Research Article

Management and outcome of breast cancer patients at a tertiary care centre

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Abstract

Background: Breast cancer is the most frequent cancer affecting the women across the world and it is the second leading cause of death due to cancer among women. There are few published reports regarding the clinical profile and management of breast cancer from India. Present study describes the clinical profile, management and outcome of breast cancer patients visiting our tertiary care hospital. **Methods:** This is a retrospective study of 45 breast cancer patients who had visited the tertiary care centre for treatment during the study period. The clinical details regarding the location of the lump, histopathological types found in present series, clinical stage at which the cases presented, treatment pattern and follow up has been described. **Results:** Left side of breast was slightly more frequently involved. Upper and outer quadrant of breast was the most common site of lump. The most common histopathological type was infiltrating ductal carcinoma which was followed by medullary carcinoma. Most common stage of presentation patients in the patients was stage II/III. Radical or modified radical mastectomy was the most common surgical treatment with adjuvant chemotherapy and radiotherapy. **Conclusions:** Modified radical mastectomy surgery was noted to be a safe and effective operative modality. Adjuvant chemotherapy and radiotherapy was used in our study patients which indicates a better approach towards management of breast cancer patients.

Keywords: Modified radical mastectomy, Chemotherapy.

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INTRODUCTION

During the last few decades breast cancer cases have been increasing all over the world however the greatest increase has been seen in the developing Asian countries. In the year 2008, it was reported that India had around 115,000 new cases with approximately 53,000 deaths which is a ratio of 2:1 indicating 1 death for every 2 detected cases[1]. As there is a lack of awareness regarding the early detection and also considering the problems related to health care services, it has been found that most of the women with breast cancer in India are diagnosed in the late stages of the disease[2]. Despite all the advances in the recent years, the issue of management of breast cancer has remained a controversial topic. Thus, it has continued to be the focus of intense basic as well as clinical research[3]. Present study describes the clinical profile, management and outcome of breast cancer patients visiting our tertiary care hospital.

MATERIAL AND METHODS

This is a retrospective study of 45 breast cancer patients who had visited the tertiary care centre for treatment during the study period. The clinical details regarding the location of the lump, histopathological types found in present series, clinical stage at which the cases presented, treatment pattern and follow up has been described. The breast cancer patients who were already treated by mastectomy outside the hospital were excluded from the study. A planned proforma was used for the detailed retrospective analysis of patients. All the patients who were included in the description and analysis had biopsy proven carcinomas.

RESULTS

A large proportion of the patients (75.6%) were found to be in the age group range of 31 years to 50 years. A total

of 30 (66.7%) patients were found to be from urban background whereas 15 (33.3%) were found to be from rural background, the ratio was 2:1. Total of 42 patients (93.3%) presented with a lump in breast. Left breast was involved in 28 of the 45 cases contributing 62.2% of the cases. Mammography was not used as a principle method for diagnosis in our study population and was done only in 5 (11.1%) patients. A total of 42 (93.3%) patients were managed by performing surgery. Out of the remaining 3 patients (6.7%) patients who were not operated, two had disease in stage IV and one patient was lost to follow-up after the down staging of the disease done by the neoadjuvant chemotherapy. Out of the 42 operated cases, 38 (84.4%) underwent classical modified radical mastectomy. A total of 4 patients (8.9%) underwent toilet mastectomies of which one (2.2%) was done in metastatic breast cancer. The proportion of patients that came for follow-up was low (37.8%). 9 out of 17 patients that came for follow up had recurrence. The most common sites for recurrence were breast and axilla. One of the patients had secondaries in brain and 3 patients had secondaries in visceral organs. During study period, 3 patients (6.7%) died.

Table 1: Breast Cancer Patients in relation to location of lump

Quadrant	Number of Cases	Percentage
Upper Outer	23	51.1
Lower Outer	05	11.1
Upper Inner	07	15.6
Lower Inner	03	6.7
Central	1	2.2
More than 1 quadrant	6	13.3
Total	**45**	**100**

Table 2: Histological types of breast cancer

Type	Number of Cases	Percentage
Carcinoma in situ	1	2.2
Infiltrating ductal carcinoma	32	71.1
Infiltrating lobular carcinoma	2	4.4
Medullary carcinoma	6	13.3
Mucinous carcinoma	2	4.4
Paget's disease	2	4.4
Total	**45**	**100**

Table 3: Clinical stage of breast cancer at the time of presentation

Stage	Number of Cases	Percentage
Stage I	2	4.4
Stage IIA and IIB	17	37.8
Stage IIIA and IIIB	24	53.3
Stage IV	2	4.4
Total	**45**	**100**

