

# **REVIEW ON BREAST CANCER**

**Naveen Kumar Singh** 

Department of Medical Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India

ABSTRACT: Breast cancer is the most common cancer of women, comprising 25% of all female cancers around the globe, with an estimated 1.15 million cases diagnosed in 2005. Of the 421,000 breast cancer deaths around the world, 223,000 (56%) occurred in low- and middle-income countries (LMCs). However, in most low- and middle-income countries (LMCs), incidence rates are increasing at a more rapid rate than in areas where incidence rates are already high. Breast cancer incidence and prevalence in western part of the world in 1992 was 25% in 1992 and 0.5% respectively. Distribution of breast cancer incidence in the 2000s changed in different regions of world due to geographic, economic, social, cultural factors. Breast cancer incidence in western part of social, cultural factors. Breast cancer incidence in western part of social, social, cultural birth >30 years, less breast feeding, etc.), and other related factor.

KEYWORDS: Breast Cancer, Breast cancer symptom, Lobular carcinoma symptom, Female, Metastatic breast cancer.

## INTRODUCTION

Breast cancer is cancer that forms in the cells of the breasts. After skin cancer, breast cancer is the most common cancer diagnosed in women in the United States. Breast cancer can occur in both men and women, but it's far more common in women. Substantial support for breast cancer awareness and research funding has helped created advances in the diagnosis and treatment of breast cancer [1]. Breast cancer survival rates have increased, and the number of deaths associated with this disease is steadily declining, largely due to factors such as earlier detection, a new personalized approach to treatment and a better understanding of the disease. A population-based most cancers registry, protecting the province of the world (population 2.7 million, 1993-1994) in Western was hooked up in 1992. Universal cancer prevalence becomes better in males than in females (age-standardized fees 157.5 and ninety-four. Zero according to a hundred.000, respectively), as in preceding non-population-based totally series.

The foremost cancers in adult males had been tobacco-associated - lung (age standardized occurrence fee, bladder (ASR eleven. Zero) and larynx (ASR 10.6), constant with the excessive incidence of smoking, and use of traditional excessive-tar tobaccos. In girls, Breast cancer occurrence and occurrence are 24.4/one hundred.000 in 1992 and 0.3% respectively; cervical most cancers became surprisingly rare [2]. Distribution of breast cancer occurrence changes in different regions of because of geographic, financial, social, cultural elements. Breast most cancers occurrence in western part of (50/a hundred.000) is more than two times in Japanese a



part of (20/100.000) due to "Westernizing existence" (early menarche, overdue menopause, first beginning >30 years, much less breast feeding, and many others.

To the estimations of the fitness Ministry assets, the wide variety of breast most cancers patients inside the length of 2007-2012 has been visible. Analysis from breast cancer is rather proper, even though globally it nevertheless ranks as the main cause of cancer mortality among women. Very favorable breast cancer survival quotes within the use and different evolved countries had been attributed to early detection through screening, and by using well timed and effective treatment (3). for instance, ladies recognized with breast cancer between 1990 and 1992 and said inside the populace-primarily based case series from the Surveillance, Epidemiology, and stop outcomes (SEER) application (13,172 ladies) had an 89% five-year survival charge (four). by way of comparison, age-adjusted survival quotes for breast cancer in developing regions are fifty-seven% common and are as low as forty-six% in India and 32% in sub-Saharan Africa[3]. (4) similarly to heterogeneity in occurrence of breast most cancers in world, breast most cancers mortality also indicates differences in different regions depending on breast health recognition, diagnostic and therapeutic infrastructures [4].

In a take a look at comparing 1841 breast cancer sufferers from clinical school, 5 years breast most cancers mortality price changed into just like costs for evolved international locations (86% and eighty-five% for patients with breast protecting surgical procedure, and mastectomy respectively, median comply with up 76 months) (5). This rate became low in Diyarbakır and different towns in East Anatolia (around 60%) due to advanced degrees at prognosis, lack of breast cancer recognition, and different social, educational, cultural and monetary obstacles to early analysis and effective treatment. surgical treatment was MRM in 66%, and breast maintaining surgical operation in 34% of patients

## DISCUSSION

## Breast cancer symptoms:

Perhaps the most recognized symptom of breast cancer is a lump or mass in the breast tissue. While many women go to the doctor after finding a lump, every woman should also be aware of other changes to the breast or nipple. With the different types of breast cancer come a variety of related symptoms. For example, invasive ductal carcinoma (IDC), which forms in the milk ducts, may cause a distinct breast lump that you can feel. Invasive lobular carcinoma (ILC), which forms in milk-producing glands, may cause a thickening in the breast.

