Study on Clinical Presentation of Breast Carcinoma of 50 Cases

Mosammat Mira Pervin¹ Haradhan Deb Nath^{2*} Mohd. Mejbahul Bahar³ Ashraful Alam⁴ Juthi Bhowmik⁵

¹Department of Surgery Bangabandhu Sheikh Mujib Medical University (BSMMU) Dhaka, Bangladesh.

²Department of Neurosurgery Bangabandhu Sheikh Mujib Medical University (BSMMU) Dhaka, Bangladesh.

³Department of Surgery General Hospital Munshiganj, Bangladesh.

⁴Department of Surgery Upzilla Health Complex, Mirzapur Tangail, Bangladesh.

⁵Department of Obstetrics & Gynecology Ad-Din Medical College Hospital Dhaka, Bangladesh.

*Correspondence to:

Dr. Haradhan Deb Nath

Associate Professor
Department of Neurosurgery
Bangabandhu Sheikh Mujib Medical University (BSMMU)
Dhaka, Bangladesh.
Mobile-+8801711354120
E-mail:dr.haradhan@yahoo.com

Abstract

Background: Breast cancer results from uncontrolled proliferation of malignant cells resulting appearance of a lump or a mass in the breast. Although many epidemiological risk factors have been identified, the cause of any individual breast cancer is most often unknowable. A women's reaction to any suspected disease of breast may include fear of disfigurement, loss of sexual attractiveness and death. Social and religious factors, unawareness of fatality of the disease, fear of infertility hinder early diagnosis & treatment. Early diagnosis is the key to increased survival. Objective: To find out clinical presentation for breast cancer. Study design: It is a prospective study of 50 carcinoma breast patients who palpable breast lump. It was conducted during the six months period. Data were collected pre-designed data collection sheet. Data were analysis statistical package for social science (SPSS) program. Result: Most of the malignant lesions are above the age of 40 years and peak incidence are between 41-50 years and most of patients under this study were in advanced stage-III (54%) and stage-IV (22%). Patients were presented as nipple discharge (20%), pain in the breast (26%), ulceration over the lump (14%), paeu'd orange (10%) skin fixation over the lump (18%), fixation to the chest wall (14%) nipple retraction (22%). Among the 50 patients there was only one male ca-breast patient (2%). Among the histopathological types infiltrating duct cell carcinoma (NST) were 41 (82%), ductal carcinoma in situ 6 (12%), lobular carcinoma invasive 2 (4%), lobular carcinoma in situ 1 (2%) and carcinoma involved in different quadrants were upper & outer 21 (42%), lower outer 5 (10%), upper and inner 12 (24%), lower and inner 4 (8%), central 7 (14%) and breast as a whole involvement was 1 (2%). About the involvement of carcinoma breast, left breast involvement were 52%, right breast 46% and bilateral involvement was 2%. Conclusion: This prospective study shows an alarming high incidence of carcinoma breast with palpable breast lump. The diversity of clinical presentation of breast lumps in different age group were observed is our hospital practice. This study gives an idea about the incidence of various types of lesions of breast in different age groups in our country.

Key words: Breast cancers; lump; malignant cell.

INTRODUCTION

Breasts are modified sweat gland and functionally of great importance for the offspring as the benefits of breast feeding are many fold. For the woman herself breasts are symbol of womanhood and significant components of feminine beauty. Breast is also dynamic structure that undergoes changes throughout women's reproductive life. This changes involve disturbances in the breast physiology extending from an extreme of normality to well defined disease process.

One fourth women suffer from breast disease in their life time after puberty^{1,2}. Worst of all it becomes a cause of death among female population in the form of breast cancer which is most common cancer and second leading cause of cancer death of women after 30 years of age in USA and Western World^{3,4}.

This malignancy can plauge a mother, a sister, a wife, or a daughter and thus has wide familial implications. Breast cancer results from uncontrolled proliferation of malignant cells resulting appearance of a lump or a mass in the breast. In western world breast cancer accounts for 27% of all female cancer and one out of 14 women can expect to develop breast cancer in their life time⁵⁻⁶. There are considerable variation in breast cancer incidence, which is particularly low in developing countries and Japan⁷⁻⁸.

In Bangladesh though there is no exact statistics about the incidence of breast carcinoma in females, appreciable number of patient suffer from breast cancer with poor outcome due to late presentation, diagnosis and treatment. A number of studies have been undertaken on carcinoma breast in this country. This study is being carried out to determine the incidence of carcinoma in cases of breast lumps presenting in tertiary hospitals.

MATERIALS & METHODS

It is a prospective study carried out in different surgical units of tertiary level hospital. Total 50 patients were admitted in different surgical units of tertiary level hospital with clinical diagnosis of Breast Carcinoma for elective surgery. Patients were selected randomly irrespective of age who definite palpable or doubtful Breast lumps. Detailed history of each patient under study were recorded with special attention to history of Breast cancer in their family, their age of menarche, lactating history, menopausal status & use of oral contraceptives. Important and relevant findings on thorough physical examination will be recorded. Collected data were analysed to find out the risk factors, clinical presentation & age incidence of breast cancer in our country.

