

Thus, the heat treatment of liver microsomes, as in the case of nicotine, and in the case of hexamethonium, changes the direction of lipid oxidation of liver microsomes when in vitro induced by enzymatic mechanisms of LPO was.

Thermal treatment of liver microsomes in the presence of nicotine and hexamethonium in the induction of non-enzymatic mechanisms of lipid peroxidation in vitro also changes its direction of oxidation of liver lipids - nicotine of a molar concentration of  $10^{-4}$  M leads to a slight increase in oxidative activity, and in molar concentrations of  $10^{-5}$  M,  $10^{-6}$  M is not expressed, but it prevents the oxidative activity of non-enzymatic mechanisms of LPO.

Hexamethonium of a molar concentration of  $10^{-4}$  M does not significantly decrease the ability of lipids of liver microsomes to oxidize, and at  $10^{-5}$  M,  $10^{-6}$  M molar concentrations increases the ability of liver microsomes to oxidize.

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### **BREAST CANCER AND OVARAINS IN WOMEN OF AMUR REGION**

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**Summary:** The study materials were common in Russia, the accounts and records of the official cancer statistics. The basic indicators of provision of medical care for women with cancer of reproductive system in the Amur region. The maximum number of cases were in age 50 years and older. Decreased the number of patients with I–II stages of the process, but became more of patients with advanced forms of cancer, especially when the visual localization of the disease. Mortality rates increased for all malignant tumors of the female reproductive system. Mortality in the first year since diagnosis has consistently increased since 1998. Analyzed the quality of cancer services on the index of accuracy of the accounting of this category of patients that is traditionally comparable to other regions of the country.

**Key words:** breast cancer and ovarians, incidence, mortality

Malignant neoplasms (ZNO) of the reproductive system are the leading oncological pathology in the female population of the economically developed countries of the world. Oncological diseases are included in the group of “dis-eases of civilization” and are rightfully considered to be the most important public health problem. In order to successfully diagnose and treat, systematic preventive and curative measures are necessary, which help to identify onco-logical pathology at early stages and improve oncological care for patients.

In 2015 in Russia as a whole accounted 66621 cases of breast cancer (BC) and 14049 cases of ovarian cancer (OC). “Gross” figure was BC – 84,79 o/oooo, a number of 17.88 o/oooo and standardized (world standard) – 49,75 o/oooo and of 11.03 o/oooo, respectively. Malignant neoplasms of the reproductive system have the greatest specific weight in the General structure of oncological pathology among the feminine population of the Russian Federation (38.9 percent). Breast cancer is in women the first place (20,9%), in third place is uterine cancer (7.7 per cent). Cause of death malignant neoplasms of reproductive system (breast and ovaries) 2015 at 30841 women, which accounted for 22.3% of the total number of women who have died in the country from cancer. [5]

The results of numerous studies suggest little progress in improving qualitative and quantitative indicators in this group of patients, as morbidity and mortality. [ 6,7,10]

Risk factors for development of breast cancer and ovarian are more than 120 of modifiers, the most significant of which (90-95%) are considered to be environmental factors: climatic, geochemical, and others. The uneven spread of malignant tumors occurs not only in different countries, different ethnic groups, but in separate regions of the same country. This aspect can be used as a basis to explore and identify the real risk factors of tumor pathology and to allow in the future to form a scientific basis for the development of cancer control programmes taking into account geographical and bio-social features of settlements and their inhabitants. [1, 4, 5, 11]

Amuroblast, apart of the far Eastern Federal district (DFO) related to areas with sharply continental climate, lack of some trace elements in the environment and a violation of their ratios, depending on the biogeochemical division of the province into

three zones in the direction from North to South, is in this respect a particular interest in the study of the cancer situation. [3]

The purpose of this study was to provide scientific assessment of the major indicators of morbidity and mortality from malignant neoplasms of the mammary glands and ovaries in a particular region of the Russian Federation.

