

# BREAST DISEASES;

## Pattern in a general hospital

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**ABSTRACT...Objective:** To determine pattern of breast diseases presenting in the surgical OPD of a General hospital. **Design:** A prospective observational study. **Place & duration of study:** The study was conducted at Railway hospital, Rawalpindi from September 2008 to February 2010. **Patients & Methods:** Female patients presenting with complaints regarding breast were recruited in the study. All of them underwent clinical breast examination followed by necessary radiological and / or histopathological investigations to diagnose the disease. Data regarding personal information, clinical examination findings and results of investigations done was collected on a proforma. Results mainly as frequencies were analyzed using software SPSS 16.0. **Results:** A total of 207 female patients presented in the OPD with breast complaints. 15 patients were lost to follow up before a definitive diagnosis could be made; therefore they were excluded from the study. Out of 192 patients 21.9% had mastalgia followed by fibroadenoma (19.3%), breast abscess (15.6%), carcinoma breast (13.5%), fibrocystic disease (6.25%), duct ectasia (5.7%), acute mastitis (4.7%), no disease (4.2%), nipple eczema (2.1%). Benign phylloides tumour, chronic mastitis, prominent axillary tail, cracked nipple were each 1% and 3 patients presented with mammary fistula (0.5%), accessory nipple (0.5%), and lipoma(0.5%). **Conclusion:** Breast diseases make a sizeable portion of the general surgical practice. In our set up benign diseases are far more common than the malignant ones. Mastalgia is the commonest breast problem. Malignancy of breast presents usually in late stages.

**Key words:** Breast lump, benign breast lumps, carcinoma breast, mastalgia.

### Article Citation

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## INTRODUCTION

Breast symptoms are very common in surgical practice<sup>1</sup>. The symptoms of various breast diseases vary widely. Most of the breast diseases however are benign in nature<sup>2,3,4</sup>. Because of the increasing awareness about carcinoma breast more patients are visiting the outpatient department for breast complaints<sup>5</sup>. The actual risk of breast cancer in different regions of the world is different and in Pakistan no official data collection system exists resulting in patchy statistics from different areas of the country in the form of medical journal articles only<sup>6</sup>. It is important therefore to know the nature of breast diseases prevailing in our part of the country. Railway general hospital is situated in a thickly populated area and so far no studies have been published regarding statistics of breast diseases in this area. This study was therefore performed to document the burden of breast diseases in the area. This will serve both for more effective counseling of patients and to assess the need of specialized breast care clinic in the area. Moreover further studies can be directed to evaluate

common problems in the area.

## MATERIALS AND METHODS

This was a prospective observational study.

A total of 207 female patients presented in outpatient department from September 2008 to February 2010. Every patient underwent a clinical examination followed by ultrasound or mammogram according to the age of the patient. Fine needle aspiration cytology (FNAC) or trucut/excisional biopsies, whatever was appropriate, was performed in cases of lumps. Data was recorded regarding presenting complaints, findings of physical examination and reports of investigations. A definitive diagnosis was made in every case. Personal data including age, menopausal status, no. of children, history of breast feeding, age of menarche and menopause, history of oral contraceptives and family history was recorded in all patients.

Data was analyzed using software SPSS version 16.

Frequencies were calculated for all the different variables in the study.

## RESULTS

Total 207 patients presented with breast complaints which makes approximately 14% of the total patients seen by a single consultant at the surgical OPD of the Railway General Hospital. All patients were female.

Out of the 207 patients initially registered fifteen patients (7.2%) did not either turn up for investigations or were lost to follow up before a definitive diagnosis could be made. These patients were excluded from the study.

The ages of the patients ranged from 12 to 78 year. The mean age was  $33.28 \pm 14.6$  years.

Lump was the main presenting complaint in 61% of the patients (117 patients). However out of these 12.8% (15 patients) did not have a definite lump on examination. On further radiological investigation 13 patients were confirmed to have no solid lump while only 2 patients had non-corresponding, non-palpable lumps on ultrasound or mammographic examination of the breast. These non-palpable lumps were benign on histopathological examination.

