FREQUENCY AND PATTERN OF ADVANCED BREAST CANCER AT ABBASI SHAHEED HOSPITAL

SYED INTESAR MEHDI KAZMI*, SYED HUSSAIN MEHDI, FAROOQ UMAR
*Department of Surgery, Surgical Unit III, Abbasi Shaheed Hospital, Karachi**
Department of Surgery, Jinnah Medical and Dental College, Korangi Campus, Karachi

ABSTRACT
Objective: To describe the frequency, presenting features and distribution by stage of Advanced Breast Cancer.
Study Design: Case series.
Setting & Duration: Abbasi Shaheed Hospital, Karachi from December 1999 to December 2000.
Methodology: This was a descriptive study aimed at determining the frequency of advanced cases of breast cancer at Abbasi Shaheed hospital. Female patients presenting at the out patient department and later diagnosed as advanced breast cancer were included. Final histopathology was taken as the gold standard for categorizing locally advanced disease, while metastatic cancer was determined on the basis of clinical, laboratory and radiological data. Cases of recurrence (local or metastatic) were excluded.
Results: A total of 27 cases of breast cancer were diagnosed during the study period. Of these, 18(66.6%) were found to have advanced disease. Locally advanced cancer (AJCC Stage III A and B) was found in 16(59.25%) patients, while only 2(7.4%) had metastasis at the time of presentation.
Conclusion: Frequeny of advanced carcinoma in this study in younger population in higher compared to previous data.

KEY WORDS: Advanced Breast Cancer, AJCC Staging, Metastasis

INTRODUCTION

Carcinoma breast is the second most common disease after carcinoma cervix in Western countries. The disease needs early diagnosis and prompt treatment for good results in improving life and in many cases curing the disease. The earlier it is diagnosed the better the survival rates.[1] The west is far ahead in screening, diagnosis and treatment of carcinoma breast claiming better resuts in the management. This study is designed to assess the frequency and patterns of advance carcinoma breast amongst patients presenting in outpatient department of Abbasi Shaheed Hospital (ASH) with breast lump and nipple discharge, later diagnosed on Fine Needle Aspiration Cytology (FNAC) or excision biopsy as malignant tumour.

Correspondence:
Dr. Syed Intesar Mehdi Kazmi, Senior Registrar,
D-2, Maymar Square, Block 14,
Gulshan-e-Iqbal, Karachi.
Phones: 021-4935505, 0333-2324352.
E-mail: intesarkazmi@hotmail.com

There is consensus on the fact that younger women are more likely to present with advanced stages[1,3], which in turn has important implications on the significance of screening and the effects on quality of life of the patients. The prime purpose of screening is to detect the cancer at an early stage.[4] The frequency of advanced malignancy thus reflects the inability of any screening program to reach out to the target population. While screening and public awareness have achieved worth-while results in the west, Pakistan is still struggling with the loop holes and red-tape of the system; with the result that the breast cancer continues to challenge the health care provider with a late stage presentation. Most of the local literature shows a high incidence able data from the western world shows declining figures for advanced stage disease.[7]

METHODOLOGY

This case series was conducted in Surgical Unit III of Abbasi Shaheed Hospital from December 1999 to December 2000. All cases of breast lump and blood stained nipple discharge are included. Data was collected on a porforma designed. Patient selection criteria were; Female age above 12 years, history of lump breast or nipple discharge, regardless of age of Menarche or

Menopause. Patients who were diagnosed on FNAC or excision biopsy, regardless of gestational age. Patients were excluded on the basis of presence of any other malignancy or chronic illness.

The metastatic work up consisted of Chest X-rays, ultrasound of the abdomen, liver function test, serum calcium and alkaline phosphatase. A bone scan was only considered for symptomatic cases or those where serum calcium and/or alkaline phosphatase were raised. Cases of recurrent cancer and those already receiving treatment and presenting only for follow up were excluded.

Using the AJCC staging system patients were classified according to TNM classification as;

a) Localised disease, stage I to stage II B.
b) Locally advance disease stage III A and B.
c) Distant matastasis, stage IV.