**Materials and methods** In the framework of the present research studied the dynamics of indicators of morbidity and mortality in patients with cancer. We used the reporting form # 7 (tab. 2000, C. 5), "Data on diseases malignant neoplasms", No. 35 "Data on patients with malignant tumors" in the region and its administrative territories, 1998 – 2016, No. 5 (table. C51, gr. 27) "the Distribution of deaths by sex, age groups and causes of death", fact sheet No. 2 PH "population by sex and age". The survey also served the accounts and records: the "Control card of the dispensary patient" (form number 30), "Notice about the patient with malignant neoplasm (form 099)", "Medical card of ambulatory patient (form 025/y), the Protocol of neglect (form 027/a)" and annual reports. The article used the codes of the diseases presented in the International classification of diseases (ICD-10: breast cancer - C50 and ovarian C56).

The object of research was each cancer of the breast and ovaries in medical preventive establishments of the Amur region and regional cancer centre (AOOD) with all cases completed treatment. All the obtained results were processed using standard programs for statistical analysis.

**Results and discussion** In 2015, the far Eastern Federal district is considered 4775 cases of malignant tumors of the female reproductive system, including breast cancer – 2595, OC – 559. Intensive indicator for breast cancer - 80,51 o/oooo, cancer of the ovaries - of 17.34 o/oooo and standardized (world standard) – 49,51 o/oooo and 11,58 o/oooo, respectively. This pathology is found in all DFO regions with the highest standardised indicators for breast cancer in the Jewish Autonomous region (61,67 o/oooo) and Kamchatskiy Krai (57,09 o/oooo), OC – in the Chukotka Autonomous district (of 24.04 o/oooo) and Sakhalin region (of 16.63 o/oooo). The lowest incidence rates of breast cancer were registered in the Chukotka Autonomous district (29,83 o/oooo) and in the Republic of Sakha (38,55 o/oooo), OC - Magadan (9,14 o/oooo) and in the Republic of Sakha (9,35 o/oooo).

High mortality from the HEAT of the female reproductive system observed in breast cancer in the Magadan region (of 18.08 o/oooo) and OC (of 8.34 o/oooo) in the Kamchatka region. [7]

Index of registration accuracy for malignant neoplasms of the reproductive system (cancer of the mammary glands and ovaries) in the female population of the far East characterizes the level of Executive discipline of doctors, cancer institutions, leading to the primary registration documentation, and also defines the activity of screening programmes in the study area, where the morbidity and mortality rates differ significantly by place of residence. The most favorable results for this type of statistical reporting was in the Chukotka Autonomous district (BC - 0,14; OC - 0,00). [9]

In 2016, in the Amur region revealed 2978 new cases of malignant neoplasms (2015. - 3139; 2010. - 2578), which is 5.2% less than in the previous year. Intensive incidence rate of ZNO increased from 245,44 o/oooo in 1998. to 370,50 o/oooo in 2016.

Structure of the basic sites of ZNO in 2016 by region as follows: in the first place – skin cancer is 12.4% (2015. % To 12.4%), followed by breast cancer and 11.5% (2015. - 11,8%), the third – lung cancer – 11,0% (2015. Of 12.9%). [1]

Annually there are registered over 400 (431) new cases of malignant neoplasms of the female reproductive system (BC – 366; OC – 65). On either of the two localizations of the tumor process (Breasts and ovaries) did not show a reduction in the number of cases in the studied period of time.

Analysis of age characteristics has shown that over the entire period of observation maximum number of patients were in the group of 50 years and older. Decreased the number of actively detected patients in 2016, indicating that the low efficiency in hospitals primary care to diagnose early signs of ZNO. Slightly increased the number of identified patients with breast cancer is 33.9% (2015. – 31,5%) with a significant decrease of such in a number of 8.9% (2015. For 28.8%). [2]

The distribution of the weights of the individual localizations of the tumor process stages of the disease (on the basis of the accepted forms of public reporting – f.35) has a different percentage ratios. In 2016. noted dynamic increase of patients with early-stage breast cancer, and ovarian (1998.-63,2% and 42.7%; 2016. – For 69.1% and 47.9%, respectively). It becomes clear that the increase in activity in identifying patients with malignant tumors, of course, increases the number of identified in the early stages of the disease.

