

EXPERIENCE OF BREAST CLINIC IN A TERTIARY LEVEL HOSPITAL

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Abstract:

Background: Breast cancer is the second leading cancer worldwide (2089 million new cases per year, 11.6%) after lung cancer and 5th most leading cause of death (6.6%). The breast clinic concept is to set up a center of a cohesive group of dedicated breast cancer specialists working together as a multidisciplinary team with access to all the facilities required to deliver high-quality care throughout the breast cancer pathway. The guidelines note that these professionals do not necessarily have to be based in one location but do need to be in the same geographical area and able to carry out close multidisciplinary work. To provide uniform management of breast diseases, hospital-based breast cancer screening, and properly manage breast cancer patients, we restarted this breast clinic weekly on Thursday in the Outpatient Department of Surgery in Dhaka Medical College Hospital, 2018.

Method and Materials: A 1 year observational study was done from 1st August 2018 to 31st July 2019. All female patients having breast problems are included in this study by purposive sampling technique. The total number of patients was 620. A database kept using a registrar book, Microsoft Excel, and documents.

Results: Out of 620 patients, 26% presented with mastalgia, 50% with a breast lump, 15% with Fibrocystic changes, 4% with nipple discharge, 2 cases with duct papilloma, 2% duct ectasia, and 4% with others. Among the breast lumps, 42% presented with different stages of Carcinoma Breast, 32.4% with Fibroadenoma, 4% with galactocele, 8% breast abscess, 2% with breast TB, 9% with Chronic breast abscess including Granulomatous mastitis.

Conclusions: Females are half of the total population, but attention to their problems is not given to that much extent. Therefore, they often presented their symptoms lately. Though mastalgia is a rare symptom of breast cancer, patients are over-conscious regarding breast pain. In contrast, a painless malignant lump grows in its pattern and advances to the T3-4 stage at the presentation time. So providing comprehensive breast care as well as screening with multidisciplinary experts and equipment is a burning need for every tertiary-level hospital.

DOI: <https://doi.org/10.3329/jdmc.v31i1.65474>
J Dhaka Med Coll. 2022; 31(1) : 93-97

Background:

Breast cancer is the second leading cancer worldwide (2089 million new cases per year, 11.6%)[1] after lung cancer and 5th most leading cause of death (6.6%)[1]. Among women, it is the most common cause of cancer (24.2%) and the leading cause of death (15%).¹ In Bangladesh, Breast cancer new cases per year

are 12,764(8.5%), ranking 3rd among men and women after Ca Oesophagus, and death per year due to Ca Breast is 6,846(6.3%), ranking 4th among all cancer deaths.¹ The breast clinic concept is to set up a *center of a cohesive group of dedicated breast cancer specialists working together as a multidisciplinary team with access to all the facilities required to deliver high-quality*

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Received: 22-02-2022

Revision: 15-03-2022

Accepted: 12-04-2022

care throughout the breast cancer pathway.² The guidelines note that these professionals do not necessarily have to be based in one location but do need to be in the same geographical area and able to carry out close multidisciplinary work. Further, the guidelines list no fewer than 16 types of professionals that should make up a team, including radiologists, radiographers, pathologists, surgeons, reconstructive surgeons, medical oncologists, radiation oncologists, breast nurses, data managers, geneticists, psychologists and physiotherapists.² It is recommended that mammography screening services be part of or closely located with breast units, partly because of the pivotal role that radiologists play in screening and symptomatic imaging and the convenience for women of a seamless service.

A tertiary-level hospital like Dhaka Medical College Hospital provides almost all the facilities and departments to start a breast clinic under one umbrella. Therefore, to provide uniform management of breast diseases, hospital-based breast cancer screening, and adequately manage breast cancer patients, we restarted the breast clinic weekly on Thursday in the Outpatient Department of Surgery in Dhaka Medical College Hospital since 1st August 2018. We have been attending it thrice weekly (Sun, Mon, Tues) for the last two months.

Materials and Method:

It is a cross-sectional observational study. The study was carried out in the breast clinic at Surgery Outpatient Department, Dhaka Medical College Hospital, from 1st August 2018 to 31st July 2019. We included female patients of all ages with breast problems who attended the breast clinic. The total number of patients was 620. The sample was selected by purposive sampling technique. The database kept using registrar book, Microsoft word, and excel.

