PATTERN OF BREAST DISEASE PRESENTATION IN CANTONMENT GENERAL HOSPITAL (CGH) RAWALPINDI

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ABSTRACT

OBJECTIVE: To determine the pattern of breast disease presentation in different age groups presenting to Cantonment General Hospital Rawalpindi.

STUDY DESIGN: A retrospective descriptive study

Place and Duration: Conducted at Department of General Surgery, Cantonment General Hospital Rawalpindi from 1st January 2005 to 31st December 2010.

METHODOLOGY: All patients operated during the study period from 1st January 2005 to 31st December 2010 for breast diseases irrespective of their age and sex were included in the study. Exclusion criteria were non availability of histopathology or culture reports in the patient's files. Age at presentation Symptoms, clinical features, investigations, operative findings and specimen reports were recorded and submitted for analysis.

RESULTS: A total of 362 patients were included. Fibro adenoma was the commonest (36.46%). Breast abscess (23.76%) was the 2nd commonest and fibrocystic disease (20.17%) was the 3rd common disease in our study. Carcinoma breast was the 4th common disease (11.88%) found in females. Lump breast was the most common symptom present in 310 (85.16%) patients. Pain in the breast was found in 59.66%, while pain and lump were present in 40.60% of patients. Among carcinoma breasts, intra ductal carcinoma was the commonest (67.44%) with the mean age of 43 years followed by malignant phylloides tumour (16.28%) with the mean age of 39 years.

CONCLUSION: Fibro adenoma 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, Fibro Adenoma Breast

INTRODUCTION

Breast is a dynamic structure which passes through the continuous physiological changes in a female's life. Our outpatient clinic has a significant number of females presenting with variable breast problems. Most of the females presenting with breast diseases have benign diseases but they assume the worst[1]. Breast diseases make a sizeable portion of the general surgical practice in our setup. Benign breast diseases are far more common than the malignant one and malignancy of breast presents usually in late stages[2]. Large portion of patients presenting with breast diseases are treated by surgery[3]. The awareness about breast diseases is very low and needs to be improved by increasing the breast clinics and mass media education[4]. Breast lump is the commonest clinical feature of breast diseases. Over 60% of breast lumps are benign and breast pain is statistically significant in malignant breast disease[5]. Moreover pattern of breast lump is changing in females from fibro adenoma to adenosis and fibrocystic diseases[6]. In our study we also involved the gynecologist as majority of breast diseases presented with pregnancy and lactation were inflammatory and infectious. However carcinoma is not a rare entity, therefore any woman presenting with breast lump should be thoroughly investigated following the principles of triple assessment[7]. So any patient presenting with palpable breast lumps should preferably be managed by surgeon with special interest and training in breast diseases[8]. Therefore we decided to study the pattern of breast diseases in different age groups in our own setup and to evaluate pitfalls in our system of management.

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METHODOLOGY

This retrospective descriptive study conducted at Department of General Surgery, Cantonment General Hospital Rawalpindi. Duration of the study was from 1st January 2005 to 31st December 2010. All patients, irrespective of their age and sex operated for breast diseases were included in the study. Data of all patients operated for breast diseases was collected from the clinical files. Exclusion criteria were non availability of histopathology or culture reports in the patient's files. Age at presentation, Symptoms and clinical features of patients ,results of investigations, operative findings and specimen reports from histopathology and cultures were recorded on a pre designed forms and tables. All the data was collected and results were interpreted, discussed and submitted for statistical analysis. Mean, Frequency and percentage were analyzed through standard statistical methods of SPSS 20.

RESULTS

We included a total of 362 patients and out of these patients, 132 (36.46%) were having fibro adenoma, being the most common disease. Breast abscess was found in 86 (23.76%) patients so the 2nd commonest and fibrocystic disease found in 73 (20.17%) patients was the 3rd common disease in our study. Carcinoma breast was the 4th common disease found in 43(11.88%) females presenting with breast diseases in our setup (Table I). Gynaecomastia was found in 9(2.49%) male patients, out of which four had bilateral disease. No patient of carcinoma breast was found in males. Mammary duct blockage was found in 3(0.83%) patients, intraductal papilloma in 2(0.55%) and ductal ectasia in 2(0.55%) patients. Benign phylloides disease was found in 3(0.83%) cases. Breast ulcer was found in 2(0.55%) cases, which proved out to be benign.

Lump breast was the most common symptom present in 310(85.16%) patients. Pain in the breast was found in 216 (59.66%) patients, while pain and lump were present in 147(40.60%) patients. Pain, lump and redness over the breast skin was found in 83 (22.92%) patients, mostly in cases of breast abscess and mastitis (Table II). Lump in the contra lateral breast was found in 42(11.60%) patients as well but all were benign, mostly fibro adenomas, fibrocystic disease and gynaecomastia. Nipple retraction and discharge was found in only 21(5%) cases when both combined. Among carcinoma breast, intra ductal carcinoma was the commonest found in 29 (67.44%) patients with the mean age of 43 years. Malignant phylloides tumour was found in 07 (16.28%) cases with the mean age of 39 years. Lobular carcinoma had mean age of 48 years and was present in 04 (9.3%) of cases. Paget's disease was found in 3(6.98%) cases with younger mean age of 34 years and aggressive progression (Table III).

By looking into the age distribution, 2nd and 3rd decade had more than 50% of the patients. Most of these patients were having fibro adenoma and fibrocystic disease. 3rd and 4th decades had breast abscesses in common (Table IV). Carcinoma Breast had a tendency to start at the end of 4th decade to the mid of 6th decade. Breast carcinoma in stage 3 was the most common found in 28(65.1%) patients, followed by 11(25.6%) cases of stage 4 and 4(9.3%) cases of stage 2. No case of stage 1 was found in our study.