It is known that the running forms of the neoplastic process is not only IV, but the III stage of visual localization testing. Analyzing the distribution of the patients in this group, it should be noted that in the studied period, although there was a decrease in the number of patients with breast cancer (1998- list - 20,1%, Ivst - 15,2%; 2016. - list - 25,6%, Ivst - 5,1%) and ovarian cancer (1998 to 22.2%; 2016 – 10.4 percent), but this situation leaves this pathology among the most important problems in Oncology, as detection of EIT in the early stages (I – II century) development process, defines the prognosis and quality of life of cancer patients. [8]

The number of patients of malignant tumors of female reproductive organs in recent years has decreased in both locations (2016 - BC – 43, C – 16; 2015 – BC – 48, OC - 29), exceeding, however, the average for Russia and the far Eastern Federal district. Relative to 1998, clearly demonstrated an increase in the number of patients given 5 or more years in cancer of the breast (+ 0.5%) and ovary (+ 1.4 per cent).

The number of patients with malignant tumors of the breast and ovaries is 3955. The index of accumulation of contingents allows the Amur region to gain a foothold among the leading regions of DFO in ovarian cancer (12,3) and breast cancer (11,0).

One of the objective criteria for assessing the performance of cancer services is the index of registration accuracy, which gives the possibility of obtaining accurate information on the distribution of EIT and able specialized medical care to cancer patients. It should be noted high level of organization of the relevant services in the region, as are many locations and, in particular, cancer of breast and ovaries is comparable with many areas of the Russian Federation, and even ahead of some of them.

Binding morphology of malignant tumors of female reproductive organs for this type of diagnostic activity, when the number subjected to cytological and histological studies reaches 97.5%, confirms the need to further improve the service.

Dynamics of mortality during the study time period showed that in 1998 there was a steady and consistent increase in standardized mortality rates from malignant neoplasms of the female reproductive system in patients with cancer of the breast and ovaries. Mortality in the first year after diagnosis among cancer patients organs of the female reproductive system (Breasts and ovaries) in the period 1998 – 2016 in the Amur region have consistently decreased.

Thus, in 2016, in the Amur region revealed the incidence rate of malignant neoplasms of the female reproductive system (Breasts and ovaries) by increasing the activity of identifying patients at early stages of disease development. High is the percentage of registered patients in stages III – IV of breast cancer related to the running forms of ZNO. Decreased level of detection of oncological diseases with preventive health checkups, but decreased mortality in the first year since diagnosis. Significantly decreased mortality from breast cancer against the backdrop of increasing it in patients with ovarian cancer.

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#### **CLINICAL CASE OF RELAPSING IDIOPATHIC DISSEMINATED ENCEPHALOMYELITIS**

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**Abstract.** Acute disseminated encephalomyelitis (ADEM) is an autoimmune inflammatory disease of the nervous system which can be characterized as widespread demyelization of the brain and spinal cord, which usually develops after infection or vaccination. ADEM takes a special place among the most frequent and severe forms of disseminated encephalomyelitis. In its pathogenesis, as well as in disseminated sclerosis, an important role is held by autoimmune reactions to myelin antigens.

Atypical pathological ADEM process is monophasic, i.e. acute with later recovery, which is the main diagnostic measure, which makes it possible to distinguish it from multiple sclerosis. ADEM is manifested by severe encephalopathy with pronounced cerebral and focal symptoms. In some cases, it's possible to see the recurrence of the disease, with an exact reiteration of the first attack symptoms, this is a recurrent ADEM. Rarely, there is possibility of ADEM re-attack, which manifests itself by the involvement of new brain areas and, of course, new clinical symptoms appearance, this is called multiphase ADEM.

**Objective.** Analysis of the clinical case.