed tomography, positron emission tomography, magnetic resonance imaging, pulmonary function tests, a bone marrow aspiration and biopsy.

In the first stage, lymphomas differential diagnosis includes determining the general physical status of the patient. First of all, it is a careful collection of medical history and clinical examination of the patient. Then a doctor conducts functional studies of the lungs, heart, liver, kidney, chest radiography in frontal and lateral projections, ultrasound of the abdominal cavity, retroperitoneal space and pelvis.

The next step at this stage is to identify comorbidities and collect general clinical and biochemical blood and urine tests. Then a doctor conducts the differential diagnosis of lymphadenopathy, cytological lymphoma verification, and identifies extranodal lesions.

In the second stage, molecular biological studies are used to verify the morphological variant of lymphoma. They include immunohistochemistry, PCR diagnostics, sequencing, fluorescence in situ hybridization (FISH).

The stage of malignant lymphoma is determined in the third step, by beam diagnostics (by prescription), ultrasound, computed tomography and nuclear magnetic resonance.

Radionuclide studies methods liver, spleen, kidney, skeleton, bone marrow examination, and lumbar puncture also occur at this stage.

In the fourth stage, a definitive diagnosis is established.

Thus, it is necessary to carry out a combined functional and differential diagnostics of lymphoma for determining more accurate diagnosis of the early stages of the disease.

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ANALYSIS OF THE INCIDENCE OF LARYNGEAL CANCER IN THE POPULATION OF THE REPUBLIC OF BELARUS FOR 2002–2013

Timeliness. Laryngeal cancer (LC) is from 2 to 5% of all malignancies annually diagnosed worldwide. The incidence of laryngeal cancer, compared with tumors of other localizations is relatively low. Over the past 10 years the number of new cases of Laryngeal cancer in Belarus remains almost unchanged. The disease usually occurs in the age groups of 40–60 years old, and men suffer from the disease 15–20 times more often than women.

Low rates of early active diagnosis of the cancer (55.9% in 2011), high rates of one-year mortality (25.3% in 2011) and the advanced malignant laryngeal tumors indicate the need for a systematic study of the major risk factors contributing to the LG on the territory of the Republic of Belarus.

The purpose is to analyze statistical data on morbidity of malignant tumors of the larynx among the population of Belarus and to identify the main trends in the incidence from 2002 to 2013.

The object of the study was the information on the number of laryngeal cancer cases in population of the Republic of Belarus for the period from 2009 to 2013, as well as the information about the number of inhabitants in the Republic of Belarus for the same period.

The analysis in the work showed that a decrease in laryngeal cancer specific gravity among the malignancies is observed. It can be also noted that LC incidence in urban population (4.5 per 100,000 people) is lower than in rural (7.5 per 100,000 people).

The analysis of the incidence dynamics by age groups showed that the increase in the morbidity of the male population occurs with age increasing and reach its maximum values for the people of 65–69 years old (52%). However, most women with laryngeal cancer account for the older age group – 70 years old (45.8%). From