AJPMHS GLOBAL RESEARCH NETWORK

AMERICAN Journal of Pediatric Medicine and Health Sciences
Volume 01, Issue 09, 2023 ISSN (E): 2993-2149

Modern Aspects of the Risk of Breast Cancer in Pregnant Women

Kaymanova Kamila Imomovna
Bukhara State Medical Institute

Annotation: The problem of pregnancy-associated breast cancer is becoming increasingly important for oncologists and obstetricians-gynecologists. Characteristic during pregnancy, increased metabolic processes, intense cell proliferation, and enhanced angiogenesis contribute to the progression of the tumor process. The combination of such indicators as young age and immunosuppressive state during pregnancy suggests that breast cancer during pregnancy is a more serious condition than breast cancer outside pregnancy. This article provides information on current aspects of breast cancer risk in pregnant women.

Key words: pregnancy, breast cancer, risk factors, oncology, diagnosis.

Relevance. According to the WHO definition, pregnancy associated breast cancer (BC) involves the occurrence of a malignant tumor during pregnancy or lactation within one year after completion of pregnancy. Among oncological pathologies of pregnant women, breast cancer ranks first, accounting for 5-17%. A number of factors contribute to the development of this situation: on the one hand, there is a steady increase in morbidity, including among women of fertile age, cancer is “getting younger”, and on the other hand, the social aspects of modern life do not always allow planning pregnancy at a young age age, so more and more often women give birth at the age of 30-40, which brings them closer to the risk group for breast cancer. The dynamics of breast cancer research in recent years have shown that it is the most common form of tumor in women during pregnancy. According to international statistical institutes, this form of tumor in women under 45 years of age accounts for up to 8% of all cases. The incidence of breast cancer detection during pregnancy ranges from 1 in 3000 pregnant women to 1 in 10,000 pregnancies. The reason that the previously quite rare combination of breast cancer and pregnancy is no longer uncommon is the later age of childbearing, as well as the fact that the cohort of patients is expanding to include those women with breast cancer. discovered within a year after birth.

Breast cancer during pregnancy is characterized by a high frequency of previous hyperplastic processes in the gland tissue, chronic hyperestrogenism, late (after 30 years) first birth and the last pregnancy interrupted, or a large number of births, but the absence of pregnancy for at least 5 years before the last pregnancy, combined with tumor. It is believed that pregnancy aggravates the course of breast cancer, especially in patients with hormone-sensitive forms of the tumor. To choose treatment tactics, a thorough examination of the patient and fetus is necessary, as well as clarification of the extent of the tumor process. The complexity of the pathology necessitates the participation of doctors of various specialties in treatment. Approximately 70-80% of pregnant women with breast cancer have a nodular form of the tumor.

Late diagnosis of breast cancer during pregnancy is a typical situation. The difficulty of diagnosing breast cancer during pregnancy is due to a number of clinical signs and features of physiological changes in the mammary gland. Hypertrophy, swelling of the mammary glands, changes in consistency, increased vascularization in response to hormonal stimulation, as well as a number of possible complications (mastitis, galactocele) make examination difficult and mask the developing tumor. A sharp increase in breast mass during pregnancy and lactation is not always taken into account by the doctor observing the pregnancy, and can be regarded as a normal physiological phenomenon.

Distinctive features of pregnancy-associated breast cancer, as a rule, are aggressive course, late diagnosis and poor prognosis. From the appearance of the first symptoms to the diagnosis of breast cancer, an average of 2 to 15 months passes, which is a factor that determines the neglect of the process. Difficulties in diagnosis are quite objective and are caused by physiological processes occurring in the breast tissue during pregnancy: an increase in size, changes in density, and consistency of the organ. There are frequent errors in the differential diagnosis of a tumor with mastitis and galactocele. However, an equally important factor is the low oncological alertness of obstetricians and gynecologists. Approximately 50% of tumors and tumor-like formations detected in the mammary gland during pregnancy and lactation are breast cancer. Then, based on the frequency of the lesion, galactocele and chronic lactation mastitis are diagnosed. In recent years, erased forms of inflammatory lesions of the mammary gland have become more common, characterized by, if not a complete absence, then at least a weak expression of typical clinical manifestations. Of course, with the increase in such forms of inflammatory diseases, the differential diagnosis between them and malignant lesions of the mammary gland becomes much more complicated. Accordingly, the number of cases of insufficiently justified and inadequate implementation of treatment measures is increasing. In addition, there is often a reluctance of patients to perform certain diagnostic procedures, in particular, biopsy of a breast tumor. All this can lead to the fact that a pregnant woman takes much more time from the onset of the first symptoms to diagnosis than in a normal situation, and treatment for such patients begins, on average, several months later than in the general group of patients with breast cancer glands. Age at first birth is a well-known factor influencing the incidence of breast cancer. Thus, in women who had a late first birth (over the age of 30) or who did not have births at all, the risk of developing breast cancer is 2-3 times higher than in those who gave birth before the age of 20. Each subsequent birth before the age of 30 years is accompanied by a further reduction in the risk of developing breast cancer. The risk of developing breast cancer before the age of 40 years is 5.3 times higher in women who gave birth over the age of 30 years compared to those who gave birth before 20 years of age. Women who have given birth and are carriers of BRCA1 or BRCA2 mutations are significantly more likely (1.71 times) to develop breast cancer before the age of 40 than nulliparous women. Each pregnancy is associated with an increased risk of breast cancer. Early pregnancy is not protective in women with BRCA1 or BRCA2 mutations. Lack of lactation is accompanied by a 1.5-fold increase in the risk of breast cancer. The positive protective effect of lactation is realized both in women of the reproductive period and in menopausal women, and there is an inverse relationship between the total duration of lactation and the risk of developing breast cancer. Risk factors for the development of breast cancer in pregnant women are the same as in the general population [31]. A certain contribution to the development of breast cancer is made by early menarche and a small number of births. Predisposing factors also include the hereditary nature of breast cancer in the family, the effect of unfavorable environmental factors, chronic fatigue syndrome, sleep