Statistical Analysis of Data:

We compiled all the collected data. We expressed the qualitative data as frequency and percentage and the quantitative data as mean (standard deviation). The statistical analysis was done with Microsoft Excel 2010.

Results:

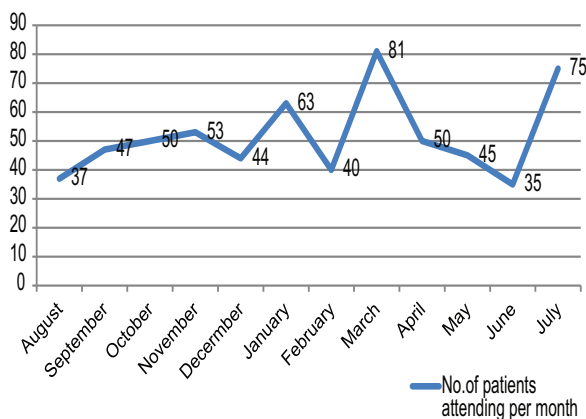


Fig.-1 : No. of patients attending per month

Figure 1 showing the number of patients attending per month in the breast clinic on weekly basis. Highest no. of patients attended in the month of March, 2019. The fluctuations were due to winter, Govt. holidays, Ramadan, Eid festival etc.

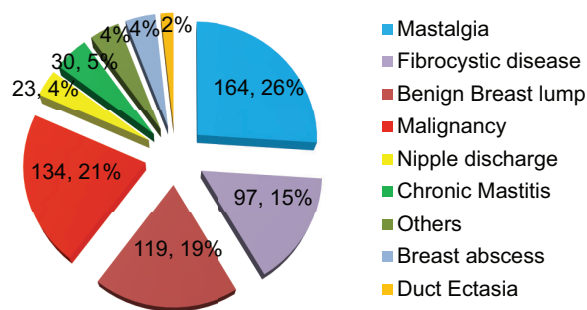


Fig.-2: Presentation of breast diseases

Figure 2 showed that out of 620 patients, 164(26%) patient presented with mastalgia, 97(15%) with Fibrocystic changes, 119(19%) with benign breast lumps, 134(21%) with different stages of carcinoma breast, 23(4%) with nipple discharge, 30(5%) with Chronic mastitis, 26(4%) with breast abscess, 8(2%) with duct ectasia and 4% others including engorged breast, cracked nipple etc.

Figure 3 revealed the age distribution of breast symptoms. Out of 620 , most of the patients 391 (63%) came between age range of 21-40 year followed by 123 cases of 41-60 age group. 85 cases were below 20 years including 1 case was of 19 months and 1 case of 2-year-old female child, rest of them in between 9 – 20 year of age. We found 2 cases of above 80 year of age.

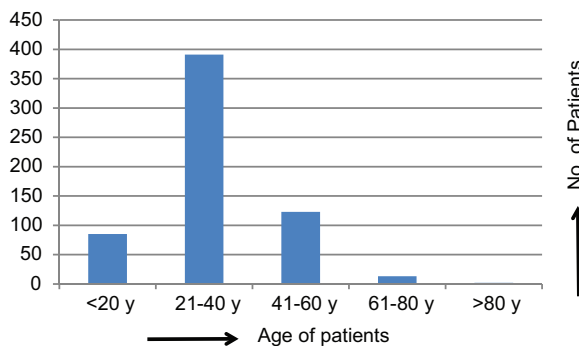


Fig.-3: Age distribution of breast symptoms

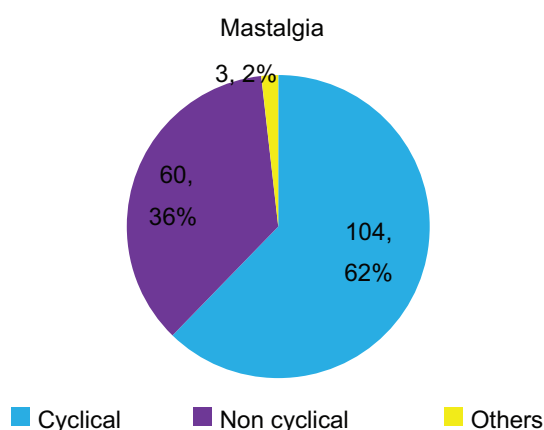


Fig.-4A: Pattern of Mastalgia

Figure 4A showing that among 164 patients with mastalgia, 104 (62%) presented with bilateral cyclical mastalgia and 36% with noncyclical mastalgia and 2% with other causes including Teitz syndrome, musculoskeletal pain etc.