DISCUSSION

Present study describes the clinical profile, management and outcome of breast cancer patients visiting our tertiary care hospital. A large proportion of the patients (75.6%) were found to be in the age group range of 31 years to 50 years. Several other studies have reported similar age prevalence[4,5,6]. 66.7% patients were found to be from urban background whereas 33.3% were found to be from rural background, the ratio was 2:1. Research reports from India and United States have also shown a higher incidence of breast cancer in urban population as compared to the rural population[4,7]. However, Sandhu *et al*[3] have reported a higher incidence in rural areas which they explained maybe due to the fact that their study was done in a hospital which received patients predominantly from rural areas. Left breast was more frequently involved contributing 62.2% of the cases. Upper and outer quadrant of breast was the most common site of lump. These findings are in line with the published reports on the subject[3,8,9]. The possible explanation for this finding is that the left breast is more bulky than the right and upper outer quadrant has relatively larger volume of breast tissue[9,10]. The most common histopathological type was infiltrating ductal carcinoma which was followed by medullary carcinoma. There are reports from India and western countries which reflect that infiltrating ductal carcinoma is the most common type[8,9,11]. Out of the 42 operated cases, 38 (84.4%) underwent classical modified radical mastectomy. It has been reported that modified radical mastectomy leads to good local and regional control and still remains an important tool for managing breast cancer in India[3]. However, popularity of breast conservation surgery has been increasing in the western world and has been reported to have become the preferred method of treatment in many patients[12-15]. Neoadjuvant chemotherapy was used in 19 (422.2%) of the patients for down staging the disease. There are published reports which suggest that chemotherapy is effective in terms of relapse-free and overall survival[16].

CONCLUSIONS

Modified radical mastectomy surgery was noted to be a safe and effective operative modality. Adjuvant chemotherapy and radiotherapy was used in our study patients which indicates a better approach towards management of breast cancer patients.

REFERENCES

1. B.B. Kulkarni, S.V. Hiremath, S.S. Kulkarni, U.R. Hallikeri, B.R. Patil and P.B. Gai, 2012. Decade of Breast Cancer-Trends in Patients Profiles Attending Tertiary Cancer Care Center in South India. Asian Journal of Epidemiology, 5: 103-113.
2. Babu GR, Lakshmi SB, Thiyagarajan JA (2013). Epidemiological correlates of breast cancer in South India. Asian Pac J Cancer Prev, 14, 5077-83.

3. Sandhu D S, Sandhu S, Karwasra R K, Marwah S. Profile of breast cancer patients at a tertiary care hospital in north India. Indian J Cancer 2010; 47:16-22.
4. Chopra R. The Indian Scene. Journal of Clinical Oncology 2001; 19:S106-11.
5. Gupta P, Sharma RG, Verma M. Review of breast cancer cases in Jaipur region. J Indian Med Assoc 2002; 100:282-3, 286-7.
6. Malik IA. Clinico-pathological features of breast cancer in Pakistan. J Pak Med Assoc 2002; 52:100-4.
7. Coughlin SS, Thompson TD, Hall HI, Logan P, Uhler RJ. Breast and cervical carcinoma screening practices among women in rural and nonrural areas of the United States, 1998-1999. Cancer 2002; 94:2801-12.
8. Hussain MA, Ali S, Tyagi SP, Reza H. Incidence of cancer breast at Aligarh. J Indian Med Assoc 1994; 92:296-7.
9. Seymour I. Schwartz. Breast In. Principles of Surgery. 7 th Edition. McGraw-Hill.1999. p. 564.
10. Lee AH. Why is carcinoma of the breast more frequent in the upper outer quadrant? A case series based on needle core biopsy diagnoses. Breast 2005; 14:151-2.
11. Goel A, Bhan CM, Srivastava KN. Five year clinico pathological study of breast cancer. Indian J Med Sci 2003; 57:347-9.
12. Singletary SE. New approaches to surgery for breast cancer. Endocr Relat Cancer 2001; 8:265-86.
13. Cody HS 3rd. Current surgical management of breast cancer. Curr Opin Obstet Gynecol 2002;14:45-52
14. Sakorafas GH. Breast cancer surgery--historical evolution, current status and future perspectives. Acta Oncol 2001; 40:5-18.
15. Mittra I, Badwe RA, Dinshaw K, Sarin R, Chinoy RC, Nair R, *et al*. Conservative surgery in breast cancer. Indian J Surg 2003; 65:325-36.
16. Shenkier T, Weir L, Levine M, Olivotto I, Whelan T, Reyno L, *et al*. Clinical practice guidelines for the care and treatment of breast cancer: 15. Treatment for women with stage III or locally advanced breast cancer. CMAJ 2004; 170:983-94.

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