

MODERN METHODS OF TREATMENT OF METASTATIC BREAST CANCER

Mirakhmedova Sohiba Soibnazar kizi
Bukhara State Medical Institute

Abstract

In 2022, 2.3 million women worldwide were diagnosed with breast cancer, resulting in 670,000 deaths. This type of cancer occurs in women of all ages after puberty, and the risk of developing it increases with age. Interestingly, the prevalence and mortality of breast cancer vary greatly depending on the country's level of development. For example, in highly developed countries, one in twelve women will experience this condition in their lifetime, and one in 71 will die from it.

Keywords: Metastatic breast cancer, triple-negative, BRCA1 and BRCA2, 6biopsy, HER2 /neu.

Introduction

As we know, metastatic breast cancer (MBC) is a breast cancer that spreads beyond the primary tumor site to other organs and tissues, making it more difficult to treat and reducing patient survival. The epidemiology of metastatic breast cancer is an important aspect of the study of this disease, which includes its spread, risk factors, survival, and treatment trends. The spread of metastatic breast cancer (MBC) is a significant public health problem that greatly affects the lives of many women around the world. Brain metastases can cause headaches, seizures, visual disturbances, and other neurological symptoms. According to the author Vykhristyuk Yu. The main factors influencing the spread of breast cancer include the aggressiveness of the primary tumor, cancer progression, the presence of germinal mutations, features of the molecular subtype of breast cancer, and the effectiveness of treatment of the primary tumor process. However, even with successful treatment of primary breast cancer, there is a risk of metastasis in the years following diagnosis, which makes breast cancer particularly dangerous for patients. The manifestations of breast cancer can be diverse and include both local and systemic symptoms, depending on the location and nature of the metastases. Understanding the spread of breast cancer is a key aspect in developing effective strategies for the diagnosis, treatment, and prevention of this disease. To combat breast cancer, comprehensive measures are needed, including early diagnosis, modern treatment, and patient support at all stages of the disease. Survival in metastatic breast cancer (MBC) is a key aspect that determines the results of treatment and the quality of life of patients. Understanding survival plays an important role in developing treatment strategies, predicting outcomes, and evaluating the effectiveness of medical interventions.

Material and Methods

Survival in breast cancer is usually much lower than in localized breast cancer. This is due to the fact that breast cancer is characterized by the spread of cancer cells to other organs and tissues, which makes it more difficult to treat. Exact survival figures can vary depending on a variety of





factors, including the stage of the disease, the location and nature of the metastases, the molecular characteristics of the tumor, the patient's condition, and the effectiveness of treatment. One of the main survival indicators is the five-year survival rate, which estimates the percentage of patients who survive five years after the diagnosis of breast cancer. However, it should be borne in mind that the survival rate may vary depending on whether the presence of metastases was determined at the time of initial diagnosis of breast cancer or whether they developed later. The degree of survival may also depend on how effective the treatment methods used have been. Modern medicine uses various approaches to the treatment of breast cancer, including surgery, chemotherapy, hormone therapy, targeted therapy, immunotherapy, and other methods. The choice of treatment depends on many factors, including the characteristics of the tumor, the patient's condition, and the presence of concomitant diseases. However, even with low overall survival, there are cases of long-term survival in some patients with breast cancer. This highlights the importance of an individual approach to treatment and the need for continuous improvement of diagnostic and treatment methods. In addition, it is important to take into account not only the physical, but also the psychological and social components of survival in breast cancer. Support for patients and their families, psychological counseling and access to social services play an important role in ensuring a full life and improving the quality of survival in this serious disease. Overall, survival in metastatic breast cancer remains a significant issue in oncology, requiring constant attention and improved approaches to diagnosis, treatment, and patient support. Risk factors are a key aspect of understanding the development of metastatic breast cancer (MBC). Identifying and identifying these factors plays an important role in assessing the risk of developing the disease in a particular patient and in developing prevention, diagnosis, and treatment strategies.

Clinical Data:

Factors for MBC risk actors in more detail.

1. Primary tumor size: Larger primary breast tumor sizes are often associated with a higher risk of metastasis. Large tumors have a greater potential to invade surrounding tissues and spread cancer cells throughout the body.
2. Lymphatic spread of cancer: The presence of metastases in the lymph nodes of the breast increases the risk of developing metastases to other organs and tissues. Lymphatic spread indicates an advanced stage of cancer and a more aggressive course of the disease.
3. Negative molecular subtypes: Some molecular subtypes of breast cancer, such as triple-negative (triple-negative) and ger2-positive, are associated with a higher risk of metastasis. These subtypes are often characterized by a more aggressive course of the disease and a poorer prognosis.
4. Germinative mutations: Inherited germinative mutations, such as BRCA1 and BRCA2 mutations, are associated with an increased risk of breast cancer, including breast cancer. The presence of these mutations can increase the likelihood of metastasis and lead to a younger age when cancer is diagnosed.
5. Advanced cancer: Patients diagnosed with advanced breast cancer have a higher risk of developing metastases. The degree of spread of the tumor process can be a direct indicator of the probability of metastasis.





