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Clinical Profile of Patients with Breast Carcinoma Attending Tertiary Care Hospital.

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ABSTRACT

Breast cancer is second most frequent cancers in females in India. It is one of the common cancers of women worldwide with 10 lakh new cases occurring every year amounting to 20% of all malignancies with high fatality rate. Age adjusted incidence rate in India amounts to 15-29 per lakh population per year and is ever increasing. It was a hospital based, cross-sectional study conducted at VIMS, Bellary, Karnataka. Pre-structured and pilot tested questionnaire was administered to all one hundred confirmed cases of female breast cancer cases diagnosed in the hospital from January 2013 to January 2014 to understand their clinical profile. Majority of the female breast cancer cases were above 30 years of age. Lump in breast was the dominant symptom. Majority of the female breast cancer cases were presented in advanced stages of disease.

INTRODUCTION

Breast cancer causes 5,19,000 deaths in a year worldwide, about 9,00,000 women are diagnosed each year. Incidence of breast cancer is 0.26/1,00,000 in males and 20.01/1,00,000 in females. While mortality associated with breast cancer is 1.20/1,00,000 in males and 4.32/1,00,000 in females. Mortality rates from breast cancer have increased during the past 60 years in every country ^[1].

The incidence of breast cancer in India is on the rise and is rapidly becoming the number one cancer in females pushing the cervical cancer to the second spot. It is reported that one in 22 women in India is likely to suffer from breast cancer during their lifetime. The rise is being documented mainly in the metros but it can be safely said that many cases in rural India go unnoticed ^[2].

Breast cancer is a disease of the old age with the peak incidence in the fifth and sixth decades, but in India the disease is seen a decade earlier, probably because of shorter life expectancy in Indian women (about 65.3 years as per Indian data in 2005) as compared to counterparts in USA ^[3].

The risk factors for breast cancer in western populations have been extensively investigated, and it has been suggested that reproductive and life-style related factors are strongly associated with increased risk for breast cancer ^[4,5]. Various risk assessment models such as Gail, Clause, BRACPRO have been developed and validated in white women ^[6,7]. They are used to recruit women for breast cancer screening protocols. However racial/ethnic differences exist in both prevalence as well as risks associated with particular factors ^[8,9]. Many low or intermediate risk countries have studied risk factor profile of their populations and developed their own risk assessment protocols ^[10,11].

Several reproductive risk factors have been identified and evaluated. Early menarche, late menopause, nulliparity, late age of childbirth is risk factors, whereas multiparity and breast feeding offers protection against breast cancer. Most of these studies were conducted in first –world countries [12]. Mandana Ebrahimi et al in their case-control study in Tehran during April 1997-April 1998 found out nulliparity, family history and unmarried status as risk factors of female BC [13]. Late age of menarche and early age of menopause, early age of 1st child birth, multiparity, history of ever breast feeding and increased duration of breast feeding were found to be significant protective factors for breast cancer in a multicentric case-control study of risk factors of breast cancer conducted in South India [14].

METHODOLOGY

A cross sectional study was carried out at Vijayanagar Institute of Medical Sciences, Bellary, Karnataka from January 2012 to January 2014 for a period of two years to study the clinical profile of breast cancer patients. After obtaining the informed written consent, a thorough history was noted and clinical examination was done. Primary data was collected by interviewing the patients or guardians and secondary data was gathered from lab and pathological reports. The data was collected in a pre tested semi structured questionnaire. Totally data was collected from 100 cases by adopting non probability purposive random sampling technique. Data was entered in Microsoft excel and was analyzed using SPSS software. After data collection, health education was given.

Ethical considerations

- Informed consent obtained from the patient.
- Confidentiality of personal data of subjects maintained and the data are used only for research purposes.

RESULTS

Table 1: Distribution based on age group

Age group	Frequency	Percentage
<30 years	10	10%
31 – 50 years	54	54%
>50 years	36	36%
Total	100	100

Among 100 patients with breast carcinoma, majority of them belongs to age group of 31 – 50 years (54%) followed by more than 50 years (36%). Interestingly, 10% of patients were aged less than 30 years

Table 2: Clinical profile

Clinical parameters	Frequency	Percentage
Side involved		
Right	55	55%
Left	45	45%
Pain		
Present	54	54%
Absent	46	46%
Size		
<5cm	70	70%
>5cm	30	30%
Nipple retraction		
Present	62	62%
Absent	48	48%
Nipple discharge		
Present	28	28%
Absent	72	72%
Peadu-d-orange		
Present	28	28%
Absent	72	72%
Axillary lymph node involvement		
Present	80	80%
Absent	20	20%
Stage of the disease		
Stage I	12	12%
Stage II	39	39%
Stage III	49	49%

There was no much difference in involvement of side i.e Right side involvement was 55% and left side 45%.

Pain was complained by 54% of patients.

Nearly 70% of breast lumps were of size < 5cms and 30% were more than 5cms.

Nipple retraction and discharge was observed among 62% and 28% of study subjects respectively. Peau-d-orange was seen in 28% of study subjects. Axillary lymph node involvement was found among 80% of patients.

