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## **EPIDEMIOLOGICAL ASPECTS OF THE INCIDENCE OF COLORECTAL CANCER OF THE POPULATION OF THE REPUBLIC OF BELARUS**

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The retrospective analysis of the structure of oncopathology of the female and male population of the Republic of Belarus for the period from 2003 to 2017 was carried out. The incidence of colorectal cancer of the population of the Republic of Belarus is analyzed, as well as the mortality due to colorectal cancer of the population of the Republic of Belarus.

*Keywords:* colorectal cancer, morbidity, polyps, mortality, pathogenesis.

Epidemiological studies on the prevalence of colorectal cancer in the territory of the Republic of Belarus are promising in terms of identifying risk factors and developing organizational and preventive measures aimed at reducing the incidence of colorectal cancer, and today is one of the most urgent tasks of public health.

The number of cases of colon and rectal cancer of the male population does not differ much from the number of cases of diseases of the female population and occupies the 4th-5th place among all forms of malignant neoplasms. The analysis of the dynamics of the incidence of rectal and colon cancer of the population of the Republic of Belarus in 2003-2017 showed a pronounced tendency to increase of the incidence of both urban and rural populations. The average annual rate of rectal cancer of the urban population is 19.8 cases of diseases per 100 thousand of the population and 21.9 cases per 100 thousand of the rural population, respectively. During almost the entire study period, positive rates of the increase in the incidence of cancer of the rectum and colon of both urban and rural populations are recorded, which indicates the presence of an upward trend. In the dynamics of the incidence of the population of the Republic of Belarus of rectal and colon cancer in 2003-2017, a pronounced tendency to increase the incidence of both male and female populations was revealed.

Regression analysis of the incidence revealed that the incidence of colorectal cancer increases with age and the peak is observed in the age group of 75-79 years (171.4 cases of rectal cancer of the male population and 73.6 cases of diseases of the female population; 250.4 cases of colon cancer of the male population and 151.5 cases of diseases of the female population per 100 thousand people). From 0 to 29 years of age, there were no cases of rectal and colon cancer in the Republic of Belarus among the female and male population.

The conducted retrospective analysis of the long-term dynamics of mortality showed that the dynamics of mortality of male and female populations from rectal cancer is not traced, it is impossible to say for sure whether the mortality rate increases or decreases during this period. The average annual mortality rate of the male population was 12.4 cases of diseases per 100,000 populations. The average annual indicator of the mortality rate of the female population was 9.8 cases of diseases per 100,000 populations. The contribution of the age component of the disease is significant.

In the dynamics of mortality of the male and female population from colorectal cancer, a pronounced tendency to increase mortality was revealed. The average annual mortality rate of the male population was 12.2 cases of diseases per 100,000 populations and the female population was 12.6 cases of diseases per 100,000 populations. The contribution of the age-related component of the disease is significant.

During the study period, a significant increase in the incidence of colorectal cancer is measured in the Republic of Belarus, which may be due to environmental degradation and the presence of risk factors such as smoking, alcohol abuse, overt use of red meat, physical inactivity, conduction, inflammatory bowel diseases, etc.

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### SECTION 3

#### **PROBLEMS OF MODERN ENVIRONMENTAL SAFETY (BIOMONITORING, BIOINDICATION, BIOREMEDIATION, RADIOECOLOGY AND RADIATION SAFETY, ENVIRONMENTAL MONITORING, MANAGEMENT AND AUDIT. INFORMATION SYSTEMS AND TECHNOLOGIES IN ECOLOGY)**

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