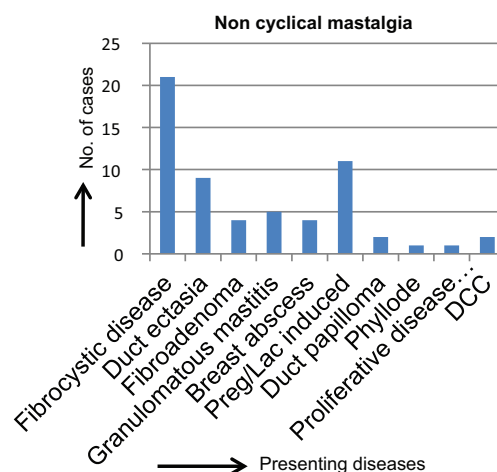


Fig.-4B : Presentation of non cyclical mastalgia

Figure 4B reveals the causes of Noncyclical mastalgia where Fibrocystic changes was 21(36%) followed by pregnancy / lactation induced mastalgia 11, duct ectasia 9, fibroadenoma 4, Granulomatous mastitis 5, breast abscess 4, duct papilloma 2 cases, Phyllode tumour in1 case, proliferative lesion with atypia in 1 case and Duct Cell Carcinoma found in 2 cases.

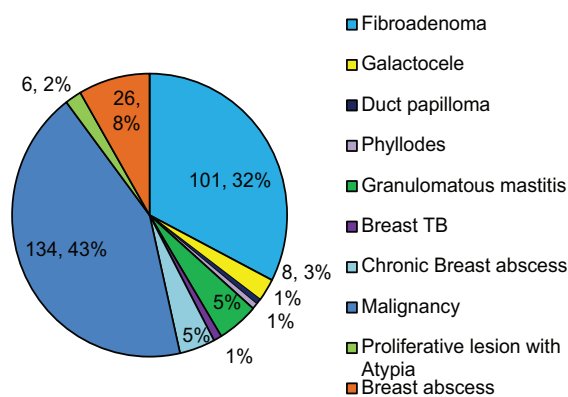


Fig: 5 : Pattern of breast lump

patients with Fibroadenoma, 134 (47%) patients presented with different stages of Ca breast, 8(3%) cases galactocele, 1% phyllode tumour, 1% duct papilloma, 5% with granulomatous mastitis, 5% Chronic breast abscess, 1% breast TB and 6(2%) cases with proliferative lesion with atypia.

Figure 5 showing the different pattern of breast lump presented at clinic. Out of total patient presented with breast lump(350), 101(35%)

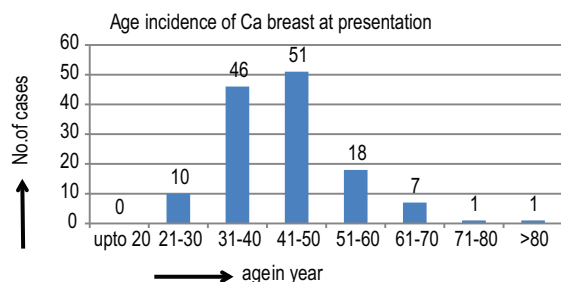


Fig.-6: Age incidence of Carcinoma Breast at presentation

Figure 6 revealing age incidence of Carcinoma Breast where it is seen that the highest peak of incidence is in age range of 41 – 50 year followed by 31 – 40 year. 1 case found over 80 year and nil found upto 20 year of age.

