Original Article

FREQUENCY OF BREAST DISEASES AT A TERTIARY HOSPITAL OF KARACHI

Usha Isaac, Farzana Memon and Nishat Zohra

ABSTRACT

OBJECTIVE: To see the pattern of breast diseases at our set up.
DESIGN: A descriptive study.
SETTING: Jinnah Postgraduate Medical Centre, Karachi - Pakistan for a period of three years.
METHODS: A total of 300 patients attending breast care clinics were evaluated. They were followed up till biopsy. All patients were females between 11-90 years of age. Majority of the patients belonged to the lower socioeconomic group. Data was collected through a specifically designed proforma.
RESULTS: Most common presenting complaint was breast lump with other symptoms. Majority presented to the clinician within 6 months of development of lump. Most of the patients were married (69%) and majority (67%) was in the reproductive age while 32% were postmenopausal. Only 1% of the patients were in premenarche age. Most common site was upper and outer quadrant of left breast. Most common breast disease was carcinoma (30%) followed by inflammatory diseases (25%), fibroadenoma (24%) and fibrocystic disease (20%). Only 1% of patients had no disease. Invasive ductal carcinoma NOS was the most common histologic type (51%).
CONCLUSION: Breast cancer in this study shows a higher frequency of this disease in Pakistan when compared to the world standards and to the other studies carried out in our country.

KEY WORDS: Breast. Cancer. Lump. Inflammation. Pakistan.

INTRODUCTION

Most of the diseases of breast take form of a palpable mass, inflammatory lesions or nipple discharge[1]. These lesions are usually benign but often malignant, therefore, the aim in breast disease is mainly to differentiate between benign breast disease and the cancer[2]. An overall perspective of the various breast problems can be gained by the analysis of a very large series of patients attending outpatient clinics. In USA, it has been found that 60% of patients have benign breast disease while 10% have cancer[3]. Breast cancer is the most common malignant tumour in females in Pakistan [4] as well as in USA[5]. Breast cancer is the most common cause of death in females in Pakistan while in USA, it has now been superceded by lung cancer[6]. Making an early diagnosis and early treatment can reduce high mortality due to breast cancer[7,8]. Importance of triple diagnosis i.e. clinical examination, mammography and fine needle aspiration cytology[9] and mass population screening with modern mammography has been stressed in literature[10].

This study was carried out to evaluate the frequency and pattern of breast diseases and to compare it with world standards and to other studies carried out in Pakistan.

PATIENTS AND METHODS

A total of 300 patients were included in this study who came to the out patient clinics for various breast problems. This study was carried out at Jinnah Postgraduate Medical Centre (JPMC), Karachi between 1988-1990 .The sources of patients included out patients department of JPMC, Dow Medical College Karachi and Breast Care Clinic at Clifton Nursing Home, Karachi. History and examination findings were recorded on a printed proforma. All patients were followed up till surgery and final histological diagnosis was recorded for analysis. For the purpose of comparison, breast diseases were classified into five categories i.e., no disease, inflammatory conditions, fibrocystic disease, fibroadenoma and carcinoma.

RESULTS

The patients included in this study were between 11-90 years of age. Eighteen percent of these were between 10-19 years and all had benign breast disease. All cancers were detected between 20-90

years. The youngest patient of 11 years old had a benign phylloides tumour on biopsy **(Table I)**. Of the 300 patients, 49% were from lower socioeconomic group (less than Rs. 1,500 per month). An equal number of patients (49%) belonged to the middle income group (Rs. 1,500-5,000 per month) and only 2% belonged to the higher income group (above Rs.5,000 per month). Thirteen percent of patients were students, 4% school teachers, 5% manual labourers and majority (78%) was house wives. Majority of the patients (62%) were immigrants from India and permanent residents of Karachi while 17% were Sindhi and the rest of the patients were Punjabi, Pathan, Balochi and Bengali **(Table II)**. Most common presenting complaint was lump in breast (94%) of which 31% had lump only while 63% had lump with other symptoms like pain, skin puckering and lump in axilla or nipple discharge. Three percent had nipple discharge only while 3% presented with lump in mastectomy scars **(Figure I)**. The duration of illness i.e. detection of lump by the patient till medical advice was sought ranged from 5 days to 20 years of complaints. Most patients reported between 1-6 months. The patient with shortest history of 5 days had a breast abscess and the patient with longest history of 20 years had a fibroadenoma on histological diagnosis **(Table III)**. Majority of the patients was in reproductive age (67%) while 32% were postmenopausal and all had malignant disease. Only 1% of the patients were in premenarche stage and all had benign breast disease. In this study, 69% of the patients were married of which 70% had cancer and 30% had benign breast disease. Thirty one percent unmarried patients had benign breast disease. History of breast feeding was present in all married patients who had children **(Figure II)**. Lumps were more common in left breast (51.4%). Majority of the lumps and maximum number of cancers were detected in upper and outer quadrants. Lower inner quadrants had very few lumps. Diffuse lumps were noted in 8% of the patients and 3% had lumps appearing on mastectomy scars. On the basis of histological diagnosis, most common breast disease was carcinoma (30%). Inflammatory diseases (breast abscess, chronic mastitis, duct ectasia, fat necrosis and tuberculosis) constituted 25%, fibroadenoma 24% and fibrocystic disease 20%. Only 1% of the patients had no breast disease. Most common histological type of cancer was invasive ductal carcinoma NOS (51%), while Schirrhous carcinoma was diagnosed in 19% of patients and the rest of

histological types constituted 2-8% **(Tables IV and**

AGE GROUP	PERCENTAGE
10-19	18
20-29	21
30-39	17
40-49	17
50-59	18
60+	09

V).

