

Frequency of Various Breast Disorders Presenting in HBS Hospital: A Local Experience

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ABSTRACT

Objective: To determine frequency of different breast disorders in female patients of varying age groups presenting to HBS Hospital Islamabad.

Study design: A prospective descriptive study

Place and duration: This study was conducted in department of General Surgery HBS Hospital from 1st May 2019 to 31 Dec 2021.

Methodology: All female patients presenting to surgical OPD and indoor department from 1st May 2019 to 31 Dec 2021 for different breast diseases with no age limitation were included in the study. Data of the patients as age at presentation, symptoms, clinical features, and risk factors, investigations as ultrasound and specimen reports if any were recorded and submitted for histopathology analysis.

Results: A total of 225 female patients were included in the study. Frequency of the disorders was as follows. Fibroadenoma breast presenting as lump breast was found in (n=69) followed by cyclical mastalgia (n=62), breast abscess (n=27), duct ectasia (n=18), carcinoma breast (n=13), sebaceous cyst breast (n=9), mastitis (n=8), cracked nipples (n=8), non-cyclical mastalgia (n=4), galactorrhea (n=3), breast budding (n=1), phylloides tumor (n=1), blood stained nipple discharge (n=1) and nipple eczema (n=1) in frequency. Age of patients ranged from 9-85 years with mean age 51.5 years.

Conclusion: Fibroadenoma is the commonest disease but the pattern is rapidly changing towards fibrocystic disease especially in young females. Incidence of Inflammatory disease increases in peak reproductive age group. Carcinoma breast presents late in our setups.

Keywords: Breast Lump, Breast Disease, Carcinoma Breast, Fibroadenoma Breast

INTRODUCTION

Breast is a dynamic gland that undergoes physiological changes throughout reproductive years of a female. Due to ever dividing gland the changes lead to various clinical presentations of benign breast disorders that are associated with menstrual cycle. Some of these are in the form of increased size with lumpiness and cyst formation that occurs due to regression of these lumps with onset of menstrual cycle.

The patient's presentation varies and maximum cases that are seen are due to benign pathology in OPDs¹. The patients are worried about their symptoms and presume them to be cancer. Malignancy patients present at late stages as disease is painless and there are social circumstances, conservative background, and shyness of the patient with poor socioeconomic status in Pakistan. Many of the patients with lumps go to faith healers and are afraid of biopsy even for the benign lumps because of myths of getting cancer after being biopsied.

Nowadays public awareness is increasing through media communication and different breast clinics are established in public and private setups. This has led to early breast examination of patients. Breast lump is most common clinical feature seen in patients. More than 60% lumps are benign as seen in study in Lahore¹ and rest of the lumps are malignant.

Histologically benign lumps have fibroadenoma, fibrocystic disease two main entities². Some found breast abscess to be 2nd common benign disorder³.

Prevalence of breast cancer in Pakistan is high with every one in nine patients suffering from it^{2,3}. There is a need to address the breast disorders like lumps. Most of the patients unaware of the outcomes ignore them until they spread and present late.

Our main objective was to note how many patients with benign and malignant breast disorders report in our setup.

METHODOLOGY

This prospective descriptive study was conducted in HBS Hospital Islamabad. HBS Hospital is a tertiary care setup catering all

patients from peripheral area of Lehtrar road and suburbs. This study was conducted from 1st May 2019 to 31 Dec 2021 for breast diseases after approval by Hospital Ethical Committee. All female patients, irrespective of their age operated for breast diseases or presenting in OPD were included in the study.

The symptoms of patients as lump, pain, nipple discharge, redness, pus ooze, and nipple with skin changes and palpable axillary lump were recorded on proforma along with relevant detailed history points taken. Examination was performed by single Assistant Professor and findings were recorded.

Patients were sent for breast ultrasound performed by a consultant radiologist in radiology department and features on ultrasound with BIRADS (Breast Imaging Reporting and Data System) grade noted. If there was any finding suspicious clinically or sonological evidence of suspicion, biopsies were performed. Counseling of patients was done for follow up and breast self-examination was taught to each patient having benign breast disorder.

Data of all patients operated or managed conservatively for breast diseases was collected from the clinical files and outpatient register. Age at presentation symptoms, clinical features of patients, results of investigations, operative findings and specimen reports from histopathology and cultures were recorded on designed forms and tabulated. All the data was collected and results were interpreted and submitted for analysis. Mean, frequency and percentage were analyzed through standard statistical methods of SPSS 22.