6. Uncontrolled use of hormone medications: Uncontrolled use of hormone medications, such as hormonal contraceptives or postmenopausal hormone replacement therapy, may increase the risk of breast cancer, including its metastasis.

7. Lack or incorrect use of screening methods: Insufficient mammographic screening tests or incorrect interpretation of the results can lead to delayed diagnosis and underestimation of the extent of cancer spread, which in turn increases the risk of metastasis.

These risk factors are just some of the many possible variables that influence the likelihood of developing metastatic breast cancer. Given the many factors involved, it is important to tailor the approach to risk assessment and develop prevention and treatment strategies for each patient. Treatment of metastatic breast cancer (MBC) is a complex and multi-factorial process that often requires a combination of different methods to control symptoms, improve quality of life, and extend patient survival. Depending on the characteristics of the tumor, the site of metastasis, the general condition of the patient, and other factors, the choice of treatment methods may vary. These include Surgery, chemotherapy, hormone therapy, targeted therapy, immunotherapy, and radiation therapy.

Conclusion:

Ongoing research in this area promises further improvements in the treatment and understanding of this complex gland disease. ТакимThus, individualizing approaches to the treatment of breast cancer based on a comprehensive analysis of prognostic factors can significantly improve outcomes for patients, providing each of them with the most appropriate and effective treatment plan.

REFERENCES

1. Almuradova D. M. et al. A Modern Approach to Diagnosis and Treatment of Breast Cancer Releases //Central Asian Journal of Medical and Natural Science. – 2021. – T. 2. – №. 5. – C. 294-298.
2. Altena R. et al. Current status of contemporary diagnostic radiotracers in the management of breast cancer: first steps toward theranostic applications //EJNMMI research. – 2023. – T. 13. – №. 1. – C. 43.
3. Belousova E. D. Vaccination in children, febrile convulsions, and epilepsy //Neuroscience and Behavioral Physiology. 2020, vol. 50, no. 1, pp. 8-12.
4. Beňačka R. et al. Classic and new markers in diagnostics and classification of breast cancer //Cancers. – 2022. – T. 14. – №. 21. – C. 5444.
5. Block J. P. Cardiac complications after SARS-CoV-2 infection and mRNA COVID-19 vaccination—PCORnet, United States, january 2021–January 2022 //MMWR. Morbidity and mortality weekly report. – 2022. – T. 71.
6. Deluche E. et al. Contemporary outcomes of metastatic breast cancer among 22,000 women from the multicentre ESME cohort 2008–2016 //European journal of cancer. 2020, vol. 129, pp. 60-70.





7. Den Brok W. D. et al. Survival with metastatic breast cancer based on initial presentation, de novo versus relapsed //Breast cancer research and treatment. – 2017. – T. 161. – C. 549-556.
8. Dogan I. et al. Demographic and Clinical Features of Patients with Metastatic Breast Cancer: A Retrospective Multicenter Registry Study of the Turkish Oncology Group //Cancers. – 2023. – T. 15. – №. 6. – C. 1667.
9. Gennari A. et al. ESMO Clinical Practice Guideline for the diagnosis, staging and treatment of patients with metastatic breast cancer☆ //Annals of Oncology. - 2021. - Vol. 32. - no. 12. Pp. 1475-1495.
10. Haddad S. A., Dizon D. S., Graff S. L. Sequencing systemic therapy in hormone-receptor positive metastatic breast cancer: a modern paradigm //Chinese Clinical Oncology. - 2023. - Vol. 12. - no. 4. - pp. 42-42.
11. Haddad S. A., Dizon D. S., Graff S. L. Sequencing systemic therapy in hormone-receptor positive metastatic breast cancer: a modern paradigm //Chinese Clinical Oncology. - 2023. - Vol. 12. - no. 4. - pp. 42-42.
12. Harwansh R. K., Deshmukh R. Breast cancer: An insight into its inflammatory, molecular, pathological and targeted facets with update on investigational drugs //Critical Reviews in Oncology/Hematology. - 2020. - Vol. 154. - p. 103070.
13. Madej-Czerwonka B., Korga-Plewko A., Czerwonka M. Modern breast cancer diagnostic methods //Current Issues in Pharmacy and Medical Sciences. – 2022. – T. 35. – №. 1. – C. 1-5.
14. Manohar P. M., Davidson N. E. Updates in endocrine therapy for metastatic breast cancer //Cancer Biology & Medicine. – 2022. – T. 19. – №. 2. – C. 202.
15. Mátrai Z. et al. Modern Breast Cancer Surgery 1st Central-Eastern European Professional Consensus Statement on Breast Cancer //Pathology and Oncology Research. – 2022. – T. 28. – C. 1610377.

