

INCIDENCE OF CARCINOMA BREAST IN FEMALES PRESENTING WITH BREAST LUMPS

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Summary

It was a retrospective study carried out Dhaka Medical College and Hospital & Sir Salimullah Medical College & Mitford Hospital, Dhaka during the period of July 2003 to June 2004. Total 118 female patients presenting with breast lump were included in this study. Data was collected by directly questioning. The collected data to be collected, edited & coded. The entered data were analyzed using SPSS programme for window version 12.

Of the 118 cases studied, 31 cases (26.27%) were diagnosed as breast cancer and 73.73% were benign breast tumor. Among the benign lumps fibroadenoma was the commonest 66.67% followed by fibrocystic disease, 24.13% in this study. This could be because it present as a discrete lump in the breast and occur in young ladies, a generation which today is probably more informed and educated. In filtrating duct carcinoma 57.74% is the first frequent histological type among the carcinomatous lesions.

Significant percentage of benign breast lumps including fibroadenoma and fibrocystic disease. It is also recommended conservative option of non-excision in the reasonable expectation of reduction of the lump in women under 35 to 40 years.

Key words : Breast Lumps; in filtrating duct carcinoma; fibrocystic disease

Introduction

Breast cancer is the leading cause of cancer mortality. Breast cancer develops from uncontrolled proliferation of malignant cells resulting appearance of a lump or a mass in the breast. The uncontrolled proliferation of breast tumor cells may require surgical removal of either the lump (lumpectomy) or one or both breasts by simple or radical mastectomy. Breast cancer is predominantly disease of the female sex although in rare cases men can also develop cancer. Although women with a family history of breast carcinoma at a higher risk of developing cancer, early menarche, late menopause, a first pregnancy past 30 years of age, long-term estrogen therapy, a high fat diet are factors believed to contribute to higher incidence of breast carcinoma¹.

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 plague 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 time.^{5,6} There are considerable variation in breast cancer incidence, which is particularly low in developing countries and Japan^{7,8}. This variation may be due to social, dietary, early marriage and related other factors. Countries with traditionally low incidence, however are now experiencing the increase in new case registration.

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 in Dhaka.

Materials and methods

It is a retrospective study carried out in Dhaka Medical College and Hospital, & Sir Salimullah Medical College & Mitford Hospital, Dhaka The study period was from July 2003 to June 2004. The sample size was comprised 118 female patients presenting with breast lump. The patients with acute bacterial mastitis who were treated by incision and drainage and who had no palpable breast lump will not include in this study i.e. the patients were selected by inclusion and exclusion criteria.

Research instruments include a self constructed data form consisting of details history, thorough clinical examination, investigations, stages that were done by the concerned doctors in Dhaka Medical College Hospital and SSMC & Mitford Hospital, Dhaka. A data entry proforma was prepared by the researcher himself to make the process of data collection easier & systematic.

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The researcher himself attended the selected hospitals & data were collected by using data preformed data collection proforma. After collection the data was checked, verified, edited manually for consistency to reduce error. Descriptive & graphical method has been used in analyzing the data. The important variables has been considered & analyzed to fulfill the objective of the study. The result has been calculated from the tabulated column, the result has been expressed according to the obtained information.

Results

Table I: Distribution of patients by age group

Age in year	No. of patients (n=118)	Percentage (%)
11-20	42	35.59
21-30	33	27.97
31-40	22	18.64
41-50	18	15.28
51-60	3	2.55%
Total	118	100

Table II: Incidence of benign and malignant cases

Cytological/histological diagnosis	No. of patients (n=118)	Percentage (%)
Benign	87	73.73
Malignant	31	26.27
Total	118	100

Table III: Histological type of benign lesions

Histology type	No. of patients (n=87)	Percentage (%)
Fibroadenoma	58	66.67
Fibrocystic disease	21	24.13
Duct papillooma	2	2.30
Chr. Non specific mastitis	4	4.60
Chr. Granulomatus matitis	1	1.15
Galactocoele	1	1.15

Table IV: Histological type of carcinoma breast lump

Histological type	No. of patients (n=31)	Percentage (%)
Infiltrating duct carcinoma	21	57.74
Mucinous carcinoma	4	12.90
Madulary carcinoma	1	3.23
Tubular carcinoma	1	3.23
Papillary carcinoma	1	3.23
Malignant phylloides tumor	1	3.23

Table V: Carcinoma involved the quadrant of the breast

Quadrant involved	No. of patients (n=31)	Percentage (%)
Upper and outer quadrant	15	48.71
Lower and outer quadrant	2	6.61
Upper and inner quadrant	7	22.58
Lower and inner quadrant	2	6.61
Central	4	13.22
Whole breast	1	3.35

Discussion

There is very small data from local study where attempt was made to find out the incidence of breast carcinoma with their presenting features among the patients presented with breast lump. Due to social circumstances and unawareness about the nature of the disease, early diagnosis of the disease, is seriously interfered. This study conducted among 118 cases who are admitted in different surgical units of Dhaka Medical College Hospital and SSMC & Mitford Hospital, Dhaka, during the period from July 2003 to June 2004. Of the 118 cases studied, 31 cases (26.27%) were diagnosed as breast cancer and 73.73% were benign breast tumor.

The incidence for malignancy in the present work 26.27% is little higher but comparable to those reported in studies i.e. 26% reported by Usmani¹⁰ in Pakistan and 24.8% by Chaudhury¹¹ in India. This figure are much higher than those observed in the Western and developed countries i.e. 19.6% observed at Australia by Fleming et al¹². The higher incidence in this work compare to the western world suggest a greater incidence of breast cancer in the population of the patient presenting to our hospitals. A significant patient's population is illiterate or poorly educated and has a poor awareness of breast cancer by virtue of Islamic beliefs, modest and poor awareness, patients with breast lumps keeps hiding the lesion and only present to the surgeon, when significant symptom is produced such as pain, discomfort, skin changes or an increase in size of the lump¹³. These reasons and little data could be basis of higher incidence of carcinoma observed in our country as compared to the west.

Among the benign lumps fibroadenoma was the commonest 66.67% followed by fibrocystic disease, 24.13% in this study. The incidence among the benign lumps 66.67% is much higher than most study in the literature i.e. 34.5% Ciatto¹⁴, 25% by Donegan 23%¹⁵, 1% Lacquement¹⁶. This could be because it present as a discrete lump in the breast and occur in young ladies, a generation which today is probably more informed and educated.

In infiltrating duct carcinoma 57.74% is the first frequent histological type among the carcinomatous lesions. The said frequency is lower in the figures reported in literature 67.9% at US by Berg et al¹⁷, 74.6% Cotran¹⁸ 65-80% by Haries¹⁹.

Conclusion

In the present study the incidence of diagnosis a lump as malignant in women were >30 years of age negligible. Moreover a significant percentage of benign breast lumps including fibroadenoma and fibrocystic disease have been reported to regress with age. It is also recommended conservative option of non-excision in the reasonable expectation of reduction of the lump in women under 35 to 40 years. Hence in these ages the surgeon can rely on his clinical judgment and reassure the patients after a negative diagnosis of carcinoma on FNAC and ask her for repeated follow up.

Disclosure

All the authors declared no competing interests.

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