



Carcinoma of Breast Expressing Human Epidermal Growth Factor Receptor 2: Case Report

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Introduction: Breast carcinoma is a systemic disease in which micro metastasis of abnormal cells which can form the secondary malignant cells. Breast carcinoma is the rapid and uncontrolled growth of abnormal cells. Breast cancer is cancer of breast that develop from breast tissue.

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Case History: Clinical findings – patient 49 years old female, having pain in right upper quadrant of right breast, irritation and discomfort in breast, swelling in lower area of breast. Biochemical, Hematological and radiological investigation are decrease.

Investigation: Physical examination -lump is found on right breast which is non tender and slightly movable. USG and Mammography shows A suspicious retroareolar lump in the right breast and two foci pleomorphic macro calcification in right breast, Histopathology – shows both the masses are malignant but in biopsy metastasis not detected.

Therapeutic Intervention: Symptomatic treatment -tab acetaminophen -tab – hydrocortisone. Lumpectomy On the left breast and mastectomy done on right breast. Radiation therapy and Chemotherapy is given before and after surgery and Chemotherapy was continue after the surgery. Hormonal therapy also given for HER2 + receptor .all the complications of chemotherapy is managed by quality nursing care.

Outcome: After all pharmacological, surgical and medical intervention and quality nursing care, patient is now in stable condition. During treatment her treatment response is good and she can very effectively cope up with her disease condition and she is able to do her daily activities effectively.

Keywords: Malignant; sentinel lymph nodes; pleomorphic microcalcification.

1. INTRODUCTION

Breast carcinoma is a systemic disease in which micrometastasis of abnormal cells which can form the secondary malignant cells There are various etiology for the breast cancer such as hormones, genetic factors [1-3]. Breast carcinoma is manifest particularly during menopause and post menopause, with the incidents increasing progressively as the woman gets older [4-7].

1.1 Patient Identification

A 49 year of female admitted in AVBRH. She is married, she had menarche at age of 11 year and menopause at age of 45 year.

1.2 Present Medical History

Chief complaint of patient is having pain in right upper quadrant of right breast from which is non tender and slightly movable, irritation and discomfort in breast, swelling in lower area of breast. After physical examination, mammography, ultrasound sound, biopsy patient diagnosis as 2 invasive ductal carcinomas of the right upper quadrant of the breast and ductal carcinoma in situ of the left breast with DCIS was HER2 positive receptor.

1.3 Past Medical History

Not having any past medical history of illness like hypertension, diabetes mellitus TB and any communicable disease.

1.4 Family History

There is no history breast cancer and uterine cancer, PCOD OR PCOS in patients family.

1.5 Obstetrics History

She is in post menopausal age she started menarche at early age of 11 and menopause at 45 year, before menopause she had 48 kg weight but after menopause she gain weight almost 60 kg, she is married women and have first pregnancy at age 23 years and second pregnancy at age of 26 of years. There is no use of contraception before pregnancy.

1.6 Clinical Findings

Having pain in right upper quadrant of right breast from 12 days, irritation and discomfort in breast 20 days, swelling in lower area day of breast from 5 Day.

1.7 Physical Examination

Rashes is present on right breast , swelling and redness is present on right breast, 2 lump present on right breast , presence of pain on upper area of right breast., Lump is non tender and slightly movable.

1.8 Diagnostic Evaluation

Diagnostic evaluation sodium, bilirubin Platelet MCH, Eosinophil, Monocytes is decreased.

2. INVESTIGATION

USG – B/L –right breast has suspicious retroareolar mass, size of 2.5 and 1.3 cm stage II and 1.2 cm ductal carcinoma in situ in the left breast.

2.1 Mammography

A suspicious retroareolar lump in the right breast and two foci of pleomorphic microcalcification in the left breast were found on mammogram.

2.2 Histopathology

Histopathology shows both the masses are malignant in with HER2 positive in the left breast DCIS but in biopsy there is no metastasis is detected in lymph nodes.

Ultrasound guided biopsy of the right breast mass. Mammography and ultrasound suggested it was benign tumor but histological and pathology revealed and diagnosed as 2 invasive ductal carcinoma of the upper right quadrant of right breast, size of 2.5 and 1.3 cm stage II and ductal carcinoma in situ of the left breast 1.2 cm. interestingly only the left breast DCIS was HER2 positive.

2.3 Therapeutic Intervention

Treatment is given as per severity and staging of cancer. So Symptomatic treatment given which included include acetaminophen, Inj. emset 4 mg – iv, -tab – hydrocortisone – 5 mg.