disorders, deviations from the normal body mass index [2,4]. The literature provides data on the protective effect of prolonged breastfeeding [3, 5, 6]. Interestingly, the protective effect of breastfeeding is realized to the greatest extent in carriers of the BRCA1 mutation, as well as those with cases of breast cancer among first-degree relatives [1, 7]. Moreover, the average maternal age for BCFA is 33–35 years [8, 9].

The problem of pregnancy-associated breast cancer is becoming increasingly important for oncologists and obstetricians-gynecologists. It is important that practicing obstetricians and gynecologists have sufficient knowledge to suspect this oncopathology during gestation and the postpartum period. Women should also be informed about the possibility of developing a malignant tumor during pregnancy. If breast cancer is suspected, the standard diagnostic algorithm developed for pregnant women must be implemented in full; postponing diagnostic measures until the postpartum period is unacceptable. Treatment tactics in such a complex clinical situation are purely individual and are developed at an interdisciplinary consultation, and the supervision of patients with breast cancer is carried out by a multidisciplinary team consisting of an oncosurgeon-mammologist, a chemotherapist, a radiotherapist, an anesthesiologist and an obstetrician-gynecologist with the mandatory involvement of a clinical psychologist. The optimal routing option is to accumulate this category of cancer patients in a multidisciplinary oncology clinic, which has an antenatal clinic and a maternity hospital in its structure. The successes of clinical oncology in recent years allow us to talk about a paradigm shift. That is, a departure from the unambiguous prescription of termination of pregnancy when diagnosing a malignant disease to the search for optimal ways to achieve the goal: the birth of a healthy child without compromising the effectiveness of antitumor treatment.

Literature

1. Олимова А. З., Шодиев У. М. Репродуктив Ёшдаги эркакларда бепуштлик сабаблари: Бухоро тумани эпидемиологияси //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 499-502.

2. Zokirovna O. A., Abdurasulovich S. B. Ovarian Diseases in Age of Reproductive Women: Dermoid Cyst //IJTIMOIY FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 154-161.

3. Olimova A. Z. ECHINOCOCCOSIS OF LIVER OF THREE MONTHLY WHITE RAT //Scientific progress. – 2022. – Т. 3. – №. 3. – С. 462-466.

4. Олимова А. З. Морфологические и морфометрические особенности печени белых беспородных трех месячных крыс после тяжёлой черепно-мозговой травмы вызванной экспериментальным путём //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 557-563.

5. Oglu M. Z. M., Zokirovna O. A. МОРФОЛОГИЧЕСКИЕ И МОРФОМЕТРИЧЕСКИЕ ПАРАМЕТРЫ ПЕЧЕНИ БЕЛЫХ БЕСПОРОДНЫХ КРЫС, ПЕРЕНЕСШИХ ЭКСПЕРИМЕНТАЛЬНУЮ ЧЕРЕПНО-МОЗГОВУЮ ТРАВМУ ПОСЛЕ МЕДИКАМЕНТОЗНОЙ КОРРЕКЦИИ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2023. – Т. 8. – №. 1.

6. Олимова А. З., Турдиев М. Р. БУХОРО ШАҲРИДА МЕЪДА ВА ЎН ИККИ БАРМОҚЛИ ИЧАК ЯРАСИ УЧРАШ ЭПИДЕМИОЛОГИЯСИ //Oriental

renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 4. – С. 642-647.