TABLE I: AGE DISTRIBUTION OF PATIENTS

ETHNIC ORIGIN	PERCENTAGE
Immigrants from India	62
Sindhi	17
Punjabi	09
Pathan	07
Balochi	04
Bengali	01

TABLE II: DISTRIBUTION OF CASES ACCORDING TO ETHNIC ORIGIN
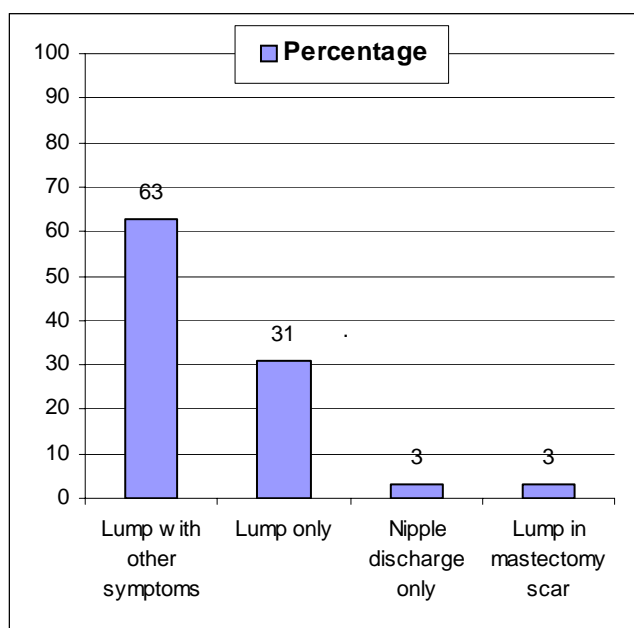
FIGURE I: DISTRIBUTION OF PATIENTS ACCORDING TO THE MODE OF PRESENTATION

DURATION OF ILLNESS	PERCENTAGE
Less than 1 month	06
1-5 months	41
6-10 months	21
11-15 months	16
More than 15 months	16

TABLE III: DISTRIBUTION ACCORDING TO DURATION OF SYMPTOMS
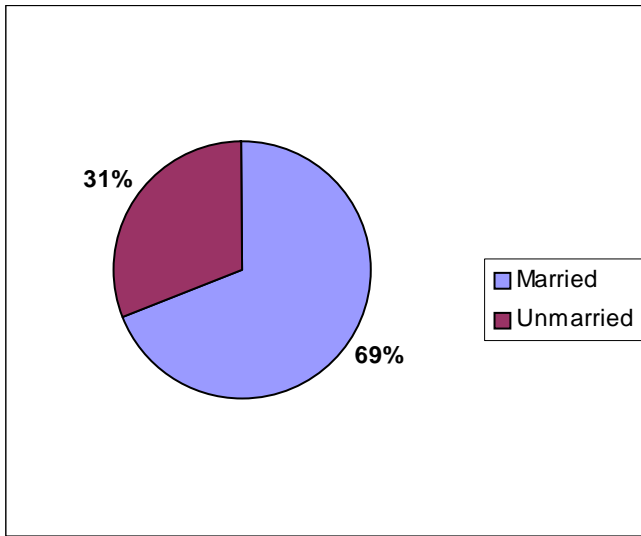
FIGURE II: MARITAL STATUS OF PATIENTS WITH BREAST DISEASE

Diagnosis	PERCENTAGE
No disease	01
Fibrocystic disease	20
Inflammatory disease	25
Fibroadenoma	24
Carcinoma	30

TABLE IV: FREQUENCY AND TYPE OF BREAST DISEASE

HISTOLOGIC TYPE	PERCENT-AGE
Invasive ductal carcinoma NOS	51
Scirrhous carcinoma	19
Comedocarcinoma	08
Medullary carcinoma	06
Colloid carcinoma	04
Mixed lobular and ductal carcinoma	06
Papillary carcinoma	02
Paget's disease	01
Invasive lobular carcinoma	03

TABLE V: HISTOLOGICAL TYPES OF CANCERS AMONG BREAST DISEASES PATIENTS

DISCUSSION

The pattern of breast diseases in Pakistan shows a significant difference when compared to the world standards. In Pakistan, it has been reported that 1% of the patients come up having no significant breast disease while in USA, 30% of the patients reporting for checkup have no breast disease. This indicates lack of awareness, screening facility and lack of education in our setup. The incidence of fibrocystic disease is much higher in developed countries because of more females getting hormone replacement therapy, as this disease is estrogen dependent. Inflammatory diseases are more common in Pakistan due to poor hygiene and low socioeconomic status. Majority of inflammatory diseases are related to lactation and trauma and only 1% of patients have Tuberculosis of breast. The frequency of carcinoma was three times higher (30%) in this study as compared to a study in USA (10%). In Pakistan, a study carried out in 2001[11] reported a very low incidence of cancer (6%) while another study[12] in 2003 have reported a frequency of 24.2%, which is still lower than the present study. Frequency of fibroadenoma was also higher in this study.This study concludes that the frequency of breast cancer, inflammatory diseases and fibroadenoma is higher in our set up as compared to the world literature. Breast cancer was the most common disease. Hence, there is a need of breast care clinics and population screening programs to detect breast cancer at an early stage to provide treatment in order to reduce the high mortality from breast cancer.

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