RESULTS

Table 1: Demographic characteristics of patients (n=50)

Age (Years)	Number of patients	Percentage (%)
11-20	0	0
21-30	03	6
31-40	15	30
41-50	24	48
>50	08	16
Sex		
Male	01	2
Female	49	98

Most of the malignant lesions are above the age 40 years and peak incidence in between 41-50 years. Most of the breast malignancies occur in female patients.

Table 2: Clinical presentation of the disease (n=50)

r		
Presenting features	Number of patients	Percentage (%)
Lump in the breast	50	100%
Pain in the breast	37	74%
Nipple discharge	10	20%
Ulceration over lump	11	22%
Peau'd orange	8	16%
Skin fixation over lump	9	18%
Fixation of lump to chest w	all 7	14%
Nipple retraction	13	26%

In the study 100% patients presented with breast lump of the total 50 patients, next down word successive presenting feature were pain in the breast 74%, nipple retraction 26%, ulceration over the lump 22%, nipple discharge 20%, skin fixation over lump 18%, peau'd orange 16% and fixation of lump to chest wall 14%.

Table 3: Involvement of the breast by primary lesion (n=50)

Breast involvement	Number of patients	Percentage (%)
Right	23	46%
Left	26	52%
Bilateral	1	2%

Table shows of the total breast lesion, bilateral involvement was rare.

Table 4: Histological types of carcinoma breast lump (n=50)

Histological types	Number of patients	Percentage (%)
Infiltrating duct carcinoma	46	92%
Mucinous carcinoma	2	4%
Medulary carcinoma	1	2%
Tubular carcinoma	1	2%
Papillary carcinoma	1	2%

Among the commonest malignant lesions infiltrating duct carcinoma was more common and second highest common lesion was Mucinous carcinoma.

Table 5: Carcinoma involved the different quadrant of the breast (n=50)

Quadrant involved	Number of patients	Percentage (%)
Upper & outer quadrant	21	42%
Upper & inner quadrant	12	24%
Lower & outer quadrant	5	10%
Lower & inner quadrant	4	8%
Central	7	14%
Whole breast	1	2%

Among two involved highest sites 42% was upper and outer quadrant and 2nd highest was 24% upper and inner quadrant.

 Table 6: Presentation of carcinoma breast according to stage (IUAC)

	Number of patients	Percentage (%)
Stage-I	5	10%
Stage-II	7	14%
Stage-III	27	54%
Stage-IV	11	22%

Most of the patients under study were in advanced stage (III & IV), only 10% patients were in stage-I and 14% patients were in stage-II.

DISCUSSION

Breast cancer is one of the most common cause of death in case of female. Its is estimated that the world burden of breast cancer is i million women newly diagnosed each year. In our country there is no relevant clear cut data about the incidence of breast carcinoma. But number of new cases in each hospital is not uncommon. In this small scale study breast carcinoma is seen common in 5th decade (41-50 years) 48%. The socio economic status of most of the patients is poor. Most of the patients have no positive family history. They started menstruation on an average age of 11 years and were menopausal at the average age of 46 years. Most of the patients are illiterate and they do not know about the breast cancer. So they suffered at the early stage of the disease and came to the hospital at the advanced stage of the disease i.e when significant symptoms are produced such as pain, discomfort, skin changes or and increase in size of the lump. The reasons and little data could be basis of higher incidence of carcinoma observed in out country as compared to the west.

In the present work, the incidence of breast carcinoma increases gradually with the age 00% in 2nd decade to 48% in 5th decade of life. This finding is coherent with study at united states by west and EI tanner in which no case of carcinoma was reported in 2nd decade of life. Only 3 cases (6%) of carcinoma were diagnosed in 3rd decade. The incidence of 6% in the present study is much higher than 2.5% observed by palmer, 2% by Donegan and 1% by Raju et al.9 in their study. The incidence of malignancy was 23.2% and 38.9% in the 4th and 5th decade respectively which was also observed by Salina and Usmani at Lahore. The incidence of malignancy as observed by Donegan and Bennette, UK was 21% and 15% respectively in the 4th decade and 30% in the 5th decade as reported by Donegan.

The peak incidence of carcinoma breast observed by Usmani et al¹⁰. in the 4th decade is almost similar to that of this study. This indicates carcinomas in breast lumps are more common at early age in our setup. In a similar study done by Malik et al⁷. on 50 patients, the age distribution was between 15 and 65 years and the maximum patients were seen in the 31 to 40 years group. Similar study done by Yusuf et al³. Ahmed et al⁶. showed similar age patterns.

Lump was the presenting features of all the cases in this series. Lumps were mild to moderately painful in 26% cases. In rest of the cases there were no complaints of significant pain. Nipple discharge was present only in 20% of patients where most of the patients present with blood stained discharge. Nipple retraction was present in 22% patients. All of them were diagnosed as breast carcinoma according to histopathological report. All the patients detected the lump by themselves. Parveen et al¹¹. who analysed breast lesion found that 95% of their patients presented with breast lump, 5% with nipple discharge and 5% with pain. Except high incidence of painful lump in this study, the findings were more or less similar to those of Parveen et al¹¹.

