



Research Article

BREAST CANCER

Chanchan Devi M., Girija Bhaskaran and Hemavathy V

Sree Balaji College of Nursing Bharat Institute of Higher Education and Research. India

ARTICLE INFO

Article History:

Received 15th July, 2018

Received in revised form 7th August, 2018

Accepted 13th September, 2018

Published online 28th October, 2018

Key words:

Breast cancer, Treatment of breast cancer
Symptoms, Risk factors, BRCA1, BRCA 2,
MAMMOGRAM, Radiation chemotherapy

ABSTRACT

After skin cancer, breast cancer is the most common cancer diagnosed in women in the world. 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 create advances in the diagnosis and treatment of breast cancer. Breast cancer survival rates have increased, and the number of deaths associated with this disease is steadily declining, due to earlier detection, and a better understanding of the disease better surgery and newer chemo therapy and radiation therapy regime.

Copyright©2018 Chanchan Devi M., Girija Bhaskaran and Hemavathy V. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

One of the commonest cancer that affects women is breast cancer which can occur in males too. Subsequent discussion is a over view of what the disease is ,how it progresses ,diagnosed and what is the management strategies that have been implemented for prevention and cure the affected and people who are at high risk of having the disease.

Definition

Breast cancer is a malignant tumor or a collection of cancer cells arising from the cells of breast

Breast cancer is a disease in which cells in the breast grow out of control. there are different kinds of breast cancer. the kind of breast cancer depends on which cell in the breast turn into cancer.

Incidence

In India the incidence of breast cancer is 30/100000 women in urban women it is 28.

Risk factors

Factors that are associated with an increased risk of breast cancer include:

- **Being female.** Women are much more likely than men are to develop breast cancer.
- **Increasing age.**

- **A personal history of breast conditions.** If you've had a breast biopsy that found lobular carcinoma in situ (LCIS) or atypical hyperplasia of the breast, you have an increased risk of breast cancer.
- **A personal history of breast cancer.**
- **A family history of breast cancer.**
- **Inherited genes that increase cancer risk.** Certain gene mutations that increase the risk of breast cancer can be passed from parents to children. The most well-known gene mutations are referred to as BRCA1 and BRCA2.
- **Radiation exposure.** If you received radiation treatments to your chest as a child
- **Obesity.**
- **Beginning your period at a younger age.** Beginning your period before age 12 increases your risk of breast cancer.
- **Beginning menopause at an older age.**
- **Having your first child at an older age.** Women who give birth to their first child after age 30 may have an increased risk of breast cancer.
- **Having never been pregnant.**
- **Postmenopausal hormone therapy.** Women who take hormone therapy medications that combine estrogen and progesterone to treat the signs and symptoms of menopause have an increased risk of breast cancer.
- **Drinking alcohol.** Drinking alcohol increases the risk of breast cancer

Types of breast cancer

1. Angiosarcoma
2. Ductal carcinoma in situ (DCIS)
3. Inflammatory breast cancer

*Corresponding author: **Chanchan Devi M**
Sree Balaji College of Nursing Bharat Institute of Higher Education and Research. India

4. Invasive lobular carcinoma
5. Male breast cancer
6. Paget's disease of the breast
7. Recurrent breast cancer

Patho physiology

We know that breast cancer occurs when some breast cells begin to grow abnormally. These cells divide more rapidly than healthy cells do and continue to accumulate, forming a lump or mass. Cells may spread (metastasize) through your breast to your lymph nodes or to other parts of your body.

Breast cancer most often begins with cells in the milk-producing ducts (invasive ductal carcinoma).

Breast cancer may also begin in the glandular tissue called lobules (invasive lobular carcinoma) or in other cells or tissue within the breast.

Inherited breast cancer

Doctors estimate that about 5 to 10 percent of breast cancers are linked to gene mutations passed through generations of a family.

The most well-known are breast cancer gene 1 (BRCA1) and breast cancer gene 2 (BRCA2), both of which significantly increase the risk of both breast and ovarian cancer.

Symptoms

Signs and symptoms of breast cancer may include:

- A breast lump or thickening that feels different from the surrounding tissue
- Change in the size, shape or appearance of a breast
- Changes to the skin over the breast, such as dimpling
- A newly inverted nipple
- Peeling, scaling, crusting or flaking of the pigmented area of skin surrounding the nipple (areola) or breast skin
- Redness or pitting of the skin over your breast, like the skin of an orange

Prevention

Breast cancer risk reduction for women with an average risk

Breast self-exam

Making changes in your daily life may help reduce your risk of breast cancer.

- Become familiar with your breasts through breast self-exam for breast awareness
- Drink alcohol in moderation, if at all
- Exercise most days of the week.
- Limit postmenopausal hormone therapy.
- Maintain a healthy weight.
- Choose a healthy diet.