2.4 Medicals and Surgical Management

Lumpectomy On the left breast. Also On the right side, a mastectomy were done. Hormonal therapy (tab Anastrozole 1 Mg) also given for HER2 + receptor. The radiation therapy given as external radiation beam therapy given before and after surgery. In neoadjuvant chemotherapy – Taxol 175 mg IV over 3 hours for 3 Weeks 4 times with doxorubicin regimen 1250 mg/m² BID for 2 weeks, followed by 1-week, given as 3-week cycles. TAC (docetaxel 110 mg, doxorubicin 110 mg, cyclophosphamide 800 mg) is prescribed as adjuvant chemotherapy. Herceptin and pertuzumab was given followed by adjuvant radiation therapy.

2.5 Nursing Management

All the complications of chemotherapy is managed by quality nursing care, the psychological support is provided to patient throughout the disease condition, health education and steps of self breast examination is also taught. Homecare exercise and precautions also be reached to patients to reduce further complication.

2.6 Nursing Perspective

Nursing perspective in breast cancer should be preventive rather than curative which includes health education, counselling and reduce risk factors in community. Treatment approach should be start with providing psychological support, increase self esteem of patient and self confidence to face the world with their disease conditions, also encourage the patient to continuation of different types of therapy and surgery for carcinoma of breast .one of the major role of nurse is to manage the complications of chemotherapy because its cause adverse effects on patient physical as well as mental condition, after the completion of treatment the health education, and home. Care guidelines for care of incision and use of affected arms and exercise for arms should be advised to patient.

3. DISCUSSION

A 49 year of female patients was admitted in AVBRH with complaint of having pain, irritation and discomfort in right breast, swelling in lower area of breast. Diagnostic test are done such as physical examination, Mammography and ultrasound suggested it's benign tumor but histological and pathology revealed and diagnosed as 2 invasive ductal carcinoma of the upper right quadrant of right breast, size of 2.5 and 1.3 cm stage II and ductal carcinoma in situ of the left breast 1.2 cm. interestingly only the left breast DCIS was HER2 positive. After that treatment started which included Chemotherapy and hormonal therapy is given Lumpectomy and mastectomy was performed After all medical management patient is now in stable condition. Her mental and physical condition is improving, and she able to do her daily activities.

Worldwide breast cancer is diagnosed in approximately 1 million annually. IDC (invasive ductal carcinoma) is found among in 8-10 breasts cancer incident. Approximately 75% of breast cancer occurred after post menopause years and less than 25% occurred before age of 30.

Study conducted by Harrison et a showed that, diet like a high-fat diet consumer, non-vegetarian diets have a higher risk level than vegetarian diets.

The radiation therapy and chemotherapy is given before surgery to minimize the tumor size and effectiveness and given after surgery to eliminate the remaining positive receptor on tumors area

Hormonal treatment is given in the adjuvant setting depending on status of hormones. The majority of cases are positive for oestrogen or progesterone receptors, symptomatic therapy are prescribed to relieve pain and other disease. special diet and exercise are to be undertaken to promote recovery form disease.

Breast carcinoma its initial stages is considered to be curable. In the last several years, therapy has progressed significantly, with a lack in treatment facilities for both. Avoiding both over treatment and under treatment has become a prime concern in loco regional and systemic therapy. Neoadjuvant therapy is a prominent treatment option in triple-negative and HER2-positive early breast cancer. Endocrine therapy, anti-HER2 targeting, and chemotherapy are some of the therapeutic backbones offered, depending on the clinical malignancy.

Carcinoma of breast is the major cause of death in women all around world. In postmenopausal women Premature menarche, late menopause, and obesity all increase a risk of getting carcinoma of breast. In prospective studies, elevated levels of endogenous oestrogen have been related to an increase in risk .Both oral contraceptives and hormonal therapy for menopause cause a slight increase in breast cancer risk, which appears to disappear after the medication is discontinued. Physical activity, is likely to decrease risk.

4. CONCLUSION

From this case report we have come to the conclusion that .carcinoma of breast is very common in female and it's increase day by day due lifestyle changes and hormonal changes, the irregularity in menstrual cycle and Weight gain is also be major factor contributed for carcinoma of breast so u must need to identify the risk factors and symptoms. Early detections reduce further complications. The treatment is available for treating the breast cancer which includes surgery, hormonal therapy and effective nursing management although first we need to identify the risk factors the lifestyle modifications, self

health education and awareness can reduce the risk of illness.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Ethical clearance obtained from a committee of the institution.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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