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Original Research Article

Profile of patients with carcinoma breast: a descriptive clinical study

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ABSTRACT

Background: Breast cancer is the most common site-specific cancer in women and is the leading cause of death from cancer for women age 40 to 44 years. It accounts for 33% of all female cancers and is responsible for 20% of the cancer related deaths in women.
Methods: Data was collected using pre tested semi structured questionnaire after thorough clinical examination. Total sample size was 200 and these patients were selected by non-probability purposive sampling technique.
Results: The most common quadrant involved was upper outer quadrant (64%) followed by upper inner quadrant (12%), lower inner quadrant (10%) and central (10%). Highest number of patients had lump size less than 3cms (48%) followed by more than 5 cms (30%). 22% of patients had lump size between 3-5 cms.
Conclusions: 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.

Keywords: Breast carcinoma, Clinical profile, Lump

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 the most common site-specific cancer in women and is the leading cause of death from cancer for women age 40 to 44 years. It accounts for 33% of all female cancers and is responsible for 20% of the cancer related deaths in women. Breast cancer was the leading cause of death until 1985, when it was surpassed by lung cancer.

There is a tenfold variation in breast cancer incidence among different countries worldwide. England and Wales have highest age adjusted mortality for breast cancer while South Korea has the lowest. Women living in less industrialized countries have a lower incidence of breast cancer than women living in industrialized countries.

Breast cancer may arise anywhere along the milk line from the epithelium of the duct system anywhere from the nipple end of major lactiferous ducts to the terminal duct unit, which is in the breast lobule. Previously, descriptive terms were used to classify breast cancer (scirrhous - means woody,medullary - means brain like). More recently, histological descriptions have been used. Two risk assessment models are currently used to predict

the risk of breast cancer. Gail and colleagues developed the most frequently used model, which incorporates age at menarche, number of breast biopsies, age at first live birth and number of first degree relatives with breast cancer. It predicts the cumulative risk of breast cancer according to decade of life. Calus and colleagues developed the other frequently used model, which is based on assumptions about the prevalence of high penetrance breast cancer susceptibility genes. Compared with the Gail model the Calus model incorporates more information about family history.[3]

Family history of breast cancer is associated with an increased risk of the disease. The risk is higher in patients with affected first- degree relatives, especially if under the age of 50 when the disease developed. The relative risk of developing breast cancer is 1.7 to 2.5 in women with a history of breast cancer in a first-degree relative, and 1.5 among those with an affected second-degree relative.

Multiple family members with breast cancer or the existence of bilateral disease indicate excessive risk especially if in association with ovarian cancer among other relatives. 5 to 10% of breast cancers are caused because of germline mutations such as BRCA-1 and BRCA-2, which are inherited in an autosomal dominant disease. BRCA-1 is located on chromosome 17q, contains 22 coding exons. BRCA-2 is located on chromosome 13q and contains 26 coding exons. Both function as tumor suppressor genes, and for each gene, loss of both alleles is required for initiation of cancer.

METHODS

This descriptive study was carried out at tertiary care hospital to study the profile of patients with breast carcinoma. Data was collected using pre tested semi structured questionnaire after thorough clinical examination. Total sample size was 200 and these patients were selected by non-probability purposive sampling technique. This was a multicentric study and data was collected from different hospitals

Inclusion criteria

- All patients with breast lumps and FNAC positive reports
- Patients who belong to clinical Stage I, Stage II and Stage III disease

Exclusion criteria

- Patients with benign breast diseases
- Excludes all inoperable advanced breast malignancies
- Patients with inflammatory breast carcinomas
- Seriously ill patients
- Those who did not give their consent

RESULTS

Among total study subjects, maximum number of study subjects were in the age group of 41 - 50 years (34%) followed by 31 - 40 years (20%), 51 - 60 years (16%), 61 - 70 years (12%), and 21 - 30 years (10%).

Table 1: Distribution based on age group.

Age in years	Frequency	Percentage
21 - 30	20	10.0
31 - 40	40	20.0
41 - 50	68	34.0
51 - 60	32	16.0
61 - 70	24	12.0
71 - 80	12	6.0
81 - 90	4	2.0
Total	**200**	**100.0**

Table 2: Distribution based on features of breast lesion.

Breast lesion	Frequency	Percentage
Pain		
Yes	88	44.0
No	112	56.0
Side		
Left	120	60.0
Right	80	40.0
Quadrant		
C	20	10.0
LI	20	10.0
LO	16	04.0
UI	48	12.0
UO	128	64.0
Size		
<3cm	96	48.0
3 - 5cm	44	22.0
>5 cm	60	30.0
Fixity		
Yes	20	10.0
No	180	90.0
Nipple retraction		
Yes	120	60.0
No	80	40.0
Nipple discharge		
Yes	52	26.0
No	148	74.0

In this study, pain was present in 44% of study subjects and the most common side affected was left side (60%). The most common quadrant involved was upper outer quadrant (64%) followed by upper inner quadrant (12%), lower inner quadrant (10%) and central (10%). Highest number of patients had lump size less than 3cms (48%) followed by more than 5 cms (30%). 22% of patients had lump size between 3 - 5 cms. Fixity was present in 10%

of study subjects. Nipple retraction was present in 60% of study subjects whereas Nipple discharge was present in 74% of study subjects

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 (about 65.3 years as per Indian data in 2005) as compared to counterparts in USA.

In the study, maximum number of study subjects were in the age group of 41 - 50 years (34%) followed by 31 - 40 years (20%), 51 - 60 years (16%), 61 - 70 years (12%), and 21 - 30 years (10%) as suggested by the Indian Data. Sen et al had also published similar findings and had 36.9% in the same age group, which is similar to our study.[4]

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 44% of the population while breast lump was seen in 100% of the cases. Tyagi et al suggested 33.5% of cases presented with pain/discomfort while 12% was suggested by Ackerman et al.[5,6] In this study the most common side affected was left side (60%).

Greater the size of the tumor, greater 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. It was noted in the rural population, negligence towards self and late presentation lead to bigger size of lumps in the disease. Marshall et al suggested that 60% of their cases had the tumour in the upper outer quadrant while Sen and Dasgupta had 49% of the cases in the same quadrant.[7,4] About 64% of the cases in our study had the tumour in the upper outer quadrant, showing preponderance of breast cancer for the upper outer quadrant of the breast.

Tyagi et al suggested only 10.8% of their cases had nipple retraction. In our study 60% of the patients had nipple retraction while 40% of the patients had no evidence of retraction.[5]

Tyagi et al suggested 10.8% of their cases had nipple discharge. Studies suggest that nipple discharge is present in 3-11% of the cases.[5] 26% of the patients had nipple discharge while 74% did not show any discharge. Thus a larger population was encountered with nipple discharge in the study.

CONCLUSION

Middle age group was more affected and the clinical profile of patients with Breast Carcinoma of this study is comparable to other studies

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