

The reduced level of expression of the studied genes of miRNAs was observed in patients aged 41–50 years – 30,2 rel. units [27,9; 34,1], increased is characteristic for persons in the age category 61–70 years – 31,7 rel. units [25,3; 34,4].

The level of expression of mir-214 in patients with I stage of disease was slightly lower 30,4 rel. units [25,3; 34,4] than in patients with II stage – 31,1 rel. units [26,8; 35,3].

Depending on the morphological structure of the tumor, there was a tendency to decrease the expression of the gene with lentigo melanoma – 29,4 rel. units [26,2; 31,3], increased expression is associated with the nodal form of tumor growth – 31,6 rel. units [29,1; 35,3].

The highest level of expression of mir-214 is diagnosed with poorly pigmented melanoma 32,8 rel. units [30,0; 35,3], and the smallest in the pigment – 30,6 Rel. units [29,1; 32,6].

The increasing the level of expression of mir-214 was detected in melanoma in the region of the upper limbs 31,8 rel. units [27,9; 35,3], while the decreasing level was found in the lower extremities – 29,8 rel. units [25,3; 33,5] depending on the localization of the primary tumor

Thus, the previously obtained data showed that the aberrant expression of microRNA is associated with clinical and morphological characteristics – sex, age of the patient, stage, localization, morphotype and intensity of pigmentation of melanoma, which in the future will allow an individualized prognosis of the disease to be assessed.

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DETECTION OF MOLECULAR-GENETIC AND IMMUNOLOGICAL MARKERS OF HERPES VIRUSES IN PATIENTS WITH A PRIMARY BRAIN TUMOR

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The incidence of malignant neoplasms of different localization is steadily increasing throughout the world and in particular in the Republic of Belarus. Over the past decade, there has been a tendency to increase the number of newly diagnosed cases of brain tumors and the central nervous system. If this indicator in 2006 was 470, then in 2015 621 cases were identified. As a consequence, rough intensive morbidity has been steadily increasing. If in 2006 it was 4,8 per 100,000 population, by it 2015 had increased to 6,5 per 100,000 population.

Keywords: herpesviruses, herpes simplex virus 1, 2 types, Epstein-Barr virus, cytomegalovirus, human herpes virus 6 type.

One of the reasons for the development of cerebral oncopathology is the presence of viral agents belonging to the *Herpesviridae* family: herpes simplex virus type 1, 2 types (HSV1,2), cytomegalovirus (CMV), Epstein-Barr virus (EBV) and human herpes virus 6 type (HHV 6). Viruses belonging to this family are able to induce and modulate oncotransformation of healthy cells causing the development of a tumor process. The detection of viral agents in patients with diagnosed oncopathology of the brain and central nervous system is possible using laboratory diagnostic methods, i. e. polymerase chain reaction (PCR) and enzyme immunoassay (ELISA) in various biological material: blood, serum, plasma, liquor, tumor tissue and others.

The aim of the study was to establish the presence of molecular-genetic and immunological markers of herpes viruses in the blood of patients with primary detected brain tumors.

Materials and methods. Whole venous blood for PCR and serum for ELISA were used as biological material for study in group of patients with a primary brain tumor. Enzyme immunoassay was performed using a semi-automated analyzer Tecan «Sunrise». The PCR method was performed with a hybridization-fluorescent detection in real time mode using BioRad CFX96 (USA) and Rotor-Gene 3000 (CorbettResearch, Australia).

Results. In the course of the study, in a group of patients with a primary brain tumor (n=50), the polymerase chain reaction method revealed that in 38 % of the cases EBV DNA was detected, and in 4 % CMV DNA was found. HSV DNA 1, 2 types was not detected. The following data were obtained during the enzyme immunoassay. When examining 50 patients for antibodies to herpes simplex virus 1, 2 types, immunoglobulin G (IgG) was detected in 86 % of cases, immunoglobulin M (Ig M) in 6 %. Twenty-nine patients were diagnosed with Ig M and Ig G to the immediate protein (IEA) of the cytomegalovirus, in 6,9 % of cases Ig M to IEA CMV was found, in 17,24 % Ig G to IEA CMV. Ig G was detected in 45,5 % of cases of the 33 people who were tested for herpesvirus type 6. Twenty-one patients underwent examination for detection of Ig G to the cytomegalovirus, which was detected in 95,94 % of cases.

The conclusion. As a result of the study, EBV DNA (38 %) and CMV DNA (4 %) were detected by PCR method. Immunoenzyme analysis showed the presence of immunoglobulin G to HSV 1, 2 types (86 %), IEA CMV (17,24 %), CMV (95,94 %) and HHV6 type (45,5 %); also immunoglobulins M to IEA CMV (6,9 %), HSV 1, 2 types (6 %) in the group of patients with primary brain tumor.

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THE INFLUENCE OF VARIED LEVEL OF PHYSICAL ACTIVITY ON THE BIOLOGICAL AGE OF YOUNG PEOPLE

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This article is devoted to the state of young people, as well as the influence of different levels of physical activity on biological age. The results of the study indicate a high degree of aging of the studied people compared with the mean values. The dependence between biological age and the level of motor activity was identified. In general, the findings show the need to alter the way of life of students, to encourage physical education and sports.

Keywords: biological age, premature aging, physical activity, students.

One of the main problems of our time is the problem of improving and maintaining the health of students. According to the results of numerous studies, recent years revealed the reduction in the standard of health and lack of motor activity among young people. This is largely due to the large learning load, the inability to organize the working day properly, the predominance of a passive lifestyle, etc. In such conditions, it is important to perform the primary diagnosis of individual health risk factors. The assessment of biological age copes with this aim rather well. It serves quite an accurate indicator and characterizes the health status and the effectiveness of adaptation to unusual ecological and occupational conditions. A significant advance or retardation in the biological age of the organism in relation to the actual age can be interpreted as a sign of a decline in the level of health and its functional reserve.

The purpose of the study is to determine the biological age of students with different levels of motor activity.

The study involved 24 young men and 36 girls aged 18 to 21 years. The researched students formed two groups: the control group, which included the students who had the usual learning load (4 hours of physical training per week according to the timetable), and the experimental group, which included young men and women who attended various sports clubs more than 4 hours per week in addition to general curriculum. In order to collect the necessary information a questionnaire was used. It included questions about bad health habits, the length of physical activity and the type of activity. The biological age of the students of both groups was determined according to the method of V. Voitenko.

In the course of the study, it was revealed that young men from the control group had the highest level of premature aging. Thus, at an average actual age of $19,5 \pm 0,4$ years, their biological age reached $31,1 \pm 1,5$ years, while in young men from the experimental group with an average age of $19,5 \pm 0,5$ years, the biological age was