



Study of Clinical Profile and Management of LABC- our Experience

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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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ABSTRACT

Introduction and Objective: Worldwide, breast carcinoma is among the most common carcinoma in females. It is commonly seen site-specific carcinoma in females. Due to lack of education, breast carcinoma patients present in later stages of the disease to healthcare facilities, especially in developing nations. Patients with Locally advanced carcinoma breast (LABC) are commonly seen in developing nations and its treatment multidisciplinary approach. This study is our experience of clinical profile and LABC in a rural setup.

Methodology: This is a retrospective and prospective study done in the medical college. Data was taken from 72 cases that were operated on at the institute from July 2018 to June 2021 and diagnosed with LABC. Patients who had histological evidence of malignancy were undergone surgery and other treatment modalities like neoadjuvant chemotherapy, adjuvant chemoradiation, and hormonal therapy.

Results: Seventy-two patients diagnosed with LABC over three years were included in the study.

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The mean age was 51 years. The tumor size was more than 5cm in 60 (83.3%) patients. Involvement of axilla was present in 62 (86.1%) patients. All patients were diagnosed with histopathology after core needle biopsy. Neoadjuvant chemotherapy was given to 62 (86.1%) patients. Most of the patients (65) were undergone MRM as surgery, while the remainder (7) were undergone breast conservation therapy. Very few patients had postoperative complications, but with limited follow-up until this study, 5 (6.9%) patients had a recurrence of their study.

Conclusion: In developing nations high percentage of Locally advanced breast carcinoma at presentation result in poor prognosis, high rate of metastasis, and mortality. Awareness and education about breast health and multimodality treatment of LABC will have long-term effects to decrease morbidity and mortality and improve outcomes.

Keywords: Locally advanced carcinoma breast; LABC; multimodality treatment; developing nations.

1. INTRODUCTION

Worldwide, Breast Carcinoma is among the most common carcinoma in females. It is commonly seen site-specific carcinoma in females. In women aged 21- 60yrs, it is one of the prime cause of mortality. It is responsible for 25% of all new carcinoma patients among women and accounts for 16% of carcinoma-related mortality among females [1].

It is uncommon before 30years of age. But after that, its incidence rapidly rises according to age. In low-income nations, it accounts for 2-4% of death [2]. The incidence of breast carcinoma in India is rapidly rising to be placed at number one. Now cervical cancer is the second most common cancer. Many studies show that 1 in 23 women may have carcinoma breast in their lifetime. This rise is mainly seen in the high affluent society of India [3].

Carcinoma breast management requires a multimodality approach involving oncosurgeon, pathologists, radiotherapists and oncologists, and other specialized paramedical staff [4]. Due to lack of education, breast carcinoma patients present in later stages of the disease to healthcare facilities, especially in developing nations. Treatment of LABC mainly requires a multimodality approach.

This study mainly focuses on clinical profile diagnostic and therapeutic modalities for locally advanced carcinoma breast. Various therapeutic modalities have been discussed, like surgery, neoadjuvant and adjuvant chemotherapy, radiotherapy, and hormonal therapy.

1.1 Aim and Objective

To study clinical profile and Management of Locally Advanced Carcinoma Breast in rural setup.

2. MATERIALS AND METHODS

This is a retrospective and prospective study done in the medical college. Data was taken from seventy-two cases that were operated at the institute from July 2018 to June 2021 and diagnosed to have LABC, who fulfilled all criteria and were ready for further treatment. Patients of male breast carcinoma, stage I, II, IV patients, recurrent breast lump in previously operated case of carcinoma breast are excluded from the study. A complete clinical profile of all patients was collected at the time of hospital admission. Every patient of LABC included in the study had histological evidence of malignancy and was underwent surgery in the form of MRM or breast conservative surgery in few patients and other treatment modalities like neoadjuvant chemotherapy, adjuvant chemoradiation, and hormonal therapy.

3. RESULTS

The study included a total of seventy-two patients diagnosed with locally advanced breast carcinoma over three years. The mean age was 51 yrs (range 36-78 years). The tumor size was more than 5cm in 60 (83.3%) patients. Skin involvement was present in 38 (52.8%) patients. Involvement of axillary lymph node was present in 62 (86.1%) patients. The chest wall was involved in 15 (20.9%) patients. All patients were diagnosed with histopathology after core needle biopsy. All patients were subject to hormonal receptor status preoperatively, and 43 (59.8%) were ER-positive, and 37 (48.6%) were PR-positive. Neoadjuvant chemotherapy was given to 62 (86.1%) patients. Most of patients (65) were undergone MRM as surgery, while the remainder (7) were undergone breast conservation therapy.

