

Original Research Article

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Clinical profile of carcinoma breast cases at a tertiary care hospital

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ABSTRACT

Background: Breast carcinoma is a serious health problem and is among the major health issues in India. Also, it has a relatively early age presentation in this part of the world. Present study describes the features like age at presentation, clinical stage at presentation and incidence of regional lymph node involvement and distant metastases among the breast cancer patients at Government Medical College, Jabalpur in Madhya Pradesh, India.

Methods: This hospital-based descriptive study was conducted at the Department of Surgery, Government Medical College, Jabalpur in Madhya Pradesh state of India. Fifty patients with a confirmed diagnosis of breast cancer were included in the study. The details like age at presentation, clinical stage at presentation and incidence of regional lymph node involvement and distant metastases among the breast cancer patients were described and tabulated.

Results: Youngest patient of the series was aged 30 years whereas the oldest was aged 65 years. Maximum patients belonged to 41 to 50 years age group. Stage wise distribution of cases reflected that Stage III was the most common stage at presentation. Majority of the cases had lymph node involvement (90%). Liver metastasis was seen in 8 cases (16%), of which, 2 cases had ascites. There were 6 cases of lung metastasis, of which 2 cases had pleural effusion and remaining 4 cases showed solitary metastasis. 6 cases of osseous metastasis were observed, out of which, 2 cases had skull metastasis and 4 cases had spine involvement.

Conclusions: It was found that the age group in majority of the patients was younger as compared to Western world and this finding is in line with data from India and other Asian regions. Also, there was a presentation at a later stage of disease in our study population.

Keywords: Breast cancer staging, Lymph node involvement, Metastasis

INTRODUCTION

Breast carcinoma is a serious health problem and is among the major health issues in India. It had a share of 19 to 34% of all cancers among the female population. Also, it has a relatively early age presentation in this part of the world with age standardized rates being a quarter or one third lower than age standardized rates in North America or Europe. Breast cancer patients present at a later stage with large numbers being diagnosed in clinical stage II or further, as there is lack of awareness regarding breast self-examination and other modalities for early diagnosis of the disease.¹⁻⁵

Present study describes the features like age at presentation, clinical stage at presentation and incidence of regional lymph node involvement and distant metastases among the breast cancer patients at Government Medical College, Jabalpur in Madhya Pradesh state of India.

METHODS

This hospital-based descriptive study was conducted at the Department of Surgery, Government Medical College, Jabalpur in Madhya Pradesh, India during years 1990 - 91.

Patients with a confirmed diagnosis of breast cancer were included in the study. The patients were informed about the research and its objectives, and written consent was obtained from them. Total of 50 patients were recruited. Detailed history was taken, physical examination, Skiagram chest, relevant investigations were done and records were analyzed. The details like age at presentation, clinical stage at presentation and incidence of regional lymph node involvement and distant metastases among the breast cancer patients were described and tabulated.

RESULTS

Youngest patient of the series was aged 30 years whereas the oldest was aged 65 years. Maximum patients belonged to 41 to 50 years age group. Stage wise distribution of cases reflected that Stage III was the most common stage at presentation. Majority of the cases had lymph node involvement (90%). Liver metastasis was seen in 8 cases (16%), of which, 2 cases had ascites. There were 6 cases of lung metastasis, of which 2 cases had pleural effusion and remaining 4 cases showed solitary metastasis. 6 cases of osseous metastasis were observed, out of which, 2 cases had skull metastasis and 4 cases had spine involvement (Table 1-3).

Table 1: Age distribution of study group.

Age group (years)	Frequency	Percent (%)
30 - 40	7	14
41 - 50	35	70
51 - 60	5	10
61 - 70	3	6
Total	50	100.0

Table 2: Stage wise distribution of study group.

Stage	Frequency	Percent (%)
Stage - II	8	16
Stage - III	27	54
Stage - IV	15	30
Total	50	100.0

Table 3: Incidence of regional lymph node involvement and distant metastasis.

Site of metastasis	Frequency	Percent (%)
Lymph node	45	90
Liver	8	16
Lung	6	12
Bone		
Skull	2	4
Spine	4	8

DISCUSSION

In our study maximum patients belonged to 41 to 50 years age group. Raina V et al studied the breast cancer

clinical profile in northern India and reported a median age of presentation as 47 years. They further stressed that incidence rate in India begins to rise in early thirties of age and peaks at 50-64 years of age. They compared it with data from United States, where peak incidence rate is at age of more than 75 years. This lower age at the time of diagnosis is reported for other cancers also in India, the underlying reasons are not well understood but it is supposed that there is under-diagnosis as well as under-reporting of cases in the elderly people.^{1,2,6} Chopra B et al study found that there were two peaks in the age group at the time of diagnosis of breast cancer i.e. 41-50 years age group and 51-60 years age group.⁷

The peak at age group of 41-50 years reflects that the disease affects younger age group in Indian population in comparison with the western world. They also highlighted that data from Delhi in India during 2001 to 2003 as per National Program of Cancer Registry of the Indian Council of Medical Research showed that among 3777 cases of breast cancer analyzed, 44.6% cases were less than 54 years of age. Goel et al and Saxena et al have also reported similar results which further reinforce the fact that there is a rising incidence of breast cancer in younger age groups in the urban population of India.⁸⁻¹¹

Jing Li et al study done in China, reported that the mean age at the time of diagnosis was 48.7 years. They discussed that it was similar to the observations from other studies from China. They compared the data from Singapore, India and Saudi Arabia and mentioned that it was similar to their study results with mean age around the mid-40s.¹²⁻¹⁵

In our study, stage wise distribution of cases reflected that Stage III was the most common stage at presentation. Majority of the cases had lymph node involvement (90%). Liver metastasis was seen in 8 cases (16%), there were 6 cases (12%) of lung metastasis and 6 cases (12%) of osseous metastasis.