7. Zokirovna O. A. Modern Concepts of Idiopathic Pulmonary Fibrosis //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 3. – С. 97-101.
8. Zokirovna O. A. Pathology of Precancerous Conditions of the Ovaries //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 3. – С. 93-96.
9. Зокировна, Олимова Азиза и Тешаев Шухрат Джумаевич. «Морфологические аспекты печени белых беспородных крыс после тяжелой черепно-мозговой травмы, вызванной экспериментально в виде дорожно-транспортного происшествия». *Scholastic: Journal of Natural and Medical Education* 2.2 (2023): 59-62.
10. Zokirovna O. A. Comparative characteristics of the morphological parameters of the liver at different periods of traumatic brain injury //Euro-Asia Conferences. – 2021. – С. 139-142.
11. Zokirovna O. A. Macroand microscopic structure of the liver of threemonthly white rats //Academic research in educational sciences. – 2021. – Т. 2. – №. 9. – С. 309-312.
12. Олимова А. З. Частота Встречаемости Миомы Матки У Женщин В Репродуктивном Возрасте //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 551-556.
13. Zokirovna O. A., Abdurasulovich S. B. Ovarian Diseases in Age of Reproductive Women: Dermoid Cyst //IJTIMOIY FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 154-161.
14. Zokirovna O. A. Cytological screening of cervical diseases: pap test research in the bukhara regional diagnostic center for the period 2015-2019. – 2022.
15. Zokirovna O. A., PREVALENCE R. M. M. EPIDEMIOLOGY OF CANCER OF THE ORAL CAVITY AND THROAT IN THE BUKHARA REGION //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 545-550.
16. Olimova A. Z. The frequency of occurrence of my uterus In women of reproductive age //JOURNAL OF ADVANCED RESEARCH AND STABILITY (JARS). – 2021. – Т. 1. – №. 06. – С. 551-556.
17. Olimova Aziza Zokirovna. (2023). MODERN PRINCIPLES OF THE EFFECT OF HEMODIALYSIS THERAPY ON HEART RATE. *International Journal of Integrative and Modern Medicine, 1*(1), 80–85. Retrieved from http://medicaljournals.eu/index.php/IJIMM/article/view/28
18. Olimova Aziza Zokirovna. (2023). PATHOMORPHOLOGICAL CHARACTERISTICS OF THE EPIDIDYMIS UNDER

IRRADIATION. *International Journal of Integrative and Modern Medicine*, *1*(1), 96–100. Retrieved from http://medicaljournals.eu/index.php/IJIMM/article/view/31

19. Olimova Aziza Zokirovna. (2023). THE INCIDENCE OF CANCER OF THE ORAL CAVITY AND PHARYNX IN THE BUKHARA REGION. *International Journal of Integrative and Modern Medicine*, *1*(1), 86–89. Retrieved from http://medicaljournals.eu/index.php/IJIMM/article/view/29
20. Olimova Aziza Zokirovna. (2023). INFLUENCE OF ALCOHOL INTOXICATION ON THE HEART TISSUE OF RATS IN THE EXPERIMENT. *International Journal of Integrative and Modern Medicine*, *1*(1), 90–95. Retrieved from http://medicaljournals.eu/index.php/IJIMM/article/view/30
21. Olimova Aziza Zokirovna. (2023). Modern Aspects of the Etiology of Gastric Ulcer and Its Complications. *American Journal of Pediatric Medicine and Health Sciences (2993-2149)*, *1*(3), 163–166. Retrieved from http://grnjournal.us/index.php/AJPMHS/article/view/208
22. Zokirovna O. A., Jumaevich T. S. Morphological Aspects of the Liver of White Outbred Rats After Severe Traumatic Brain Injury Caused Experimentally in the Form of a Road Accident //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – №. 2. – С. 59-62.
23. Aziza Zokirovna Olimova GASTRIC ULCER AND ITS COMPLICATIONS // Scientific progress. 2022. №3. URL: https://cyberleninka.ru/article/n/gastric-ulcer-and-its-complications (дата обращения: 28.09.2023).
24. Olimova Aziza Zokirovna. (2022). TECHNIQUE FOR CUTTING BIOPSY AND SURGICAL MATERIAL IN THE PRACTICE OF PATHOLOGICAL ANATOMY AND FORENSIC MEDICINE. *Web of Scientist: International Scientific Research Journal*, *3*(7), 116–120. https://doi.org/10.17605/OSF.IO/PSQ59
25. Zhumayevich N. F., Zokirovna O. A. PATHOMORPHOLOGY OF GASTRIC CANCER //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 330-333.
26. Zokirovna O. A. Epidemiological and Etiological Data of Morphogenesis and Pathomorphology of Congenital Heart Diseases in Children //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 4. – С. 88-91.