

# **Original Research Paper**

**Medical Science** 

# Biological Risk Factors in Locally Advanced Breast Cancer and Various Modes of Treatment and Their Results

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**ABSTRACT** 

**Aim**: To study the various risk factors in locally advanced breast cancer, the best outcome of various mode of treatment for various stages and to compare the efficiency by way of incidence of loco regional recurrence.

**Methods**: A total of 60 patients with disease profile of LABC were analysed. Patients belong to various socioeconomic and geographical background. The selection criteria of patients were based on TNM classification of breast cancer from stage II B, stage III A and stage III B were selected. Modalities of diagnosis and treatment of breast cancer were done following clinical examination, FNAC, trucut biopsy, USG breast, x-ray chest and USG abdomen.

**Results**: Various biological factors such as age of occurrence of LABC, menopausal status, mode of presentation, site of occurrence, side of presentation and family history were studied in every case.

**Conclusion**: LABC is the most common presentation of carcinoma breast in our institution. The site of occurrence of LABC is predominantly on the right side with the upper outer quadrant being the most common area.

## **KEYWORDS: Breast cancer, LABC, risk factors**

#### INTRODUCTION

Carcinoma breast is one of the most common cancers afflicting the females. The presentation of carcinoma breast gives as varied a panorama as the surgical field itself. Locally advanced carcinoma breast is one of the most common modes of presentation of carcinoma breast in the surgical wards. The lack of awareness in the general populace regarding breast lumps in general and the explicit mode of presentation of LABC contribute to the plethora of forms of appearance of this disease. Cancer breast is one of the commonest malignant diseases of women second only to Cancer of Cervix. It accounts for 30-40% of all female cancers and is responsible for 20% of cancer related death in women. Since 1940, the incidence has been steadily increasing. Breast cancer increases with increase in age & is the most common cause of cancer death in women over 65 years of age. Breast cancer survival depends on the earliest possible diagnosis. 99% cure rates are possible if the disease is detected in its early stages. The overall incidence of Breast cancer has been rising because of increases in the average life span, life style changes that increases the risk of breast cancer and the improved survival from other diseases. The treatment of Carcinoma breast has changed more so in the past few years. We have witnessed fundamental changes in our approach, with decreasing reliance on radical mastectomy. This is mainly due to a better understanding about the pathogenesis and the spread of breast cancer and a greater appreciation of the systemic aspect of the disease, and the increased realization that variation in loco-regional treatment are unlikely to alter prognosis. Hence multi-modal approach is adapted to obtain the best results in terms of patient survival and disease free survival. The modalities are Surgery, Chemotherapy, hormonal therapy and radiotherapy. Surgery remains the main backbone of treatment in all stages.

## AIM

To study the various risk factors in locally advanced breast cancer, the best outcome of various mode of treatment for various stages and to compare the efficiency by way of incidence of loco regional recurrence.

### MATERIAL AND METHODS

A total of 60 patients with disease profile of LABC were analysed for this study during the time period of 2009 to 2011. Patients belong to various socioeconomic and geographic backgrounds. Predominant age group of the patients were in the age group of 40 to 50 years. The common age of recurrence being 30 to 40 and 50 to 60 years respectively. The selection criteria of patients were based on TNM classification of breast cancer from stage II B, stage III A and stage III B. The modality of diagnosis and treatment of breast cancer being done in our institution were meticulous clinical examination, FNAC, trucut biopsy, USG Breast, X-Ray chest and USG abdomen. Patients were followed as they underwent various modalities of treatment in the form of surgery, neoadjuvant and adjuvant chemotherapy and radiotherapy supplemented by hormonal therapy. Various biological factors such as age occurrence of LABC, menopausal status, mode o presentation, site of occurrence, side of presentation and family history were studied in every case.

#### RESULTS

A total of 60 patients with disease profile of LABC were analysed for this study. Patients belong to various socio economic and geographic backgrounds. The predominant age group of these patients was in the age group of 40 to 50 years. The commonest age of occurrence being 30 to 40 and 50 to 60 years respectively. Majority of cases 36/60 were post menopausal, 24/60 were pre menopausal. Post menopausal status were 60%. Premenopausal status were 40%. The most common complaints of these patients includes sensation of lump of various sizes in the breast. About 30% of patients had complaints of skin manifestation s like peau-de-orange, skin ulceration and retraction of nipple. Retraction of nipple was found in 10% patients. The presentation of lymph nodal enlargement was found in 5% of total no. of patients. The side of occurrence of carcinoma was found to be predominantly in the right side in 78% of the studied group of patients. The upper outer quadrant was favoured location of occurrence of cancer in 54% of patients in the right and 29% on the left.

There was no specific correlation to the family history in any of the studied patients. Most patients had breast fed their children from birth till the age of 1 year and no specific linkage could be made out in their record. Early attainment of menarche could be inferred from the study with 82% of patients studied attaining menarche between 16 to 18 years, 40% had not attained menopause at the time of affliction of this disease. Predominantly nulliparous women were affect-

ed.25/60 were nulliparous, 18/60 had one child,8/60 had 2 children and 9/60 had more than 2 children. After complete treatment recurrence was observed. Recurrence rate of 20% was observed in the end of study with 8 cases

#### **DISCUSSION**

LABC is one of the most common presentations of carcinoma breast in developing nations as borne out by the fact that it forms 40 to 60 % of total cancers of breast (1,2). LABC is the most common presentation of carcinoma breast in our institution. Definite prognostic indicators could not be assessed as the period of study was 2 years only. Hence needs further critical follow up. The epidemiological profile is of the age group of women in the perimenopausal age group of 40-50. The site of occurrence of LABC is predominantly on the right side with the upper outer quadrant being the most common area. (3,4) Nodal affliction is one of the important prognostic indicators and histopathologically invasive ductal carcinoma is the most common type(5,6). Multimodality therapy administered with meticulous follow-up provides acceptable rates of loco regional recurrence (7,8). Despite meticulous and aggressive combined modalities o treatment, the disease free interval improved only a maximum of 10 months. This study showed that biological factors play an important role in presentation of LABC and their treatment outcomes also.

#### CONCLUSION

LABC is the most common presentation of carcinoma breast in our institution. The site of occurrence of LABC is predominantly on the right side with the upper outer quadrant being the most common area. Predominant age group of the patients were in the age group of 40 to 50 years. The common age of recurrence being 30 to 40 and 50 to 60 years respectively. Majority of the cases 31/50 were post menopausal, 24/50 were pre menopausal. There was no specific correlation to the family history in any of the studied patients. Most patients had breast fed their children from birth till the age of 1 year and no linkage could be made out. Early attainment of menarche could be inferred from the study with 82% of patients studied attaining menarche between ages of 6 to 18, 40% of patients had not attained menopause at the time of affliction of disease.

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