

20,0 %, from 9 up to 10 % – 10,0 % of patients. The average value of the level of glycated hemoglobin in the study group after the first survey was $8,43 \pm 1,71$ %, after the second and $7,60 \pm 0,87$ %, after the third survey – of $7,53 \pm 0,64$ %. The calculated student's t-test is less than table, then the differences of the compared values is statistically not significant.

Among patients with diabetes mellitus of the 2nd type, the level of glucose in blood is 6 to 8 mmol/l inclusive at 20,0 % of patients Smorgon regional clinics, from 8 to 10 mmol/l inclusive at 50,0 per cent, from 10 to 12 mmol/l, inclusive, from about 20,0 %, more than 12 mmol/l in patients of 10,0. The average value of blood glucose at study group Smorgon district clinic after the first inspection made of $10,66 \pm 2,86$ mmol/l, after the second of $9,34 \pm 1,40$ mmol/l, after the third survey – of $9,18 \pm 1,04$ mmol/L. The calculated student's t-test is less than table, then the differences of the compared values is statistically not significant.

To establish the statistical significance of the obtained results, we used the method of mathematical statistics – rank correlation coefficient. Correlation coefficient coincided with the critical value for significance level of 1 %. The study revealed a direct positive relationship between the level of blood glucose level and glycated hemoglobin: the higher the indicators for one criterion, the higher, and compare with it.

DYNAMICS OF PREVALENCE OF TUBERCULOSIS RESISTANT TO DRUG THERAPY AMONG RESIDENTS OF MINSK CITY FOR 2011–2015

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Tuberculosis is a latent infection, which remains one of the biggest threats in the world. According to the World Health Organization in 2015 of 10,4 million people suffered from TB and 1.4 million people died. In this regard, the World Health Organization developed a global strategy «to put an end to tuberculosis» for the period after 2015. The main goal is to end the tuberculosis epidemic. However, a major obstacle to the successful implementation of this plan is the proliferation of drug-resistant tuberculosis forms. In 2015 multidrug-resistant tuberculosis (MDR-TB) was affected by 480,000 people, there were 100,000 cases of tuberculosis with resistance to rifampicin. In 2014 MDR-TB killed 190,000 people.

The purpose of the work is to characterize the features of the dynamics and structure of the primary incidence of tuberculosis, resistant to drug therapy among Minsk residents in 2011–2015.

Keywords: tuberculosis, multidrug-resistant tuberculosis.

The problem was studied on the basis of the data of the health care institution «2nd City TB Dispensary» in Minsk. The data were obtained from the electronic Republican register «Tuberculosis». Extensive indicators, intensive indicators, indicators of visibility have been calculated. The analysis of long-term dynamics of morbidity by the function of a parabola of the first order has been conducted [1; 2].

In Minsk and the Republic of Belarus, there is a similar tendency to reduce the primary incidence of MDR-TB, but at different rates. In Minsk, for example, the level of this disease declined by 13,51 % per year, while in the Republic of Belarus the annual loss was 1,33 %.

In the city of Minsk, men and women have become less likely to have tuberculosis that is resistant to treatment. In 2015, the primary incidence of women was 3,29 cases per 100 thousand people, men – 12,95 cases per 100 thousand people.

In comparison with Minsk, in the Republic of Belarus there is a tendency to increase the level of primary incidence of women by an average of 0,05 % per year.

In the city of Minsk, the primary incidence of people from 0 to 14 and from 15 years and older decreases with an average annual rate of 75,3 % and 13,1 % respectively.

In the Republic of Belarus for five years the primary incidence of the population from 0 to 14 years compared with Minsk, on the contrary, increased, the rate of growth was 9,1 % annually. The incidence of persons aged 15 and older decreased, but at a lower rate than in the city Minsk, on average by 1 % per year.

There are no differences in the types of drug resistance of mycobacterium tuberculosis in Minsk and the Republic of Belarus. The prevalence of multidrug-resistance (36 % and 34 % respectively). The proportion of forms with a wide drug resistance was much lower 21 % and 31 % respectively, monoresistance to rifampicin was observed only in 4 % and 5 % of cases respectively.

Thus, despite the generally positive dynamics of reducing the incidence of MDR-TB in Minsk and Belarus, it is necessary to pay attention to the trend toward increasing incidence of women and children in the age group 0-14 in Belarus and a lower rate of decline in nationwide morbidity compared to Minsk. Further improve measures for prevention, timely diagnosis and successful treatment of every patient with bacterial discharge that will prevent the spread of MDR-TB in the society.

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EVALUATION OF ENDOGENOUS INTOXICATION BY INDICATORS OF PERIPHERAL BLOOD IN PATIENTS WITH LYMPHOMA

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In the course of study, indices of cellular homeostasis were studied. It was noted that in patients with HL, calculation of indices of endogenous intoxication showed an increase in IRLM after treatment by 4 times. In patients with NHL, LII is reduced by 1.8 times, ISL by 1.6 times.

Keywords: Hodgkin's lymphoma, non-Hodgkin's lymphoma, endogenous intoxication.

Lymphoid tumors in general structure of malignant neoplasms occupy the fifth place. In recent years, the incidence of HL and NHL has increased steadily, in developed countries the incidence has almost doubled in the past 20 years. Heterogeneity of lymphomas, difficulties in diagnosis, severity of clinical symptoms, peculiarities of spread, the different nature of therapy, different prognosis and response to treatment make the problem of malignant lymphomas extremely urgent [1].

Systemic action of tumor on body is accompanied by the development of syndrome of endogenous intoxication. The syndrome of endogenous intoxication (SEI) is a syndrome based on the accumulation of toxic substances of various origin in the body, in concentrations that exceed the functional capabilities of detoxification systems, resulting in damage to organs and body systems [2].

In terms of the degree of severity of SEI, one can judge the severity of the disease and predict its course.

1. Leukocyte index of intoxication is calculated by the formula of Kalf-Kalifa. It characterizes the degree of endogenous intoxication and the severity of inflammation.

2. Index of leukocyte shift is the ratio of sum of eosinophils, basophils and neutrophils to the sum of monocytes and lymphocytes. Leukocyte formula shift to the left indicates the course of various kinds of inflammatory processes and infectious diseases, acidosis, and pre-coma [2].

Materials and methods. The work is based on clinical data of 20 patients with lymphomas aged 22–86 years who were on treatment at "Pinsk inter-district oncology dispensary" Healthcare Facility.

In the course of study, the peripheral blood parameters of patients were analyzed, in which the relative number of leukocytes, lymphocytes, neutrophils, monocytes, and ESR was determined. Quantitative study of hematologic indices was performed with hematology analyzer Hemacomp 10 (Italy). According to the formulas, the following indices of endogenous intoxication were calculated: leukocyte intoxication index (LII), leukocyte shift index (ISL), leukocyte and ESR ratio index (IRESR), lymphocyte and monocyte ratio index (IRLM), neutrophil and lymphocyte ratio index (IRNL).

Results. Calculation of integral hematological parameters in patients with Hodgkin's lymphoma showed a decrease in LII from 1,62 rel. units up to 1,3 rel. units, ISL also decreases from 2,95 rel. units up to 2,3 rel. units, which indicates a violation of the reactivity of the organism. IRNL decreases slightly from 3,02 rel. units up to 2,98 rel. units IRESR indicators has changed from 1,04 rel. units up to 1,2 rel. units. As a result of the data analysis, IRLM significantly increased after treatment (from 5,5 rel. units to 22,4 rel. units) 4-fold, which indicates a high sensitivity of monocytes, and also shows the effectiveness of the therapy.