Stage of the disease revealed that, 12% of patients were in stage I, 39% were in stage II and remaining 49% were in stage III.

DISCUSSION

The incidence of breast cancer is seen to increase with age. Breast cancer is primarily a disease of the old age with the peak incidence in the fifth and sixth decades, but in India the disease is seen a decade earlier, probably because of shorter longevity of life in Indian women as compared to counterparts in USA.

In the study, peak incidence of breast cancer was 54% between 31 – 50 years as suggested by the Indian Data. Sen et al ^[15] had also published similar findings and had 36.9% in the same age group, which is similar to our study.

Pain and discomfort are usually not seen in early breast malignancies as they are usually painless lumps. They are usually seen with involvement of skin or chest wall or due to infiltration of nerves. Pain and discomfort was noted in about 54% of the population while breast lump was seen in 100% of the cases. Tyagi et al ^[16] suggested 33.5% of cases presented with pain/discomfort while 12% was suggested by Ackerman Del Regato ^[17].

Cancer in both left and right breasts showed almost equal incidence. In our study 55% of the patients had cancer of the right breast while the other 45% had it on the left side. Greater the size of the tumour, greater are the chances of the disease to be generalized and greater are the difficulties to treat. Almost equal incidence was noted in the size of the breast with breast lumps all groups showing equal incidence. Hence no inference could be obtained.

Tyagi et al ^[16] suggested only 10.8% of their cases had nipple retraction. In our study 62% of the patients had nipple retraction while 52% of the patients had no evidence of retraction.

Tyagi et al ^[16] suggested 10.8% of their cases had nipple discharge. Studies suggest that nipple discharge is present in 3–11% of the cases. 28% of the patients had nipple discharge while 72% did not show any discharge. Thus a larger population was encountered with nipple discharge in the study.

In the present study, 34% of cases showed a T2 stage followed by 28% of cases with T1 stage and 24% with T3 stage. 62% of cases showed N2 status followed by 32% with N0 status. About 49% of the cases were Stage III on presentation while 39% showed a Stage II disease.

CONCLUSION

- Highest incidence of carcinoma breast is seen mostly between the 30- 50 years in the study
- Higher cases were noted with Stage II and Stage III disease reflecting the poor awareness and negligence on the part of the patients

REFERENCES

1. K Park. Textbook of Preventive and Social Medicine, 2009, Twentieth Edition, Chapter 6, Epidemiology of Chronic Non Communicable Diseases and Condition, Cancer, Page 338.
2. www.medindia.net/news/view_news_main.asp?x=7279 as accessed on 14.10.2013.

3. http://www.asianhnm.com/surgical_speciality/surgery_breast_cancer_india.htm
4. Madigan M, Ziegler R, Benichou C et al. Proportion of breast cancer cases in the United States explained by well established risk factors. *J Natl Cancer Inst.* 1995; 87:1681.
5. Rockhill B, Weinberg CR, Newman B. Population attributable fraction estimation for establish. *Am J Epidemiol.* 1998; 147:826-33.
6. Rockhill B, Spiegelman D, Byrne c, et al. validation of gail et al model of breast cancer risk prediction and implication for chemoprevention. *J Natl Cancer Inst.* 2001; 93:358-66.
7. Berry Da, Ivarsen Es, Gudbjartsson DF, et al. BRCA1/BRCA2 and prevalence of other breast cancer susceptibility genes. *J Clin Oncol.* 2002; 20:2701-12.
8. Chlebowski RT, Chen Z, Anderson GL. Ethnicity and breast cancer: Factors influencing differences in incidence and outcome. *J Natl Cancer Inst.* 2005; 97; 439-448.
9. Hall IJ, Moorman PG, Millikan RC, Newman B. Comparative analysis of breastcancer risk factors among African-American and white women. *Am J Epidemiol.* 2005; 161: 40-51.
10. Ng EH, Gao F, Ji CY, Ho GH, Soo KC. Risk factors for breast carcinoma in Singaporean Chinese women: the role of central obesity. *Cancer.* 1997; 80:725.31.
11. Wu GH, Chen LS, Chang KJ et al. Evolution of breast cancer screening in countries with intermediate and increasing incidence of breast cancer. *J Med Screen.* 2006;13:23-7.
12. Zheng T, Holford TR, Mayne ST, et al Lactation and breast cancer risk: a case-control study in Connecticut. *Br J Cancer.* 2001;84:1472-6.
13. <http://breast-cancer-research.com/content/4/5/R10>
14. Gajalakshmi V, Mathew A, Brennan P, et al. Breastfeeding and breast cancer risk in India: A multicenter case-control study. *Int J Cancer.* 2009;125:662-5.
15. A K Sen and T K Das Gupta, Cancer of the breast and its treatment, *Ind J Surg.* 11: 832–847.
16. Tyagi, Carcinoma breast its incidence and histological variants in Aligarh, a studyof 92 cases, *Ind J Surg.* 1983.
17. Ackerman, Del Regato: Cancer diagnosis, treatment and prognosis, in Christopher Davis textbook of surgery, St. Luis, C V Murphy.