Diagnosis

Diagnosing breast cancer

Tests and procedures used to diagnose breast cancer include:

- Breast exam. Your doctor will check both of your breasts and lymph nodes in your armpit, feeling for any lumps or other abnormalities.
- Mammogram.

- Breast ultrasound.
- Removing a sample of breast cells for testing (biopsy).
- Treatment

Breast cancer surgery

Operations used to treat breast cancer include:

- Removing the breast cancer (lumpectomy).
- Removing the entire breast (mastectomy).
- Removing a limited number of lymph nodes (sentinel node biopsy).
- Removing several lymph nodes (axillary lymph node dissection).
- Removing both breasts.

Radiation therapy

Radiation therapy uses high-powered beams of energy, such as X-rays and protons, to kill cancer cells. Radiation therapy is typically done using a large machine that aims the energy beams at your body (external beam radiation). But radiation can also be done by placing radioactive material inside your body (brachytherapy).

Breast cancer radiation can last from three days to six weeks, depending on the treatment. A radiation oncologist determines which treatment is best for you based on your situation, your cancer type and the location of your tumor.

Side effects of radiation therapy include fatigue and a red, sunburn-like rash where the radiation is aimed. Breast tissue may also appear swollen or more firm. Rarely, more-serious problems may occur, such as damage to the heart or lungs or, very rarely, second cancers in the treated area.

Chemotherapy

Chemotherapy uses drugs to destroy fast-growing cells, such as cancer cells. If your cancer has a high risk of returning or spreading to another part of your body, your doctor may recommend chemotherapy after surgery to decrease the chance that the cancer will recur.

Chemotherapy is sometimes given before surgery in women with larger breast tumors. The goal is to shrink a tumor to a size that makes it easier to remove with surgery.

Hormone therapy

Hormone therapy—perhaps more properly termed hormone-blocking therapy—is often used to treat breast cancers that are sensitive to hormones.

Treatments that can be used in hormone therapy include:

- Medications that block hormones from attaching to cancer cells (selective estrogen receptor modulators)
- Medications that stop the body from making estrogen after menopause (aromatase inhibitors)
- Surgery or medications to stop hormone production in the ovaries

Targeted therapy drugs

Targeted drug treatments attack specific abnormalities within cancer cells. As an example, several targeted therapy drugs focus on a protein that some breast cancer cells overproduce called human epidermal growth factor receptor 2 (HER2). The protein helps breast cancer cells grow and survive. By

targeting cells that make too much HER2, the drugs can damage cancer cells while sparing healthy cells.

Supportive (palliative) care

Palliative care is specialized medical care that focuses on providing relief from pain and other symptoms of a serious illness.

Palliative care is provided by a team of doctors, nurses and other specially trained professionals. Palliative care teams aim to improve the quality of life for people with cancer and their families. This form of care is offered alongside curative or other treatments you may be receiving.

CONCLUSION

Breast cancer prevention and treatment with advances in medical science has become much simpler and patients are being diagnosed and treated in much more comprehensive manner .simple changes in life style can be helpful in prevention in high risk individuals .targeted drug therapy radiation and palliative care has also improved and the morbidity and the disease burden on the society has significantly reduced in 21st century thanks to awareness of the disease amongst general population.

Bibliography

- Book reference BRUNNER & SUDDARTH'S Textbook of Medical- Surgical Nursing volume2 twelve edition Suzanne c.smeltezer page no;1246-1248
Medical Surgical Nursing Speciality volume 2 Cecy Correia page no 50- 54
- Lewis's Medical Surgical Nursing, Assessment and Management of Clinical Problems Dr. Chintamani page no- 1328 to 1337 Medical Surgical Nursing volume 1&2 Jaspreet Kaur Kodhi page no- 1246 to 1249.
Medical Surgical Nursing Concepts and principles Susan Dewit page no:567 to 570 Net reference:
www.cancer.org/acs/groups/cid/documents/webcontent/003090-pdf
<http://www.biomedcentral.com/content/pdf/bcr10.pdf>
<http://nci.cu.edu.eg/lectures/book20pdf/ch-6.pdf>
- Journal reference: Breast cancer risk factors, survival and recurrence, and tumor molecular subtype: analysis of 3012 women from an indigenous Asian population
Mustapha Abubakar, Hyuna Sung, Devi BCR, Jennifer Guida... (September 2018) Breast cancer heterogeneity: mechanisms, proofs, and implications
- Yi-Hsuan Hsiao, Ming-Chih Chou, Carol Fowler, Jeffrey T. Mason, Yan-gao Man Journal of Cancer 2010, 1: 6-13
© 2010 by the American Society of Radiologic Technologists Understanding Breast Cancer Risk
www.asrt.org/store.

How to cite this article:

Chanchan Devi M., Girija Bhaskaran and Hemavathy V (2018) 'Breast Cancer', *International Journal of Current Advanced Research*, 07(10), pp. 15772-15774. DOI: <http://dx.doi.org/10.24327/ijcar.2018.15774.2891>
