in the age group 20–30, the highest candidosis sick rate – in the age group 25–40. Meanwhile, 93–100 % of patients are female. If analysed per 10000 people, the trichomoniasis sick rate of rural population is by 40 % higher than with urban population, the chlamidiosis sick rate of rural population is by 50 % higher than with urban population, and the candidosis sick rate of rural population is by17 % lower than with urban population.

THE ANALYSIS OF EPIDEMIOLOGICAL ASPECTS OF EYE DISODERS MORBIDITY OF THE CHILD POPULATION OF NOVOGRUDOK CITY

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There is a steady tendency towards an increase in the incidence rate of the eye and its adnexa in both adults and children in the Republic of Belarus. Ophthalmic pathology has one of the leading positions in the structure of morbidity.

Keywords: analysis, child population, morbidity, eye.

Additional health risk factors associated with the use of modern devices was formed in recent years, which is directly related to the growth of ophthalmic pathology. Therefore, the analysis of the incidence rate of the eye and its adnexa using quantitative methods of evaluation has both relevant and prognostic interest.

The purpose of the study is to carry out a quantitative analysis of the eye disorders morbidity in the child population of Novogrudok.

The object of the study was the data from the State statistical reporting on the number of cases of diseases of the child population of Novogrudok, received in the healthcare institution "Novogrudok Child City Hospital" and the data on child population, obtained from the Demographic Yearbooks of the Republic of Belarus for the period studied. The following methods were used in the study: the calculation of extensive coefficients, the analysis of statistical series by the method of the first-order parabolic curve graduation, the calculation of the annual average morbidity rate, the calculation of the dynamics of the average annual morbidity.

The results of the research showed that the diseases of the eye and its adnexa in the last four years occupied the second rank place, in 2011–2013 – the third rank place, in 2008–2010 the third rank place in the structure of the eye disorders morbidity of child population of Novogrudok for the entire study period (2008–2016). The analysis of the statistical series of general morbidity revealed an unstable growth of the index ($R2 = 0,60$). Significant difference upwards the incidence of general morbidity in 2016 ($464,2 \pm 16,5$) $^0/_{000}$ compared to 2008 ($364,6 \pm 19,4$) $^0/_{000}$ ($t = 4,1$, $p < 0,001$) was indicated. The analysis of the statistical series of primary incidence rate was carried out by the method of the moving average graduation. An unstable increase in the index ($R2 = 0,52$) was revealed. The comparative analysis of the indices at the end of the study period compared with the beginning did not reveal significant differences ($t = 1,7$, $p > 0,05$). The calculation of the ratio of the total and primary eye disorders morbidity of the child population of Novogrudok was carried out. It was revealed that the coefficient ranged from 2 to 4,4 in the last four years of study.

The diseases of the eye and its adnexa were distinguished into a separate class of diseases in 2004. Until 2004, this class of diseases was a part of the class of diseases of the nervous system and sensory organs and occupied the first rank place in the structure of this class of diseases. The increase in the ratio of the total and primary disease incidence of the eye and its adnexa from year to year may indicate an increase in the chronicity of pathology among the child population of Novogrudok.

MOLECULAR AND CYTOGENETIC DIAGNOSTICS OF LYMPHOMA

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In the course of the study, the expression levels of the Bcl-2 and Bcl-6 genes responsible for proliferative activity were determined in patients suffering from lymphoma.

Keywords: Hodgkin's lymphoma, non-Hodgkin's lymphoma, immunohistochemical analysis, expression, molecular-cytogenetic diagnostics.

Lymphoproliferative diseases belong to the blood cancer group and occupy the fifth place among all oncological diseases. Lymphoma is a common disease, which is a heterogeneous group of malignant tumors [1].

For early diagnosis of lymphoma, it is necessary to know the molecular-cytogenetic characteristic of the disease. When analyzing the expression value, it was established that precisely during the identification of the Bcl-2 and Bcl-6 genes the patients had an extremely unfavorable prognosis. The prognosis of the disease depends on the overall level of activity and the mechanisms that lead to an increase in the expression of each of these genes and the production of the corresponding proteins.

The Bcl-2 gene protects cancer cells from apoptosis. This can lead to the continuation of the division of mutated cell lines and then to cancer. Moreover, overexpression of Bcl-2 can affect metastasis [2]. The Bcl-6 gene makes the cells less sensitive to DNA damage, protects them from apoptosis, and leads to the development of resistance to drugs [3].

The study was based on clinical data of 35 patients, aged from 24 to 76 years, with the disease of groups of non-Hodgkin's lymphoma and Hodgkin's disease, treated on the basis of the State Institution "RNPTS OMP named after N.N. Alexandrov "from 2015 to 2016.

When analyzing the extent of the tumor process in patients with lymphomas, it was found that stage I was diagnosed in 6 % of cases, 9 % of patients had Stage II, 11 % had III, and 60 % had Stage IV disease.

The level of expression of the proliferative antigens Bcl-2 and Bcl-6 was determined by immunohistochemistry using the DAKO kit (manufactured in Denmark) with the imaging system EnVision +.

When analyzing the morphotype of lymphomas, it was found that in most cases, malignant neoplasms belong to such categories as diffuse B-large-cell non-Hodgkin's lymphoma (29 %), Hodgkin's lymphoma (14 %), diffuse B-small-cell non-Hodgkin's lymphoma (14 %), mantle cell non-Hodgkin's lymphoma (3 %), B-cell lymphoma of Burkitt (3 %), B-cell lymphoblastic non-Hodgkin's lymphoma.

As a result of the analysis of the obtained data, it was found that 16 % of patients suffering from lymphoma, had a high level of expression of the Bcl-2 gene. A moderate level of expression occurs in 63 % of patients, low expression level – in 16 % of cases, absence of expression was detected in 5 % of patients. The Bcl-6 gene was detected: a high level of expression in 46 % of cases, with a moderate – 27 %, with a low gene expression frequency of 9 %, absence of expression level was detected in 18 % of cases.

Based on the obtained data, it can be concluded, that the expression of the Bcl-2 gene is most characteristic in the following morphotypes: diffuse B-large cell lymphoma, B-small cell lymphoma.

High level of expression of the Bcl-6 gene is detected more often with the following morphotypes: Burkitt's lymphoma, diffuse B-large-cell non-Hodgkin's lymphoma, Hodgkin's lymphoma, which may indicate a high proliferative tumor and unfavorable course of the disease.

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THE INFLUENCE OF PATHOLOGY OF THE THYROID GLAND ON REPRODUCTIVE HEALTH OF WOMEN

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Extent of influence of pathology of a thyroid gland on the course of pregnancy is studied. It is established that the most expressed violations of reproductive function are shown at women with a hypothyrosis.

Keywords: pathology of a thyroid gland, reproductive health, pregnancy.