- No. of patients required admission : 120
- No. of Core biopsy taken as OPD basis : 100
- No. of abscess aspirated : 17
- No. of patients improved by conservative treatment for painful breast lumps (Abscess, periductal mastitis, chronic breast abscess, granulomatous mastitis etc) : 26
- No. of Fibroadenoma excised as OPD basis: 90
- No. of patients of carcinoma breast referred for NAC(Neoadjuvant chemotherapy) : 50
- No. of patients dropped out : 239

Discussion:

Breast pain is a common problem in the setting of both primary care and breast clinics. Some researchers have found it to be more common than breast cancer as a presentation.³

In this study, the patients with breast pain had a mean age range was 21-40 years, 61% had cyclical mastalgia and 37% had non-cyclical mastalgia. But in Australia, Wetzig noted that the patients with breast pain had an average age of 42 years, cyclical pain occurred in 59.0%, and unilateral pain occurred in 38.0%⁵ which was quite similar to our study⁴. Whereas in a Nigerian study, the mean age was 33.7 years, 24.4% had cyclical pain, and 75.6% had unilateral pain.⁵

In this study, out of 97 cases of FCC, 21 cases presented with cyclical mastalgia and 22(36%) patients presented with noncyclical mastalgia mostly unilateral. Ochonma et al showed in their study, fibrocystic changes in 31 (24.4%) cases, but cancer in 28 (22.0%)⁵ cases presented with unilateral mastalgia. Whereas in our study, out of 36% noncyclical mastalgia, 2 patient diagnosed histologically as DCC and 1 patient as proliferative lesion with atypia. But none of them presented solely with pain, they had lumps in their breasts, too. Ochonma et al also showed in their study that no diagnosis of breast cancer was made in the absence of a palpable breast lump in addition to the pain as a presenting complaint.⁵

In this study, Fibroadenoma was the most frequently diagnosed benign lesion (101,35%), followed by fibrocystic change which was also supported by the study of Christopher et al.⁶ Nipple discharge is benign in most instances and is the third most common breast-related complaint, after breast pain and breast mass.⁷ Here, nipple discharge were found in 23(4%) cases out of which duct papilloma found in 2 cases, 1 case was DCIS and 1 case diagnosed later as invasive duct cell carcinoma of breast. Rest of the cases of nipple discharge were due to benign causes mostly due to hyperprolactinaemia 8(34%) followed by 4 cases due to Fibrocystic changes and 4 cases due to Duct ectasia. However it is very much co-existent with the article of James E Devitt where it is shown that of 249 patients with nipple discharge, breast nodularity and duct ectasia was the cause in 75% and only 4% of all the patients with nipple discharge had an associated breast cancer.⁸

Regarding Chronic mastitis, out of 310 patients with breast lump, 31(10%) cases presented with Chronic mastitis. Among which, 15 patient presented with Granulomatous mastitis, 3 cases with Breast Tuberculosis and 13 cases with chronic breast abscess due to other causes. 26 (8%) cases presented with Acute Breast Abscess.

Regarding carcinoma breast, highest no. of patient presented between 41-50 years (51, 38%) followed by 31-40 years (46, 34%). Therefore, almost 72% patients presented

between 31-50 years. In Asian countries, peak age incidence of Ca breast is 40-50 years and in India, it peaks between 45-50 years as compared to 61 years in the Western literature.⁹ As Asian females have more dense breasts, it is thought to be the cause of carcinoma breast presenting at a decade earlier than western countries. Regardless of menopausal status, breast cancer risk in Asian women increased with breast density measured using PD (percent density).¹⁰

Limitations:

- About 40% patient dropped out regarding follow up.
- Inadequate manpower for this service
- Computerized software database is required for further research and analysis.
- Breast clinic conducted weekly. So it was not possible to cover total bulk of patients presented with breast symptoms throughout the week.

Conclusions:

Females are half of the total populations, but attention to their problems are not given that much extent. Therefore, they often presented to their symptoms lately. Though mastalgia is a rare symptom of breast cancer, patients are over conscious regarding breast pain whereas painless malignant lump grows in its own pattern and advances to T3-4 stage at the time of presentation. So providing a comprehensive breast care as well as screening with multidisciplinary experts and equipment is a burning need for every tertiary hospital.

Conflicts of interest: No conflicts of interest

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