PATTERN OF FEMALE BREAST DISEASES IN KARACHI

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The study was conducted to know the pattern of female breast diseases in Karachi. In this study there were a total of 307 breast biopsies and mastectomy specimens of which 67 were inflammatory, 166 benign and 74 malignant. Fibroadenoma was the commonest (35.179%) followed by invasive ductal carcinoma (21.824%), fibrocystic disease (16.286%), breast abscess (7.166%) and chronic mastitis (7.817%). Fibroadenoma was common in second decade and infiltrative ductal carcinoma in fifth decade. Breast carcinoma occurs at a younger age group in (Karachi – Pakistan) than in western countries.

Key words: *Breast diseases, Pattern.*

INTROUDUCTION

In Pakistan, the data available regarding the pattern of various breast lesions is limited. In fact, the reporters have mainly published the pattern of malignant breast diseases in Pakistan. Although breast carcinoma is one of the most dreadful disease of women and is the commonest malignancy affecting female in various parts of the world including Pakistan, most of the patients suffer from benign breast diseases whereas cancer accounts for 10%[1-4,14-16,20].

MATERIAL AND METHODS

In this study, 307 surgical breast biopsies and mastectomies, in the departments of pathology, Baqai Medial University Hospital and PNS Shifa Karachi, during the period from 2000-2004,.have been analyzed.

The specimens were received in 10% buffered formalin and processed as per routine laboratory procedure and then embedded in paraffin for the preparation of blocks. The sections were stained with the routine haematoxylin and eosin method. The special stains were performed whenever required.

The diagnoses of these cases were classified as inflammatory, benign and malignant lesions. Mean age for the three histopathological groups and for each individual lesion were derived. Normal and accessory breast and the male breast pathology, were excluded from this study.

RESULTS

A total of 307 cases with breast lesions were studied of these 67 (21.824%) were inflammatory lesions, 166 (54.071%) benign breast lesions, and 74 (24.104%) malignant lesions. The mean age of presentation for these groups was 33.8, 36.6 and 49.5 years respectively. The distribution of breast lesions by mean age at diagnosis is shown in table 1. Overall fibroadenoma was the commonest finding (35.179%) followed by invasive ductal carcinoma (21.824%) and fibrocystic change (16.286%). In case of fibroadenoma, the mean age of presentation was 23 years. The second ranking breast lesion was breast carcinoma. The mean age of its presentation was (47 years). Fibrocystic change was third common breast lesion accounting for 50 (16.286%) of all cases. The mean age of its presentation was 39 years.

DISCUSSION

A palpable breast lump is a common diagnostic problem both for the general practitioner and for the surgeon. It is well accepted dictum that all lumps in breast are malignant unless proved otherwise on tissue diagnosis. In our study, the most common lesions found in female were benign lesions (54.071%), followed by malignant (24.104%), and inflammatory (21.824%) respectively. Fibroadenoma was the most frequent histopathological diagnosis 35.179%) in our study. This is higher than the reported frequency in England (7.7%)[5] and the USA (18.5%)[6], but is lower than the Caribbean Islands of Trinidad (39.3%)[7]. The causes of this high frequency of fibroadenoma among our females is not clear but racial predisposition could be a factor. Many workers have reported that fibroadenoma is the most common benign tumour of female breast[14,16,18,20].

Malignant lesions in our study comprised of 74 cases (24.104%) with the mean age of 49.5 years. Invasive ductal carcinomas (67 cases) were the most common. The mean age of its presentation

was 47 years. The findings of our study are different from the literature of western countries such as the United Kingdom and the United States where carcinoma is the third most common lesion (3.6%). In this study, the mean age at diagnosis is less as compared to that in western countries where majority of carcinoma are seen in postmenopausal woman and the mean age is 54 years.[17] Local studies have shown that in our population, females between the ages of forty and fifty years are most commonly affected[11,12,13, 18]. Thus most of our patients are in younger age group and premenopausal. In a study from Korea Ahn S.H. reported a high incidence of breast cancer in premenopausal women[19]. In the present study, fibrocystic change was the third common lesion comprising 16.286% of all cases. This is the most common breast lesion in studies from USA (33.9%)[6] and UK (37%)[5].

Breast abscess comprised 7.166%. It appears that the figures for breast abscess are underestimated because most abscesses are drained and only a minority are biopsied. Chronic mastitis comprised 7.817% of the all cases where as granulomatous mastitis is 3.257%.

Table 1: *Distribution of breast diseases and their mean age of presentation.*

Type of Lesions	Numbers of Patients	Percentage	Mean Age Years
Inflammatory Lesions:			
Breast abscess	22	7.166	27
Chronic mastitis	24	7.817	32
Granulomatous mastitis	10	3.257	35
Duct ectasia	9	2.931	38
Fat necrosis	2	0.651	37
Total inflammatory lesion = 67 (21.824%)			
Benign Lesions:			
Fibroadenoma	108	35.179	23
Fibrocystic changes	50	16.286	39
Lactating adenoma	3	0.977	27
Intra ductal Papilloma	2	0.651	50
Lipoma	1	0.325	40
Benign Phylloides Tumour	2	0.651	41
Total benign lesion = 166 (54.071%)			
Malignant Lesions:			
Invasive ductal carcinoma	67	21.824	47
Invasive lobular carcinoma	1	0.325	50
Ductal carcinoma in situ	2	0.651	48
Medullary carcinoma	2	0.651	41
Invasive Papillary carcinoma	1	0.325	60
Mucinous carcinoma	1	0.325	51
Total malignant lesion = 74 (24.104%)			

The mainstay of aiming for a better prognosis is early diagnosis. it is recommended that a breast cancer screening programme should be considered. In all the major hospitals this is the only means by which this cancer can be detected in the pre-clinical stage.

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