Table 1. Characteristics

Characteristics		n= 72
Age in years (Mean)		51 years
Range		36-78
Presentation		
Size of tumor 5cm or more		60 (83.3%)
Skin involvement		38 (52.8%)
Fungating mass		10 (13.9%)
Nipple excoriation		12 (16.7%)
Discharging sinus		10 (13.9%)
Axilla involvement		62 (86.1%)
Chest wall involvement		15 (20.9%)
Diagnosis		
Histopathology		72 (100%)
Hormone Receptors status		
Estrogen receptor	Positive	43 (59.8%)
	Negative	29 (40.2%)
Progesterone receptor	Positive	37 (48.6%)
	Negative	35 (51.4%)
Her2-neu status	Positive	9 (12.5%)
	Negative	63 (87.5%)
Management		
Neoadjuvant Chemotherapy		62 (86.1%)
Breast conservation		7 (9.7%)
Modified radical mastectomy		65 (90.3%)
Adjuvant Chemotherapy		70 (97.2%)
Adjuvant Radiotherapy		65 (90.3%)
Postoperative complications		
Wound infection		4 (5.5%)
Seroma		5 (6.9%)
Lymphoedema		1 (1.4%)
Recurrence		5 (6.9%)

All patients were advised with postoperative chemoradiation, but some refused, so 70 (97.2%) were undergone postoperative chemotherapy while 65 (90.3%) were undergone postoperative radiotherapy. Very few patients had postoperative complications, but with limited follow-up until this study, 5 (6.9%) patients had a recurrence of their study.

4. DISCUSSION

Patients' delay in reporting to healthcare facilities this a most important reason that is responsible for delayed diagnosis of carcinoma breast. And such patients generally present with advanced stages of the disease. It is found that about 22–32% of patients with clinical symptoms of breast carcinoma consult their physicians with almost three month delay [5]. It has also been found that distant metastasis can be seen in patients of in situ carcinoma because of micrometastasis [6]. Decrease in death rate in carcinoma breast in the

western world mainly because of two factors, early diagnosis and multimodality treatment [7]. Delayed presentation of the patient and advanced stage of the disease is commonly seen in Low, middle-class countries compared with Upper middle-class countries [8]. And because of this, there is increased morbidity and mortality in patients of low-middle-class countries. Along with this, there is significant loss of productive the capacity of society [8,9]. Only 16% of patients in the western world presents with stage III, and IV breast carcinoma at presentation; in contrast developing nations, has more than half of the total patients presenting with stage III or IV disease [8,10]. Our study is mainly focusing on study of locally advanced carcinoma breast and limitations in multimodality treatment in rural setup. We recommended neoadjuvant chemotherapy and adjuvant chemoradiation to all patients of our study, but some patients were unable to receive this treatment due to poor educational and economical background.

Neoadjuvant and adjuvant chemotherapy which is recommended by national resources have also been published by the Global Breast Health Initiative [11]. A well prepared guidelines for carcinoma breast detection and management which are evidence based have been well developed and disseminated in several developed nations [12]. A number of studies on breast carcinoma were reported [13-17]. Yeola et. al. reported on incidence and trends of chemotoxicity in carcinoma breast patients [18]. Related studies by Lamture et. al.[19], Mudey et. al. [20], Tanna et. al. [21] and Khatib et. al. [23-24] were reviewed. Breast imaging with ultrasonography or diagnostic mammography, followed by core needle biopsy forms a diagnostic basis for carcinoma breast. Multimodality treatment in the form of Neoadjuvant chemotherapy followed by Surgery with axillary lymph node dissection followed by adjuvant chemoradiation is the mainstay of treatment of LABC which need to follow at every level of breast health [24].

5. CONCLUSION

In developing nations high proportion of Locally advanced carcinoma breast at presentation results in high rate of metastasis, increased morbidity and mortality. Awareness and education about breast health and multimodality treatment of LABC will have long term effect to decrease morbidity and mortality and improve outcomes.

CONSENT

It is not applicable.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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