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Review Article

**PROGNOSTIC FACTORS OF BREAST CANCER A REVIEW
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Zabol, Iran² Zabol University of Medical Sciences, Zabol, Iran**Abstract:**

Introduction: According to published statistics by the World Health Organization in 2011, cancer is the second leading cause of death after cardiovascular diseases throughout the world. The American Cancer Society announced in its latest report that out of every eight women, one is diagnosed with breast cancer. The rate of cancer in developed countries is increasing from 1 to 0.2% and in developing countries about 0.5% annually.

Methods: In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the Prognostic factors of breast cancer. In this review, the papers published until early January 2017 that were conducted to study the Prognostic factors of breast cancer were selected.

Results: the identification of factors affecting the metastasis and death of the patient can help make a better decision for selecting the treatment method and arranging an appropriate planning for the prevention of high-risk patients and reduction of recurrence costs.

Discussion and conclusion: early diagnosis and adopting proper treatment methods by the doctors have a significant role in preventing the undesirable effects of this disease on the individuals' lives, improving life quality, and increasing the patients' longevity.

Key words: Prognostic factors, breast cancer

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INTRODUCTION:

According to published statistics by the World Health Organization in 2011, cancer is the second leading cause of death after cardiovascular diseases throughout the world. The American Cancer Society announced in its latest report that out of every eight women, one is diagnosed with breast cancer (1). The rate of cancer in developed countries is increasing from 1 to 0.2% and in developing countries about 0.5% annually. According to a report by the World Health Organization in 2011, cancer in Iran was reported to be 12% widespread and was recognized as the third most common cause of death (2). Gastric cancer, breast cancer, and colorectal cancer are the three common cancers in Iran respectively. Breast cancer is the first place cancer widespread among women (3). The average age of breast cancer diagnosis in the Western countries is 56 years and in Iran 45 years. New developments in the patients care with breast cancer have increased the overall survival rate of the patients in recent years. This increase in survival has doubled the importance of predictive factors of local recurrence and distant metastases of the disease (4). In addition, it should be noted that the progression or regression of some diseases are not constant over time, as in the stages of recovery or worsening of the disease, the occurrence of some consequences changes the course of the disease, and the disease progress declines and this risk begins to decrease in the 2-5 years after treatment, which make the recovery process speed (5).

METHODS:

In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the Prognostic factors of breast cancer. In this review, the papers published until early January 2017 that were conducted to study the Prognostic factors of breast cancer were selected

FINDINGS:

New advances in care for the patients suffering from breast cancer have increased the overall survival rate of these patients over the past few years. This increased survival has doubled the importance of identifying prognostic factors of Local recurrence and metastasis (6). Moreover, it must be taken into account that the development or regression process of some disease is not fixed over time, since in the stages of recovery or worsening of the disease, the occurrence of some complications change the whole process of the disease (7). As for breast cancer, the highest risk of recurrence occur within the first two years after the treatment and the recovery process declines. This risk declines with 2-5 years after the treatment and the recovery process is quick (8). Given the

advances in the treatment of patients over the past few years and since appropriate treatments lead to increased patients' longevity, finding new methods for selecting the medical programs are among the important goals in oncology and one of the most important factors in the treatment selection of cancer patients is determining the prognostic factors (9). Various studies have reported different prognostic factors including the number of lymph nodes involved, tumor grade, size of tumor, and ER/her-2 hormone receptors. Thus, the identification of factors affecting the metastasis and death of the patient can help make a better decision for selecting the treatment method and arranging an appropriate planning for the prevention of high-risk patients and reduction of recurrence costs (10).

DISCUSSION AND CONCLUSION:

ER, EHR2, and PR hormone receptors are included as the most important factors for predicting the treatment resistance (11). Factors such as the number of lymph nodes involved in metastasis and death, tumor grade, size of tumor, HER-2 in metastasis and death, and age have a significant effect on the occurrence of death and these factors affect the patient's longevity (12). Thus, early diagnosis and adopting proper treatment methods by the doctors have a significant role in preventing the undesirable effects of this disease on the individuals' lives, improving life quality, and increasing the patients' longevity.

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