Out of 117 patients 51 patients (43.6%) complained that they had pain or nipple discharge associated with the lump.

Regarding the definitive diagnosis out of 192, 21.9% had mastalgia only followed by fibroadenoma (19.3%), breast abscess (15.6%) and carcinoma breast (13.5%). All diagnosis are shown in table-I.

Fibroadenoma was more common in premenopausal group (96%) as was mastalgia (83%), breast abscesses (83%) and duct ectasia (63%).

Mean age of patients with carcinoma breast was 51.15 years (range: 30 - 78 years). 53.8% were T4. 11.5% were T3 while 15.4% were T2. Out of all 19.2% patients had metastasis at the time of diagnosis. Majority of the patients was post-menopausal, multiparous and had breast fed their children for more than a year. The frequency of different known risk factors for carcinoma breast in our patients is shown in table-II.

Breast disease	Number	Frequency
Mastalgia	42	21.9%
Fibroadenoma	37	19.3%
Breast abscess	30	15.6%
Breast cancer	26	13.5%
Fibrocystic disease	12	6.25%
Duct ectasia	11	5.7%
Acute mastitis	9	4.7%
Normal Breast	8	4.2%
Nipple eczema	4	2.1
Asymmetrical breasts	2	1.04%
Benign phylloides tumour	2	1.04%
Chronic mastitis	2	1.04%
Prominent axillary tail	2	1.04%
Cracked nipple	2	1.04%
Mammary fistula	1	0.5%
Accessory nipple	1	0.5%
Breast lipoma	1	0.5%

Table-I. List of breast disease n = 192

## DISCUSSION

Patients presenting with breast complaints are quite common in surgical practice<sup>1</sup>. The majority of the breast diseases diagnosed is benign and our results are no different from those reported from all over the world<sup>2,3,4</sup>. One of the reasons for increased frequency of benign breast diseases may be the increased picking up rate due to heightened awareness and presence of dedicated breast clinics in developed countries<sup>4</sup>.

Risk factors	Number (n)	Frequency
Age >40 years	20	76%
Postmenopausal	17	65.4%
Age at first childbirth above 30 years	4	15.4%
Age at menarche less than 12 years	10	38.5%
Age of menopause less than 50 years	11	42%
Number of children less than 2	2	7.7%
Nulliparous	0	0%
No history of breast feeding	3	11.5%
Duration of breast feeding less than 1 year	8	30.7%
Family history	2	7.7%
History of oral contraceptives more than one year	0	0%
History of oral contraceptives less than one year	2	7.7%

**Table-II. Frequency of risk factors in patients with breast cancer**

In our study the commonest complaint was lump which is shown in some other studies as well<sup>7,8</sup>. However clinically discernible lump is not always present in these cases. This in part can be explained by our patients' lack of familiarity with breast tissue. In our study when asked about any previous lumps palpated by the patient, majority of the patients agreed that they had never before palpated their breasts. This shows that despite the fact that the awareness and fear about carcinoma breast has increased and more patients are concerned to rule out the deadly disease still the majority is not cognizant of importance of self breast examination nor do they practice it.

Mastalgia was the most common diagnosis as many patients who had presented with complaints of painful lumps, on investigation proved to be mastalgia alone because no lumps were demonstrated on either

physical examination or ultrasound/mammogram, thereby making mastalgia as the commonest diagnosis. This is in accordance with other studies<sup>9,10,11</sup>. This again represents our patient's unawareness regarding the consistency of normal breast tissue. It also underlines the importance of counseling in patients presenting with mastalgia as the patient is actually worried about the risk of cancer and this has to be fully explained to patients after the diagnosis is made.

In our study fibrocystic change was not as common as in other studies<sup>3,8,12</sup> while the prevalence of fibroadenoma was comparable with western literature<sup>13</sup>. This is lower than the figures reported in other Pakistani studies<sup>12,14</sup>.

