

Original Article

Pattern of presentation and management of Ca breast in developing countries. There is a lot to do

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Abstract

Objective: To investigate the pattern of presentation, severity, factors responsible for delayed presentation and outcome of breast cancer in patients presenting to a teaching hospital of Jamshoro.

Methods: It's a prospective descriptive study of 103 malignant breast lumps treated at a tertiary care teaching hospital over a period of 8 years. All patients were admitted through Outpatients department and were thoroughly examined and investigated. Treatment offered was based on triple assessment and ranged from lumpectomy to toilet mastectomy depending upon the stage of disease. The variables studied were recorded on a proforma and analyzed on SPSS version 12 for measuring frequencies and using Chi square test where applicable.

Results: The mean age of the study population was 39.17 ± 6.019 years and a range of 22 to 54 years. The frequency of advanced malignancy was alarmingly high in younger patients. Intra- ductal carcinoma was the commonest tumour in 93 (90%) patients, while the remaining included lobular (07) and Paget's disease (03). The high figures of advanced disease at presentation is attributed to lack of knowledge and education, poverty and local customs of women not exposing themselves even to the physicians. In addition, there is a substantial delay in the referral of patients from under privileged, remote areas where patients continue to receive symptomatic treatment till such time that disease becomes incurable.

Conclusion: Advanced breast disease is common in younger patients belonging to underprivileged and remote rural areas. Great efforts are required to educate people so as to make early diagnosis possible (JPMA 60:718; 2010).

Introduction

Carcinoma of the breast has imposed a major burden on the general surgeons worldwide and makes up a larger share of the total cancer cases in the developing world. There is an ever increasing incidence of breast cancer in the developing countries for which no definitive cause is found.^{1,2} It remains a primary cause of most of cancer deaths all over

the world and continues to have a great impact on the patient's treatment and survival in developing countries.^{3,4} There is a consensus that most of breast cancers in the developing countries present in advanced stage and more so in younger patients compared to developed countries.⁵⁻⁸ There is a lack of organized breast screening programmes in most of the developing countries like Pakistan where only the affluent

society has an access to them which may be offered by a limited number of private hospitals.

The social set up in most of the low-resourced areas in developing countries does not consider women as useful members of the family and so they are not given importance when they become ill. Being affected by a disease like breast cancer, a woman acquires a social stigma and suffers a lot of psychological trauma as an added insult to injury. A large number of women carry a breast lump for a long time and do not seek medical advice till the disease is advanced. The factors contributing to this delayed presentation include poverty, lack of awareness about the disease and local customs avoiding exposure of women even to doctors.⁹

This study presents patterns of presentation of breast cancer with emphasis on various factors responsible for delayed presentation and management offered to the patients.

Patients and Methods

This is a prospective descriptive study conducted in a teaching institute over a period of 8 years. A total of 313 patients with breast lumps presented during this period out of which 103 (32.90%) were found to have malignant disease on biopsy and were included in the study. The inclusion criteria was biopsy proven malignant breast lump regardless of age and gender of the patient while benign neoplastic and non-neoplastic breast lumps were excluded. All patients presenting with breast lump were admitted and were evaluated by history, physical examination and appropriate investigations like ultrasound, mammography, FNAC and incisional or Trucut biopsy when indicated. Sixty nine (67%) of the total cases of Ca breast were received in stage 3 and 4 while remaining 34 (33%) were received in operable stage. The patients were offered different treatments based on the stage of the disease. A detailed proforma for each patient was attached to the case file of the patient and was duly filled in by one of the co-authors. Informed consent was obtained from all patients included in the study. The variables studied included demographics, modes of presentation, distant spread, time

since first noticed, reason for delayed presentation and outcome of the treatment. Follow up visits were scheduled at 3 weeks, 3 months and then twice a year. The data was analyzed statistically on SPSS version 12 using Chi square test where needed and calculation of frequencies and means.

Results

The mean age of the patients was 39.17 ± 6.019 years with a range of 22 to 54 years. There were 2 males and 101 females in this study. Majority of the patients were pre-menopausal (n=93, 93 %) while remaining 8 (7%) patients were in the post-menopausal age group. Of the total number, 81 (78.6%) patients belonged to remote, under-privileged areas while 22 (21.4%) belonged to urban society. There were 73 (70.87) illiterate patients whereas 30 (29.12%) had primary to graduate level education.

The Fine Needle Aspiration Cytology (FNAC) revealed malignancy in 96 (93.2%) patients while results were inconclusive in 7(6.8%) patients. A proportion of 90.3% were pre-menopausal and multiparous. History of breast feeding was present in majority of the patients. Tumour was detected by the patients themselves in 91(88.34%) patients. Eighty nine (86.40%) patients had a localized lump involving one quadrant while diffuse lump involving the whole breast was present in (14%) patients.