## Early warning signs of breast cancer:

Symptoms of breast tumors vary from person to person. Some common, early warning signs of breast cancer include:



- Skin changes, such as swelling, redness, or other visible differences in one or both breasts
- An increase in size or change in shape of the breast (s)
- Changes in the appearance of one or both nipples
- Nipple discharge other than breast milk
- General pain in/on any part of the breast
- Lumps or nodes felt on or inside of the breast

## Symptoms more specific to invasive breast cancer are:

- Irritated or itchy breasts
- Change in breast color
- Increase in breast size or shape (over a short period of time)
- Changes in touch (may feel hard, tender or warm)
- Peeling or flaking of the nipple skin
- A breast lump or thickening
- Redness or pitting of the breast skin (like the skin of an orange)

It's important to remember that other, benign conditions may have caused these changes. For example, changes to the skin texture on the breast may be caused by a skin condition like eczema, and swollen lymph nodes may be caused by an infection in the breast or another, unrelated illness. Seeing a doctor for an evaluation will help you determine whether something you notice is cause for concern [5].

## Invasive breast cancer symptoms:

Invasive breast cancer symptoms may include:

- A lump or mass in the breast
- Swelling of all or part of the breast, even if no lump is felt
- Skin irritation or dimpling
- Breast or nipple pain



- Nipple retraction (turning inward)
- The nipple or breast skin appears red, scaly, or thickened
- Nipple discharge
- A lump or swelling in the underarm lymph nodes

#### Ductal carcinoma symptoms:

Ductal carcinoma in situ (DCIS) does not cause any symptoms. Rarely, a woman may feel a lump in the breast or have nipple discharge. However, most cases of DCIS are detected with a mammogram [6].

#### Lobular carcinoma symptoms:

Lobular carcinoma in situ (LCIS) does not cause symptoms and cannot be seen with a mammogram. This condition is usually found when a doctor is doing a breast biopsy for another reason, such as to investigate an unrelated breast lump. If a person has LCIS, the breast cells will appear abnormal under a microscope.

#### Inflammatory breast cancer symptoms:

Unlike other breast cancers, inflammatory breast cancer (IBC) rarely causes breast lumps and may not appear on a mammogram. Inflammatory breast cancer symptoms include:

- Red, swollen, itchy breast that is tender to the touch
- The surface of the breast may take on a ridged or pitted appearance, similar to an orange peel (often called peau d'orange)
- Heaviness, burning, or aching in one breast
- One breast is visibly larger than the other
- Inverted nipple (facing inward)
- No mass is felt with a breast self-exam
- Swollen lymph nodes under the arm and/or above the collarbone
- Symptoms unresolved after a course of antibiotics

Unlike other breast cancers, inflammatory breast cancer usually does not cause a distinct lump in the breast. Therefore, a breast self-exam, clinical breast exam, or even a mammogram may not detect inflammatory breast cancer. Ultrasounds may also miss inflammatory breast cancer.



However, the changes to the surface of the breast caused by inflammatory breast cancer can be seen with the naked eye. Symptoms of inflammatory breast cancer can develop rapidly, and the disease can progress quickly. Any sudden changes in the texture or appearance of the breast should be reported to your doctor immediately. For women who are pregnant or breast-feeding, redness, swelling, itchiness and soreness are often signs of a breast infection such as mastitis, which is treatable with antibiotics. If you are not pregnant or nursing and you develop these symptoms, your doctor should test for inflammatory breast cancer.

#### Metastatic breast cancer symptoms:

Metastatic breast cancer symptoms depend on the part of the body to which the cancer has spread and its stage. Sometimes, metastatic disease may not cause any symptoms.

