ORIGINAL ARTICLE

A Histopathological Analysis of Consecutive 161 cases of Breast Lumps

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ABSTRACT

Objective: To conduct a histological analysis of breast lumps in pts f at S. Z. Hospital Lahore
Methodology: From April 2011 to August 2012, a prospective histopathological study was done on 161 consecutive patients. These patients with breast lumps had undergone incision biopsies, lumpectomies or mastectomies and a histological analysis was carried out in histopathology laboratory.
Results: The study revealed that under the age of 30 years, no malignancy seen in 97 cases, however with increasing age it was observed that less than one out of four cases were malignant between 31 and 40 years of age, rising to one out of four cases between 41-50 years and 51-60 age-groups. The 61-70 years age showed one out of three while two out of three cases were malignant in the ages 71-80 years. Fibroadenoma was the commonest benign tumor and infiltrating ductal carcinoma was the commonest malignant tumor in our study.
Conclusions: Mostly breast lumps were benign and there was a probability of 1 in 10 to be malignant. However under 30 years malignancy was unlikely , however, above the age of 40 years the chance of malignancy rises to one in four ,emphasizing the need of screening methods for women over the age of 40 years. Fibroadenoma was the commonest breast lesion in women under 30 years age.
Keywords: Breast lumps, biopsies, consecutive, analysis

INTRODUCTION

The breast lump is a sign of worry and apprehension in most educated, professional and enlightened women[1]. All the breast lumps are not malignant. A benign appearing breast lump on clinical examination in the patient of younger age group[2,3], will not be labelled benign with certainty by the surgeons until its histopathology report proves it benign. The histological diagnosis is the gold standard which can be done on histological sections. This study reviewed the tissue diagnosis of patients (both male and female) presenting to general surgery units of Shaikh Zayed Hospital Lahore with complaints of a lump or lumps in one or both breasts. This study has revealed a detail of benign and malignant out comes of breast lumps in Shaikh Zayed Hospital Lahore. In addition, this study can also give valuable data for patients counseling, awareness about breast cancer in the general public and helping meaningful screening programme[4].

MATERIALS AND METHODS

This was a prospective study from April 2011 to August 2012, a period of one year and four months. All these patients presented with breast lumps were initially examined at the surgical outpatients department of Shaikh Zayed Hospital Lahore. An excision of lump, mastectomy, incision biopsy or ultrasound guided biopsy was carried out which was decided by the surgeon depending on the size of the lump, clinical presentation and the age of patient. The specimen fixed in 10% formalin was received in the histopathology laboratory. The cut up of the specimen with gross description was done in lab and the tissue slides were stained using Haematoxylin and Eosin. Final diagnosis was done by the histopathologist and the reports were usually available from the lab three to four days after surgery.

RESULTS

A total of 161 patients were studied; 11 males and 150 females giving a Male/Female ratio of 1:13.6. The age range was 15 to 80 years. The total number of cases were 161 (11 patients had bilateral lesions) with the ratio of malignant to benign cases of 1:8.5 (17 to 144). The malignant cases comprised of 9.47% (17 out of 161) of the total number of cases. Among benign cases, fibrocystic disease accounted for 19.87% and the fibroadenoma on top, 53.41%. The percentage of patients with cancerous lumps rose gradually with increasing age. The mean age of patients with carcinoma was 48.8 years; those with fibrocystic disease 39.5 years and fibroadenoma 24.4 years. The benign phyllodes tumor accounted for 3.1% (5 patients) of the total cases. The histological diagnosis and frequency of cases (Table)

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Table: Histological diagnosis and frequency of lumps.

Histological Diagnosis	=n	%age
Fibroadenoma	86	53.41
Fibrocystic Disease	32	19.87
Invasive ductal Carcinoma	14	8.69
Benign Phyllodes Tumor	05	3.10
Gynaecomastia	04	2.48
Duct Ectasia	04	2.48
Mastitis	10	6.21
Invasive lobular Carcinoma	02	1.24
Medullary Carcinoma	01	0.62
Duct Papilloma	03	1.86

Histopathology of the malignant cases revealed that 14 out of the 17 had Invasive ductal carcinoma (82.35%) with the three remaining patients having medullary one (0.62%) and Invasive lobular carcinomas 2 cases (1.24%). Out of the 11 male patients in this study, four were diagnosed gynaecomastia; four had fibrocystic disease and three had invasive ductal carcinoma.

DISCUSSION

General perception is that most of the breast lumps are benign and only one out of ten proved to be malignant, 2,3 In this study, below the age of 30 years, no malignancy seen in 85 cases. As the age increased it was seen that less than one out of 4 biopsies were malignant when the patients were aged between 31 and 40 years, increasing to one out of four biopsies for the 41-50 and 51-60 age-groups. The 61-70 showed one out of three malignant whilst two out of three lumps revealed malignancy in the 71-80 age-group. Breast cancer was seen less frequently in females under 30 years and it rises as the age of the patient increases.2-5Fibroadenoma was seen to be the most common breast lump with 53.41%, followed by fibrocystic disease with 19.87% and benign phyllodes tumor was 3.10% . This is in accordance with the fact that the most common breast lump in females under the age of 30 years is fibroadenoma.1-5. The patients containing fibrocystic disease were between the age range 31-50 years.In this study, the mean age of patients with fibrocystic disease was 39.5 years and this is a little higher when compared with another study where this age was 31.8 years.2 Fibrocystic disease was a significant breast lesion because of its high frequency after fibroadenoma in this study and also because of its few subtypes resemble the clinical and radiological appearances of carcinoma.6 There is a significance of atypical epithelial hyperplasia in fibrocystic disease due to its relationship with carcinoma.9, In this study, two patients with invasive ductal carcinoma also revealed fibrocystic change in their breast lumps. The mean age of patients diagnosed with breast cancer was 48.8 years in this study. This is near to another study which showed mean age 50.1 years2 and the most common histopathological type was invasive ductal carcinoma[7,8].

In summary, to create awareness among general public, this study has revealed that most of the breast lumps are benign and the women show a probability of one chance in 10 that their biopsies will turn out malignant. Considering the fact that some histologic features in breast lumps such as atypical ductal hyperplasia are premalignant lesions, it is strongly recommended that histologic evaluation for all breast lumps should be routinely carried out for assessment of malignancy.

This has also been observed that above the age of 40 years, the probability of malignancy increases to one in four. This strongly favors screening programs for women above 40 years. The most common breast lesion in women under 30 years was fibroadenoma and invasive ductal carcinoma is the commonest histopathological type of breast cancer.

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