TABLE - I: FREQUENCY AND PATTERN OF BREAST DISEASES (n=362)

Disease	No. of Patients	Percentage
Fibro adenoma	132	36.46%
Breast abscess	86	23.76%
Fibrocystic disease	73	20.17%
Carcinoma breast	43	11.88%
Gynaecomastia	09	2.49%
Mastitis	07	1.93%
Phylloides disease	03	0.83%
Mammary duct blockage	03	0.83%
Intraductal papilloma	02	0.55%
Breast ulcers	02	0.55%
Duct ectasia	02	0.55%
Total	**362**	**100%**

TABLE – III: FREQUENCY OF CARCINOMA BREAST (n=43)

Types of Carcinoma	No. of Patients	Percentage	Mean Age
Intra ductal carcinoma	29	67.44%	43 years
Malignant phylloides tumour	07	16.28%	39 years
Lobular carcinoma	04	9.30%	48 years
Paget,s disease	03	6.98%	34 years

TABLE - II: FREQUENCY OF SYMPTOMS OF BREAST DISEASES (n=362)

Symptoms	No. of Patients	Percentage
Lump breast	310	85.16%
Pain breast	216	59.66%
Pain+lump breast	147	40.60%
Pain+lump+redness of skin over breast	83	22.92%
Lump in the other breast	42	11.60%
Nipple retraction	13	3.59%
Nipple discharge	8	2.20%

TABLE - IV: FREQUENCY OF LUMP BREAST IN DIFFERENT AGE GROUPS (n=362)

Age Distribution	No. of Patients	Percentage
0----10 years	02	0.55%
11---20 years	63	17.40%
21---30 years	175	48.34%
31---40 years	49	13.54%
41---50 years	45	12.43%
51---60 years	20	5.53%
61---70 years	8	2.21%
Total	**362**	100%

DISCUSSION

Breast disease seems to be very common in our females and equally frightening for the patient and family. Though 80% of our patients in the study belonged to urban area, awareness and education about the breast disease was substandard. By studying data about duration and size of the disease, it was evident that social embarrassment about the expression of the disease was overwhelming the need for early cure.

In our study fibro adenoma was the commonest among breast disease followed by the breast abscess, fibrocystic disease and carcinoma breast. Our results were comparable to usman[9] and colleagues. In his study benign to malignant disease ratio were 4 to 1, most common presentation was the breast lump and commonest disease was fibro adenoma (50.4% in 2nd to 3rd decade). Breast abscesses were more common in peak

reproductive period (68.75%) in age group of 21 to 30 years. This signifies lactating ladies need improvement in hygiene as well as nutrition for good immunity. Results of Fatima[1] and colleague were even closer to our study. In their study benign to malignant ratio was 9:1 as compared to our result of 8.4:1.

In a study conducted by Hussain[10] and colleagues, 54% of the patient had benign lumpy disease and 21.8% had inflammatory lesions. Both findings were comparable to our study but they found 24.1% of malignant lesions which is a higher observation as compared to our study. Zafar[2] and colleagues concluded that benign lesions are far more common than malignant one and malignant lesion also present late, a finding similar to our results.

Comparing international studies, if we look in to the fadwa, s study[11], conducted in the Middle East, showing comparable results for fibrocystic disease to our study but findings for carcinoma breast were towards much higher side (28.4) % as compared to our results (11.88%). In a study conducted in Nigeria by Ayode[12] and colleagues, breast lump was the commonest clinical feature and over 60% of these were benign and breast pain was statistically significant presentation with malignant breast disease. Jabbo[13] and colleague documented that 83.3% patients presented with breast lumps and themean age at presentation was 35.39 years with a peak incidence in the 4th decade. Fibro adenoma was the commonest disease (61.4%) followed by fibrocystic changes (9.65%) and inflammatory disease (7.87%). His findings differ from our study in respect that we had a peak in the 3rd decade. Fibro adenoma was commonest (36.46%) in our study but far less in number in comparison. Presentation of lump breast was almost equal. Chaudhry[14] and colleagues documented that fibrocystic disease (26.92%) was more common than the fibro adenoma (23.50%). These findings are contradictory to our findings though both studies are conducted in the same region but with different catchment areas. Study conducted by Isaac[15] and colleagues had shown even more contradictory results. They documented that carcinoma breast (30%) is the commonest followed by the inflammatory (25%), fibro adenoma (24%) and fibrocystic disease (20%). In his study incidence of inflammatory and fibrocystic disease was comparable to our findings but incidence of carcinoma was much higher, compared to the world standards and other standards in our country. His study is also supported by another study by khan[16] and colleague, showing a higher incidence of carcinoma breast (31.3%). So the rate for female breast lesions varied in different studies but benign fibro adenoma is the most common breast lesion and the mean age for malignant lesions in seven different countries came out to be 44.05%[17]. Al awadi[18] and colleague in his cancer control centre study showed mean age of carcinoma to be 50 years as compared to our finding of 43 years. Our study had much closer results to a study conducted in Nepal by Khan[19] and colleague who stated that benign breast disease is the commonest and among them fibro adenoma is the commonest. His results for fibro adenoma (32.57%) and breast abscess (24.19%) are much closer to our study. Moreover peak age range for breast lesions was also in 3rd and 4th decade, a finding that supports our results.

CONCLUSION

Fibro adenoma 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. We need to improve hygiene during lactation and develop specialized breast clinics and screening centers for early detection of breast cancers.

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