Staging of the breast cancer plays a very important role in estimating the prognosis of the disease, planning the treatment strategy as well as for the interpretation and comparison of the outcome of the disease. Raina V et al study has reported that 45% patients presented with Stages III and IV of breast cancer disease. Similarly, another study found that 45.7% patients presented in Stages III and IV breast cancer.^{1,16} Saxena et al study observed that Stage IIIB was the most common stage at presentation i.e. 36.1% cases presented with Stage III B breast cancer in Indian population and also over 90% of patients were in stages II, III and IV. They reported that breast cancer patients frequently present at advanced stage. They stressed the need for awareness programs regarding the early diagnosis and management of the diagnosis as it is a known fact that breast cancer diagnosed at earlier stages have more favourable prognosis in comparison with those diagnosed at later stages. They mentioned that fear of the disease among the

people, lack of awareness regarding the disease and its management and the psychological issues are the reasons due to which most patients in our country try to ignore or hide the breast cancer disease and present in later stages of the disease at the hospital.¹⁰

Limitations of our study include hospital based and small sample size with a cross-sectional study design of study. So, the findings cannot be generalized over a diverse geographical area affecting external validity of the study.

CONCLUSION

The age group in majority of the patients was younger as compared to Western world and this finding is in line with data from India and other Asian regions. Also, there was a presentation at a later stage of disease in our study population.

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REFERENCES

1. Raina V, Bhutani M, Bedi R, Sharma A, Deo SV, Shukla NK, Mohanti BK, Rath GK. Clinical features and prognostic factors of early breast cancer at a major cancer center in North India. Indian J Cancer. 2005;42:40-5.
2. National cancer registry programme. Consolidated report of the population based cancer registries1990-1996. New Delhi: Indian Council of Medical Research; 2001.
3. National Cancer Registry Programme. Ten year consolidated report of the hospital based cancer registries 1984-1993. An assessment of the burden and care of cancer patients. New Delhi: Indian Council of Medical Research; 2001.
4. National Cancer Registry Programme. Consolidated report of the population based cancer registries1990-1996. Supplement: Year-wise tabulation of incident cancers and rates by site and gender. New Delhi: Indian Council of Medical Research; 2001.
5. Mortality and prevalence worldwide. Available at <http://www-dep.iarc.fr/>. Accessed on 12 August 2016.
6. Bhutani M, Vora A, Kumar L, Kochupillai V. Lympho-hemopoietic malignancies in India. Med Oncol. 2002;19:141-50.
7. Chopra B, Kaur V, Singh K, Verma M, Singh S, Singh A. Age shift: breast cancer is occurring in younger age groups - is it true? Clin Cancer Investig J. 2014;3:526-9.
8. Ferlay J, Bray F, Pisani P. GLOBOCAN 2000: Cancer Incidence, Mortality and Prevalence Worldwide, Version 1.0. IARC Cancer Base No. 5. Lyon: IARC; 2001.
9. National cancer registry programme (ICMR). consolidated report of population based cancer registries 2001-2004. Individual registry data, 2001-2003;161.
10. Saxena S, Rekhi B, Bansal A, Bagga A, Chintamani, Murthy NS. Clinico-morphological patterns of breast cancer including family history in a New Delhi hospital, India - a cross-sectional study. World J Surg Oncol. 2005;3:67.
11. Goel A, Bhan CM, Srivastava KN. Five year clinico pathological study of breast cancer. Indian J Med Sci. 2003;57:347-9.
12. Jing L, Zhang BN, Fan JH, Pang Y, Zhang P, Wang SL, et al. A nation-wide multicenter 10-year (1999-2008) retrospective clinical epidemiological study of female breast cancer in China. BMC Cancer. 2011;11:364.
13. Yang MT, Rong TH, Huang ZF, Zeng CG, Long H, Fu JH, et al. Clinical analysis of resectable breast cancer: a report of 6 263 cases. Chinese J Cancer. 2005;5:327-31.
14. Luo JQ, Su HM, Meng X. Analysis of incidence rate of female breast cancer patients in Wuzhou city from 1981 to 1996. Guangxi Prev Med. 1999;5:142.
15. Tu YH. Clinical and pathological characteristics of breast cancer: a report of 292 cases. Guangxi Medical University. 2007.
16. Kakarala M, Rozek L, Cote M, Liyanage S, Brenner DE. Breast cancer histology and receptor status characterization in Asian Indian and Pakistani women in the U.S. - a seer analysis. BMC Cancer. 2010;10:191.

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