Cases classified as stage III B onwards were labeled as advanced disease in this case series.

RESULTS

A total of 27 female patients were diagnosed with breast cancer in the given study duration. Of these 16(59.25%) were found to have locally advanced disease, while only two patients had metastatic cancer (7.4%). The overall frequency of advanced cancer in the group thus came to be 66.6% (18 out of 27 cases).

Age distribution (Graph 1): The average age was 40.5 years. Majority of the patients (15 out of 18, 83.3%) were less than 50 years old at the time of diagnosis.

Clinical Presentation (Table I): All patients had clinically palpable tumors. The average tumor size was 5.4 cm in the greatest dimension. 14 patients also had clinically palpable ipsilateral axillary nodes (10 mobile and 4 with fixity to the axillary fat). Only one patient had hepatomegaly and ascites at the time of presentation and another presented with pathological fracture of the femoral shaft.

Histological stages: Based on final histopathology, four distinct categories of patients were noted:

1) *Large tumor size, negative/small nodes (T3, N0.1, M0)*: 10 patients (55.5%) were designated in this category. The average tumor size in this group was 6 cm; 8 of these also had small, mobile axillary nodes, only six of which were found to be histologically positive.

2) *Tumor extension to chest wall, positive nodes (T4, N1, M0):* Only one patient had tumor adherent to pectoral muscles. The ipsilateral nodes were positive but mobile.

3) *Any tumor size, fixed nodes (N2,M0):* 5 patients (27.7%) had tumors smaller than 5cm (average 3.5cm) with bulky nodes fixed to the axillary fat. Average number of positive nodes was 5, with the average size of 2.5cm.

4) *Metastatic disease (M1):* Only two patients had distinct metastasis at the time of diagnosis (one with liver metastasis confirmed by cold biopsy and another with fracture of femur).

DISCUSSION

Advanced breast cancer is an elusive disease category that defies all attempts at treatment and palliation. Like most natural disasters whose toll is on the young female

Fig. 1. Age-wise distribution of advance Breast Cancer (n=18)

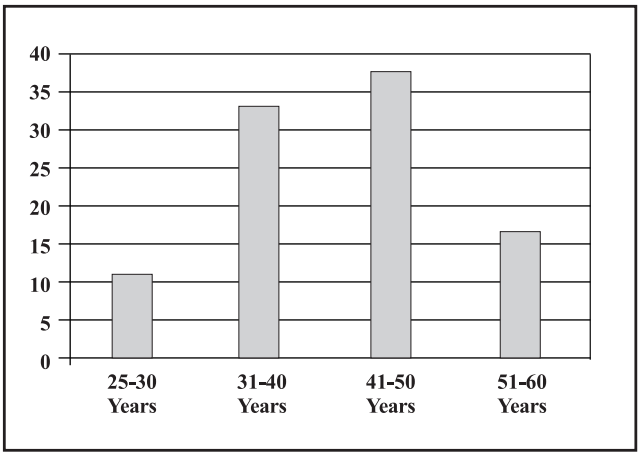

Table I. Clinical features at presentation in advance breast cancer (n=18)

Clinical Feature	No.	%
Breast Lump	18	100
Nipple Discharge	4	22
Nipple Retraction	5	27
Mobile Nodes	10	55.5
Fixed Nodes	4	22
Peau d'orange	3	16.6
Fixity to Chest Wall	1	5.5
Hepatomegaly	1	5.5

population. Late presentation with disseminated disease is not only a therapeutic challenge but also significantly increases psychological morbidity.[8] In this series, a high proportion of *de novo* cases of breast cancer presented as advanced malignancy, although the frequency of metastatic disease was 7.4%. This correlates well with the dismal figures obtained by researches, like Yusuf[5] from Rawalpindi General Hospital, reported an incidence of 73.8% of advanced cancer in their study of 84 patients. Vahdaninia and Montazeri[9] of the Tehran University found that of 128 cases, 61% presented with advanced disease. Conversely, data from the west puts the figure at an encouraging 20-30%[7] and this has steadily decreased due to effective mammographic screening. Fracheboud[10] have reported a fall of 12.1% in 9 years between 1989 and 1997.