Among the histological types of breast carcinoma 41 (82%) patients are duct cell carcinoma (NST), 6 (12%) patients are ductal carcinoma in situ, 2 (4%) patients are lobular carcinoma invasive and 1 (2%) patients lobular carcinoma in situ. No patients were diagnosed as a case of medullary, papillary and metaplastic carcinoma. Out of 50 clinically suspected breast malignancy, 5 (10%) patients were in stage-II, 7 (14%) patients were in stage-II, 27 (54%) in stage-III and 11 (22%) patients were in stage-IV. So, most of the patients were in advanced malignancy.

Involvement of breast by primary lesion, left breast malignancy were 52% and right sided carcinoma breast were 46% where as bilateral involvement were only 2%. In their series, Malik et al⁷. showed left breast involvement in 27 patients (54%) while right breast 23 (46%). This result is very much similar to my study.

The upper and outer quadrant was the commonest site of the lump in our patients 21 (42%) patients while the upper inner quadrant was involved in 12 (24%) the lower and outer in 5 (10%) and inner quadrant in 4 (8%). Malik et al⁷. in his series had 29 patients (58%) with a lump in the upper and outer quadrant and 9 had a lump in the upper and inner quadrant while 4 patients had a palpable lump in the lower and outer quadrant. There were 5 and 3 patients the upper and outer quadrant to be the dominant quadrant to have a palpable lump. About sex distribution of the carcinoma breast in this study showed only one (2%) male patients of carcinoma breast. Men have a lower risk of developing breast cancer (approximately 1.08 per 100,000 men per year), but this risk appears to be rising. Men with gvnaecomastia do not have a higher risk of developing breast cancer. There may be an increased incidence of breast cancer in men with prostate cancer. The prognosis, even in stage I cases, is worse in men than in women. The treatment of men with breast cancer is similar to that in older women. Since the male breast tissue is confined to the area directly behind the nipple, treatment for males has usually been a mastectomy with axillary surgery. This may be followed by adjuvant radiotherapy, hormone therapy (such as tamoxifen), or chemotherapy.

CONCLUSION & RECOMMENDATION

This study shows most common clinical presentation were pain in the breast, nipple retraction, ulceration over the lump, nipple discharge, skin fixation over lump, peau'd orangeand fixation of lump to chest wall. The breast is the most common site of cancer in women. The probability of developing breast cancer increases with age, throughout life. So measures aimed at early detection and proper treatment is required. Women who are at greater than normal risk of developing breast cancer, should be identified by proper health education and employing screening program by regular self examination, of breast, physical examinations by doctors. Any suspicious lesion must have a cytological diagnosis. Considering the cost benefit ratio a less expensive screening technique should be implemented. Better health education along with seminar & symposium locally or nationally and well publicity by radio, TV, newspaper, mobile phone, website and others electronic media women will more conscious and that will help then to realize about the disease.

DISCLOSURE

All the authors declared no competing interest.

REFERENCES

- Siddique, Imtiaz RM, Pattern of breast disease, preliminary report of breast clinic J Coil physician Surg. Pak. 2001; 11: 497-500.
- 2. Ghurnro AA, Khaskheli NM, Monien AA, Ansari AG, A Wan MS, Clinical profile of patient with breast cancer. J Coil physician Surg. Pak. 2002; 12: 28-31.
- 3. Yusuf A Khan JS, Bhopal FG, Iqbai M, Minhas S, Mahrnood N, et al. Level of awareness about breast cancer among females presenting to a general hosp. in Pakistan J. Coil physician Surg. Pak. 2001; 11: 131-5.
- 4. Berg JW, Hutter RV, Breast cancer 1995; 75: 25 7-69.
- Sauncliss CM, Baurnm. The breast in: Russell RCG, Willarns NS, r Buistrode CJK editors, Bailey & loves short practice of surgery 25th ed. London: Arnold 2000; 749-772.
- 6. Ahmed M, Khan AH, Mansoor A. The pattern of malignant tumours is Northern Pakistan J. Pak. Med Assoc 1991; 41: 270-273.
- 7. Malik IA, Khan WA, Khan ZK, Pattern of malignant tumours observed in the University Hospital, a retrospective analysis, J Pak Med Assoc 1998; 48: 120-122.
- 8. Rasool A, Malik KI, Luqman Ml Clinopathological study of carcinoma of breast. Pak J Med Res. 1987; 26: 135-139.
- 9. Raju GC. Jankey N. Narynsingh V. Breast disease is young west Indian Women; an analysis of 1051 consecutive cases. Posgraduate Med. J. 1985;61:977-978.
- Usmani K, Khanum A. Afzal H, Ahrned N. Breast carcinoma is Pakistani women. J Environ Pathol Toxicol oncol 1996; 15:25 1-3.
- 11. Parveen S, Shahid MA. Prognostic factors in stage-I breast cancer: a prospective study. J Pak Med Assoc. 1997; 47:117-118.

Volume 13, Issue 2, May 2014

11