- If the breast or chest wall is affected, symptoms may include pain, nipple discharge, or a lump or thickening in the breast or underarm.
- If the bones are affected, symptoms may include pain, fractures, constipation or decreased alertness due to high calcium levels.
- If tumors form in the lungs, symptoms may include shortness of breath or difficulty breathing, coughing, chest wall pain or extreme fatigue.
- If the liver is affected, symptoms may include nausea, extreme fatigue, increased abdominal girth, swelling of the feet and hands due to fluid collection and yellowing or itchy skin.
- If breast cancer spreads to the brain or spinal cord and forms tumors, symptoms may include pain, confusion, memory loss, headache, blurred or double vision, difficulty with speech, difficulty with movement or seizures.

## Papillary carcinoma symptoms:

Although papillary carcinoma may not be present, a routine mammogram may detect its development. For those who do experience symptoms related to this type of cancer, the following may be common:

*Mass:* Papillary carcinoma is most often detected as a cyst or lump of about 2 cm to 3 cm in size that may be felt with the hand during a breast self-exam.

*Nipple discharge:* About 50 percent of papillary carcinomas occur beneath the nipple, resulting in bloody nipple discharge.

#### Triple-negative breast cancer symptoms



Although triple-negative breast cancer does not look different from other breast cancer, it has several unique characteristics, including:

*Receptor status:* Tests that detect receptors for estrogen, progesterone and HER2 will be negative, which means hormone therapy, a traditional breast cancer treatment, is not effective. Instead, triple-negative breast cancer treatment options will include chemotherapy, targeted therapy and radiation.

*More aggressive:* A greater tendency to spread and recur after treatment compared to other breast cancer types. This risk decreases after the first few years following therapy.

*Cell type and grade:* Triple-negative breast cancer cells tend to be "basal-like," meaning that they resemble the basal cells lining the breast ducts. The cells may also be higher grade, which means that they no longer resemble normal, healthy cells.

Male breast cancer symptoms

Male breast cancer symptoms can be similar to those experienced by women and may include:

- Lumps in the breast, usually painless
- Thickening of the breast
- Changes to the nipple or breast skin, such as dimpling, puckering or redness
- Discharge of fluid from the nipples

## CONCLUSION

Breast cancer incidence has increased in world in recent decades, and there is no nationwide screening program. Its frequency, stage at diagnosis, and treatment have heterogeneity in different regions of world (earlier diagnosis and higher incidence in world), due to social, cultural, educational economic factors. These problems can be improved through practical interventions that are realistic and cost-effective. Early breast cancer detection and comprehensive cancer treatment play synergistic roles in facilitating improved breast cancer outcomes. The most fundamental interventions in early detection, diagnosis, surgery, radiation therapy, and drug therapy can be integrated and organized within existing health care schemes in world and other LMCs. The BHGI will study what implementation strategies can most effectively guide health care system reorganization to assist countries that are motivated to improve breast cancer outcome in their populations.

#### REFERENCES

[1] Association of Breast Surgery at, "Surgical guidelines for the management of breast cancer," *Eur. J. Surg. Oncol.*, 2009, doi: 10.1016/j.ejso.2009.01.008.



- [2] A. Prat *et al.*, "Clinical implications of the intrinsic molecular subtypes of breast cancer," *Breast*, 2015, doi: 10.1016/j.breast.2015.07.008.
- [3] M. Marmot, D. G. Altman, D. A. Cameron, J. A. Dewar, S. G. Thompson, and M. Wilcox, "The benefits and harms of breast cancer screening: An independent review," *The Lancet*. 2012, doi: 10.1016/S0140-6736(12)61611-0.
- [4] X. Dai *et al.*, "Breast cancer intrinsic subtype classification, clinical use and future trends," *American Journal of Cancer Research*. 2015.
- [5] D. L. Holliday and V. Speirs, "Choosing the right cell line for breast cancer research," *Breast Cancer Research*. 2011, doi: 10.1186/bcr2889.
- [6] M. G. Marmot, D. G. Altman, D. A. Cameron, J. A. Dewar, S. G. Thompson, and M. Wilcox, "The benefits and harms of breast cancer screening: An independent review," *Br. J. Cancer*, 2013, doi: 10.1038/bjc.2013.177.