The average tumor size in this series of advanced breast tumors was 5.4cm. Rasool[11] from the Services Hospital Lahore in his study of 72 patients found a staggering average size of 8.8cm, who exclusively studied the elderly female population. The mean tumor size reported by western researchers is much smaller, averaging at 3.3cm.[12] Apart from large tumor size, we also witnessed a high proportion of nodal positivity; although relatively fewer patients had fixed axillary nodes. Schootman[13] found the overall incidences of node positive cancers at 76 per 100,000 population. Apart from the challenges of treatment and morbidity, psychological issues have been well recognized in patients with advanced breast cancer. Turner[8] have identified difficulties in communicating with doctors, emotional impact, feelings about why the cancer developed and use of non-prescribed treatment as some of the collateral issues surfacing in these cases.

CONCLUSION

Frequeny of advanced carcinoma in this study in younger population in higher compared to previous data.

REFERENCES

1. Ascunce N, del Moral A, Murillo A, Alfaro C, Apesteguia L, Ros J, Abascal L, Aizcorbe M, Dominguez F. Early detection programme for breast cancer in Navarra, Spain. Eur J Cancer 1994; 3 Suppl 1:41-8.

2. Thompson A M, Dewar J A. Disorders of the breast. In: Cuschieri A, Steele R J C, Moossa A R Eds. Essential surgical practice. 4th ed. Arnold London 2000; 85-93.

3. Singletarry S E, Allred C, Ashley P, Basset L W, Berry D, Bland K I. Staging system for breast cancer: revisions for the sixth edition of AJCC cancer staging manual. Surg Clin North Am 2003; 83: 803-19.

4. Agnese D M, Yusuf F, Wilson J L, Shapiro C L, Lehman A, Burak W E. Trends in breast cancer presentation and care according to age in a single institution. Am J Surg 2004; 188: 437-9.

5. Taplin S H, Ichikawa L, Yood M U, Manoos M M, Geiger A M, Weinmann S. Reason for late stage breast cancer; absence of screening and detection, or breakdown in follow up? J Natl Cancer Inst 2004; 96: 1518-27.

6. Azam Y, Jahangir S K, Faisal G B, Muhammad I, Sabah M, Nadir M. Level of awareness about breast cancer among females presenting to a general hospital in Pakistan. JCPSP 2001; 11: 131-5.

7. Rana F, Yunus J, Muzammil A. Breast cancer epidemiology in Pakistani Women. JCPSP 1997; 8: 20-23.

8. Timothy J, Yeatman A. The natural history of locally advanced primary breast carcinoma and metastatic disease. Lancet 1995; 4: 510-15.

9. Turner J, Kelly B, Swanson C, Allison R, Wetzig Psychosocial impact of newly diagnosed advanced breast cancer. Psychooncology 2005; 14(5): 396-407.

10. Vahdaninia M, Montazeri A. Breast cancer in Iran; a survival analysis. Asian Pac J Cancer Prev 2004; 5: 223-5.

11. Fracheboud J, Otto S J, van Dijk J A, Broeders M J, Verbeek J L. Decreased rates of advanced breast cancer due to mammography screening in the Netherlands. Br J cancer 2004; 91: 861-7.

12. Rasool M I. A study of carcinoma breast in elderly female patients. Pak J Surg 1995; 11: 18-21.

13. Schaefer G, Leser M L, Kinnie E W, Beattie E J. Breast carcinoma in elderly women: Pathology, Prognosis and survival. Path Annal 1994; 19: 195-220.

14. Schootman M, Jeffe D, Reschke A, Aft R. The full potential of breast cancer screening used to reduce mortality has not yet been realized in the United State. Breast Cancer Res Treat 2004; 85: 219-22.