A palpable lump was present in 100% patients while discharge from the nipple was the commonest symptom (n=39,) followed by pain in breast (n=16).

There was a significant difference in terms of duration of symptoms and presentation of the disease between rural and urban population (P<.001) as shown in Table-1. Different underlying reasons for delayed presentation are compared between rural and urban population in Table-2. The different gross patterns of the tumour are shown in Table-3.

Sixty seven patients had advance disease with evidence of axillary nodal involvement and/or distant metastasis. Definitive surgery was performed in 82 (79.61%)

Table-1: Time since lump first noticed.

Adress of Patient	One week	15 days	One month	2-3 Months	>6 Months	One year or more	Total
1. Rural, remote areas	00	02	03	25	46	05	81
2. Urban , Major cities	10	07	01	03	00	01	22
Total	10	9	4	28	46	6	103

P<0.001.

Table-2: Address of patient and reason for delayed presentation.

Adress of patients	Remote area, no facilities	Social customs of family	Reluctance for exposure to doctors	Poverty	NA	Total
1. Rural areas	14	12	36	18	01	81
2. Urban areas	0	0	0	05	17	
Total	14	12	36	23	18	103

Table-3: Gross Pattern of growth.

Gross appearance	Frequency	Percentage (%)
1- Localized growth	89	86.4
2- Ulcerated growth with destruction of nipple	4	3.07
3- Infected, fungating growth	7	6.79
4- Growth with maggots	3	2.91
Total	103	99.99

patients while toilet mastectomy was done in 6 (5.82%) with infected growths and maggots. Post-operative adjuvant chemotherapy and radiotherapy was given to patients who were referred to the radio isotope center. Follow up visits were scheduled on 15 days, 2 months, 6 months and yearly but compliance was very poor and 76 patients were lost to follow up while 9 patients were reported dead after receiving chemotherapy.

Discussion

Carcinoma of breast continues to be a major killer of women all around the world. The incidence and pattern of this disease, however, differ significantly between developed and underdeveloped countries.^{1,10} A number of studies have shown a rising incidence of advanced breast carcinoma in women of younger age group.^{11,12} This change is more marked in developing countries where many factors contribute in delayed presentation of the disease such as unequal distribution of health care facilities, lack of knowledge about the disease, poverty, and social customs of the families avoiding women exposure.

The 103 patients of carcinoma breast of a younger age group in our study had an advance stage disease at presentation. None of the affected breasts in our series was screen detected. The age incidence conforms to the general increased incidence of Ca breast in a younger population in developing countries.^{13,14} It is known that advanced stage at presentation has an influence on overall survival of the patients. Majority of our study subjects belonged to remote, under-resourced areas presenting late in the course of the disease (>6 months after detection of lump) due to various reasons. This is consistent with the findings of many similar studies.^{15,16} A lack of a proper screening programme in under-developed countries seems to be a major factor in delaying the diagnosis of breast cancer.¹⁷ An early and correct diagnosis of breast cancer is the key to optimize treatment and to decrease the mortality.^{18,19} Smith et al²⁰ also point out an increasing mortality from breast cancer due to lack of screening programmes in under-resourced areas.

A blood mixed discharge from the nipple was the commonest symptom in our series while pain is reported to be the commonest symptom reported in a series from Nigeria.²¹

We performed mastectomy followed by radiotherapy

in both node positive as well as node negative patients, an approach followed and recommended by many other studies.^{22,23} Neo-adjuvant therapy was given to 7(6.7%) patients while post-operative adjuvant chemotherapy was given to 16 (15.3%) patients. There were only 53 patients who received full course of radiotherapy following surgery while remaining did not attend the radiotherapy department. The follow up remained very poor.

Inadequacy and unequal distribution of the health care facilities to women belonging to remote, low-resourced areas is the major factor contributing to an ever increasing mortality from breast cancer. Added to these are various other factors such as social and cultural restrictions to keep women under strict confinement so that despite having a treatable problem they are not exposed even to physicians.

Furthermore, un-awareness of breast cancer among women of low socio-economic class makes them ignorant of the disease and it is quite common that a woman carries a breast lump for a long time before it is diagnosed to be malignant. Lack of a proper breast screening programme and breast clinics even in the major cities of most of the developing countries further contributes to the severity of this problem. All these factors lead to a higher proportion of patients presenting with advanced disease.

Conclusion

The study observed a high frequency of advance breast cancer in women of the younger age group with a low literacy rate and belonging to the rural areas. The major barriers to early diagnosis were reluctance to consult doctors, poverty and lack of health care facilities.

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