

in the adult population. In the structure of the general morbidity of the population, 45,9 % were nodular goiter, hypo-thyroidism was 24 %, autoimmune thyroiditis – 20,6 %, endemic goiter – 5,2 %, thyrotoxicosis – 4 %.

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IRON DEFICIENCY ANEMIA AMONG PREGNANT WOMEN OF VARIOUS AGES

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It is shown that most cases of iron deficiency anemia occur in the second trimester of pregnancy. The highest values of hemoglobin level, transferrin saturation with iron and the minimum values of the total iron binding capacity of serum are observed among pregnant women 18–25 years old.

Keywords: iron deficiency anemia, anemic syndrome, complications of pregnancy, fetal development.

Anemia can occur at any period of a person's life, not only with various diseases, but also with certain physiological conditions, for example, during pregnancy, lactation, during a period of increased growth. The most common in clinical practice is anemia that develops as a result of iron deficiency in the organism.

The research part of the work was carried out on the basis of a maternity hospital of City Clinical Hospital №5 of Minsk. Case histories of pregnant women with iron deficiency anemia were taken. Five age groups were formed: 18–25 years; 25–30 years; 30–35 years; 35–40 years; 40–45 years. The main indicators for the diagnosis were the values $Hb < 110 \text{ g/l}$ in 1 and 3 trimesters and the values $Hb < 105 \text{ g/l}$ in 2 trimester. The diagnosis of iron deficiency anemia (IDA) was made on the basis of the results of a set of laboratory tests, including the determination of iron metabolism: serum ferritin (FC), transferrin saturation with iron coefficient (STI), total iron binding capacity of serum (TICS). The criteria for laboratory diagnosis for IDA among pregnant women were: $FC < 20 \text{ mcg/l}$, $STI < 17 \%$, $TICS > 65 \text{ mcml/l}$.

Anemia was first detected in the I trimester among 19 % of pregnant women, in the II trimester among 60,3 % of women and in the III trimester among 20,7 % of pregnant women. So, most cases of iron deficiency anemia occur in the second trimester of pregnancy.

The highest hemoglobin values occur in the younger age group (18–25 years), moreover, both among healthy women and in the group of women with anemia.

The highest rate of serum ferritin was found in the older age group (40–45 years); minimum values were observed in the group of patients 35–40 years old.

Iron transferrin saturation was highest in the group of 18–25 years old, minimum values identified for age 35–45 years. The same peculiarity was noted among healthy women.

Among pregnant women with anemia there is an increase in the total iron binding capacity of serum, here-with minimum values observed among pregnant women at age 25–30 years, the highest values – at age 40–45 years.

PROGNOSTIC SIGNIFICANCE OF MOLECULAR BIOLOGICAL SUBTYPES OF BREAST CANCER

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Based on the literature data, molecular biological subtypes of breast cancer associated with aggressive tumor potential and prognosis of the disease course were studied, based on the determination of the level of expression of ER and PR, Her-2/neu and Ki-67.

Keywords: breast cancer, luminal type, basal-like, superexpressive, estrogen and progesterone receptors, Ki-67, Her-2/neu.

Breast cancer is a heterogeneous disease that is one of the main problems of clinical oncology. The increase in breast cancer according to the Belarusian cancer registry every year is 1,2-1,5% and takes the 1st place among oncological pathology in women. The success of breast cancer treatment largely depends on its molecular biological subtype and proliferative activity of markers detected in tumor tissue [1]. Based on immunohistochemical studies of breast carcinoma cells expression of estrogen and progesterone receptors, as well as epidermal growth factor receptor type 2 (Her2/neu, ErbB2) and proliferative antigen Ki-67, breast cancer can be classified into 4 molecular subtypes, which differ in prognosis and response to therapy: luminal A type, luminal B, Her-2/neu positive (superexpressive), basal-like (trinegative)[1–2].

Luminal A type is characterized by high expression of estrogen receptors (ER) and progesterone receptors (PR), lack of expression of Her2/neu and low expression of Ki-67(<20%). This type of cancer occurs in 30-45% of cases. Tumors of this type are hormone-dependent. In such patients, the risk of recurrence during the first 2 years was significantly reduced and overall survival was increased [2].

Luminal B type is represented by 2 types: Her-2/neu negative and Her-2/neu positive. Luminal B Her-2 / neu negative type is characterized by the absence of expression of epidermal growth factor receptor type 2 on the background of re expression and the presence of one of the factors: the lack of expression of PR or increased expression of Ki-67 (>20%). In luminal B Her-2 / neu positive type, the presence of ER and Her-2/neu expression was established. In General, luminal b-type tumors have increased Ki-67 expression and low or no RP expression, have genomic instability, and affect mutations in TP53. This molecular biological type accounts for 20% of breast cancer cases[2]. Luminal B type is able to metastasize and acts negatively on the function of lymph nodes [3]. In the **overexpressive (HER2-positive) type** of breast cancer, there is no expression of re and RP (less than 20%), there is an excess of HER2 receptors on the surface of tumor cells, Ki-67 expression is detected >14% [4]. This type is diagnosed in 15-20% of women. Characterized by low differentiation, larger tumor size with lymph node involvement. A distinctive feature of **basal-like tumors** is the lack of expression of ER, PR and Her-2/neu and overexpression (>50-90%) of the marker of proliferative activity Ki-67. The probability of this type of cancer is 27-39%. This is an extremely aggressive form of cancer with a high level of metastasis and low overall survival of patients in comparison with other subtypes of breast cancer [5].

Thus, the analysis of the literature data shows that tumors of luminal A type are less aggressive, characterized by a better prognosis compared to receptor negative tumors. Basal-like breast cancer has the most aggressive potential, which is characterized by frequent recurrence of the disease and low overall survival rates of patients.

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ANTIBIOTIC RESISTANCE – A MODERN GLOBAL CHALLENGE FOR HUMAN HEALTH

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Antibiotic resistance is one of the urgent problems not only of medicine but also of other branches. According to the results of a survey of future doctors, medical students in the treatment of acute respiratory infections in most cases (86.8%) do not adhere to the indications for antibiotic therapy, they use these drugs on their own, which leads to side effects from the patient's body.

Keywords: antibiotics, antibiotic resistance, questionnaire