RESULTS

A total of 225 female patients were included in the study. Frequency of the disorders was as follows. Fibroadenoma breast presenting as lump breast was found in n=69(30.6%) followed by cyclical mastalgia(n=62 (27.5%), breast abscess n=27(12%), duct ectasia n=18(8%), carcinoma breast n=13(5.7%), sebaceous cyst breast n=9(4%), mastitis n=8(3%), cracked nipples n=8(3%), non-cyclical mastalgia n=4(1.7%), galactorrhea n=3(0.8%), breast budding n=1(0.4%), phylloides tumor n=1(0.4%), blood stained

nipple discharge n=1(0.4%) and nipple eczema n=1(0.4%) in frequency with percentage mentioned Table 1. Age of patients ranged from 9-85 years with mean age 51.5 years in Table 2.

Table 1: Frequency of Breast Disorders with Percentage

Disease	No. of Patients n=225	Percentage
Mastalgia Cyclical	62	27.5%
Fibro adenoma	69	30.6%
Breast abscess	27	12%
Duct ectasia	18	8%
Sebaceous cyst breast	9	4%
Breast budding	1	0.4%
Mastitis	8	3%
Carcinoma breast	13	5.7%
Breast eczema	1	0.4%
Phylloides tumor	2	0.8%
Galactorrhoea	2	0.8%
Mastalgia Non Cyclic	4	1.7%
Blood stained nipple discharge	1	0.4%
Cracked Nipples	8	3%

Table 2: Age Distribution of Patients

Age Distribution	No. of Patients	Percentage
<10 years	1	0.4%
11---20 years	27	12%
21---30 years	81	36%
31---40 years	72	32%
41---50 years	27	12%
51---60 years	9	4%
61---70 years	5	2.2%
71---80 years	2	0.8%
>80 years	1	0.4%
Total	225	100%

DISCUSSION

There were 190 Fibroadenoma, 81 fibrocystic diseases,64 breast abscess, 12 granulomatous mastitis, 7 lipoma, 5 phylloides tumors and 4 fibrosis cases noted in this study from Lahore. Fibrocystic disease is found in about 21 to 30 year age range while fibroadenomas in elder age groups¹.

Histopathologically 85.2% lesions were benign and 14.8% were malignant in specimen studied in Lady Redding Hospital Peshawar². Fibroadenomas were top on list 66.1% in 2nd to 3rd decade followed by fibrocystic changes 15.7%.

36.4% fibroadenomas followed by breast abscess 23.76% were found in a study at Cantonment General Hospital Rawalpindi³. Cancer breast in 11.8% patients was noted^{3,4}. Another study showed 63.2% fibroadenomas⁴. Fibroadenomas were 46.5% while cancer breasts were 34.5% which is very high frequency noted in any study from Islamabad⁵. A study with 42.5% fibroadenomas, 25% fibrocystic lesions,12.5% breast abscess and 20% cancer breasts⁶ most of them presented in stage 3 & 4. A study by Usman 51% fibroadenomas, 12.5% cancer breasts,11.6% breast abscess and 10.8% fibrocystic lesions were noted⁷. Spectrum of benign breast disorders elaborated by Vimal & Colleagues was studied and among them 55.4% were fibroadenomas and 27% fibrocystic changes⁸. Hemrajani⁹ noted 52.4% fibroadenomas, granulomatous mastitis 7.06% with 0.6% fibrocystic diseases. Jain 57% fibroadenomas, 20% malignant lesions were noted¹⁰. Karia noted (36.3%) had malignant disease, seventy patients (57.8%) had benign breast disease¹¹. Rajkumar studied breast disorder and saw 78.9% fibroadenomas, 1.3% mastitis/ duct ectasia each in this study¹². Hatim¹³ found

fibroadenomas in (77.62%), followed by fibrocystic disease (4.3%) and gynaecomastia (4.3%). Kumar¹⁴ only studied different fibroadenomas in his study and recorded fibroadenoma breast which was present in 35 patients (35%), 25 patients (25%) reported to have fibroadenosis, and 8 patients (8%) had giant fibroadenoma. Mahadani noted benign disorder in 39 patients and cancer breast 29 cases¹⁵. A total of 170 (56.3%) out of 302 patients examined had benign lumps; the remaining 132 (43.7%) patients harbored malignant lumps noted by Ogwu-Olisa¹⁶. Pace & colleagues saw in their study 67% of patients were consistent with mass-forming lesions (with fibroadenoma being the most common), 11% reflected inflammatory processes, 6% reflected pregnancy- or lactation-related changes, and 16% were nonspecific, including normal breast tissue in 10%¹⁷.

CONCLUSION

So overall studies done on breast disorders find more of benign diseases and low number of malignant cases and are comparable to our study.

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