Acute mastitis and breast abscesses, mastalgia, fibroadenoma and fibrocystic disease were more common in premenopausal group as also proven by other studies<sup>11,14,15</sup>. The reason for this is thought to be the hormonal influence on breast during these reproductively active years of life.

Regarding size of fibroadenomas 38.7% patients had tumours less than 2 cm in size. 48% were 2-5 cm and 13% were giant fibroadenomas. This is in contrast to the study by M Kumar in which majority of the fibroadenomas were less than 2 cm in size<sup>15</sup>. Many patients had tried treatments from homeopaths and other healers before finally consulting a doctor. This indicates that our patients avoid coming to hospitals unless the lumps grow significant in size.

In our study 12.6% patients had breast cancer. There is a very wide variation in the number of breast cancer cases reported in various local studies. The percentage ranges from 6 to 33%<sup>1,2,21</sup>. The reason for this variation can be explained by retrospective nature of these studies based on in-patient records. These records cannot be representative of all the patients who present in outpatient and do not either get

admitted or refuse further treatments after diagnosis. Furthermore some studies are based on pathological specimens which would obviously miss cases in which pathology is not required for diagnosis<sup>21</sup>.

Majority of the breast cancers in our study presented with lumps. 57.7% patients had painless lumps while 23% had painful lumps. 3 patients had ulcerated lumps involving skin while one patient had a non-healing ulcer only without a palpable lump. Bony aches and pains due to bony metastasis were the mode of presentation in one patient. There was no screen detected breast cancer as in other studies<sup>12,16,17</sup>.

The commonest type of tumour was infiltrating ductal carcinoma as in other studies<sup>17,18,21</sup>. The mean age of breast cancer patients was higher than in other regional studies<sup>1,12,17</sup> but comparable to western studies<sup>5,19</sup>.

Regarding the stage of the disease majority of our patients were either locally advanced ( $\geq T3$ ) or metastatic. Five cases presented with distant metastasis at the time of diagnosis. This finding is similar to other local studies which uniformly show that our patient population presents with advanced tumours as compared to west<sup>17,18,20,21</sup>. Many social and financial factors are responsible for this late presentation in our population which put health on the least priority of the people generally. One of the factors responsible for late presentation may be the unavailability of female doctors in the society because our patients feel reluctant to get themselves examined by a male doctor. Therefore they tend to linger on with the problem as long as they can. This view is also supported by other studies<sup>22</sup>.

Regarding the risk factors for breast cancer nulliparity, oral contraceptive pills, age at first childbirth less than 30 years and absence of breast feeding were not

associated with breast cancer. Only 7% cases (2 out of 26) had significant positive family history for breast or ovarian cancer. There are variable reports by different authors on this issue. Some studies show similar results<sup>1,17</sup> while others are more consistent with western studies on the subject<sup>23</sup>. The reason for this is unknown but because our study had only 26 breast cancer patients the number is too small to be significant. Large scale studies are needed to look for breast cancer risk factors in our population. They are important for patient counseling. Patients may feel protected from cancer if they have breast fed their children which may not be the actual case. So it is very important to scientifically quantify it especially because of conflicting reports from various authors.

As supported by literature lipomas are extremely rare in breasts and the diagnosis should be made cautiously.

4.2% patients had no disease in our study. This percentage is higher than data reported by Isaac U<sup>7</sup>. This rise may signify change in Pakistan in terms of heightened awareness of breast pathologies in the community.

## CONCLUSIONS

Breast complaints are quite common in surgical practice. Majority is benign. Breast cancer presents in advanced stages in our community. There is conflicting evidence regarding significance of certain known risk factors for carcinoma breast like multiparity and history of breast feeding in our population.

## RECOMMENDATION

Dedicated breast clinics with in-house facilities for early diagnosis are needed to cater for increasing breast patients.

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He is finished when he quits.

Richard M. Nixon