

## Frequency of Different Female Breast Lesions in Pathology Department of Lahore Medical & Dental College

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### ABSTRACT

**Aim:** To know the different types of breast lesions presented in histopathology department of LMDC so that prevalence of the diseases can be compared with that of national and international results.

**Design:** A retrospective study.

**Methods:** Total numbers of 117 cases were taken in which biopsies and mastectomies were included, biopsies from male breast were excluded.

**Results:** According to our study 44 were fibro adenomas, 23 were ductal carcinomas, 14 were mastitis, 5 were duct ectasias, 2 were F.C.D, 2 lactating adenomas; epidermal inclusion cysts, Squamous Papilloma, Sebaceous cyst, Medullary Ca, Infiltrating Lobular Carcinoma, all were one each in number.

**Conclusion:** It was concluded from this study that the most common presenting Lesion was fibroadenoma here, second to it was IDC. This is also the case with international studies mostly.

**Keywords:** Fibro adenoma, FCD (Fibro Cystic Disease), IDC infiltrating ductal carcinoma,

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### INTRODUCTION

Breast diseases are very common in females and range from inflammatory lesions to benign and invasive carcinomas<sup>1</sup>. Pakistan has a significant cancer burden. It has been estimated that about 40,000 patients die every year due to breast cancer alone and 90% of these cancers can be cured if detected early (<http://medimoon.com/2012/10/akistan-as-highest-incidence-of-breast-cancer-in-asia/> extracted on 8-9-2013). There are no national cancer screening programmes that can educate people about cancer screening and early detection<sup>2</sup>. The earlier diagnosis of any lesion in breast can help in decreasing the incidence of invasive carcinomas<sup>3</sup>.

Numerous studies have been done on carcinoma of the breast but studies on the general pattern of breast diseases in female population are limited<sup>4</sup>. There is a dearth of such studies in our country and there exists a need to know the incidence of different types of breast diseases so that guidelines for prevention, early detection and treatment can be developed. A 5 year retrospective study is therefore planned to determine the percentage of different breast lesions that presented in the Pathology Department of Lahore Medical and Dental College and attached Ghurki Trust Teaching Hospital.

The study is an extension of previous similar studies with the aim to see any difference that may exist between the incidences of different breast

lesions occurring in our set-up and rest of the world. It is believed that such type of studies can throw a light on the commonest breast lesions in different age groups, and the information can be used in developing prevention programmes for different breast diseases with a clue to predisposing factors like age, sex, pregnancy, hormonal factors, genetic or environmental effects<sup>3</sup>.

### MATERIAL AND METHODS

The study was carried out in Lahore medical and Dental College. Data was collected by exploring the record files of biopsy and mastectomy specimens received in Pathology department of Lahore Medical and Dental College and Ghurki Trust Teaching Hospital from 2007 to 2012. Pathology Department of LM&DC receives specimens from GTTH, Lahore. The specimens were received in 10% formol saline and processed in routine procedure and diagnosed histopathologically. Age, sex and descriptive parameters were noted and entered in Microsoft Excel programme 2007. The cases were classified according to inflammatory, benign and malignant diseases<sup>3</sup>. Mean age group and distribution for these lesions was derived.

### RESULTS

A total of 117 cases of breast were received in 5-yrs. Out of which 25 were inflammatory, 58 benign, 34 were malignant disorders. Of the inflammatory lesions the most common disorder was mastitis (16

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cases, mean age 35 years) and second most common was Duct Ectasia (7 cases, mean age 36 years). Epidermal inclusion cyst 2 cases and 1 case of (age 29yrs) Sebaceous Cyst were noted. Among the benign lesions the commonest was fibro adenoma (51 cases, mean 22 years). The other benign disease was fibrocystic disease (2 cases, mean age 44 years). Lactating adenoma (2 cases, 24 years), adenosis (1 case, 23 years). Malignant commonest lesions was infiltrating ductal carcinoma (30 cases, 47 years mean age), invasive papillary carcinoma (2 cases, 72 years), Lobular and Medullary carcinoma 1 case each with mean age 90 and 30 years respectively. Of the total 117 cases the commonest was fibro adenoma with mean age of 22 years. Second most common lesion found was Infiltrating Ductal Carcinoma. The mean age at presentation was 47 years. Mastitis was third most common with mean age at presentation, 35 years. Above the age of 60 years the commonest lesions were mostly carcinomas.

Table1: Inflammatory Lesions

Types of lesions inflammation	n	%age	n%	Mean age
Mastitis	16	64	13.6	34
Ductal ectasia	06	24	5.1	38
Sebaceous cyst	01	24	0.8	29
Epidermal inclusion cyst	02	08	1.7	35

Table 2: Benign Lesions

Types of lesions inflammation	n	%age	n%	Mean age
Fibro adenoma	51	87.9	43.5	22
Fibrocystic Disease	02	3.4	1.7	45
Lactating adenoma	02	3.4	1.7	24
Intraductal Papilloma	02	3.4	1.7	26
Adenosis	01	1.7	0.8	23

Table 3: Malignant lesions

Types of lesions inflammation	n	%age	n%	Mean age
Infiltrating ductal carcinoma	30	88	25.6	47
Lobular carcinoma	01	2.9	0.8	90
Medullary carcinoma	01	2.9	0.8	30
Invasive Papilloma	02	5.8	1.7	72

## DISCUSSION

Many studies are done on the female breast carcinoma or malignant lesions but on the whole studies on the incidence of different breast lesions

are not as common especially in Pakistan. The more we conduct the studies on the different pathological lesions in different areas of Pakistan; a contribution can be made for the etiological agents, early diagnosis, prevention and treatment. These studies can also be compared with international incidence and this can help further researches in different fields, for the better management of the breast lesions<sup>5</sup>.

In our study the most common pathology was fibro adenoma (43.5%) with mean age of 20 years; next most common lesion was infiltrative ductal carcinoma (25.6%) with mean age of 47 year<sup>6,7</sup>. The Nigerian study reveals an incidence of breast carcinoma as 39.1%<sup>8</sup>. There are some other studies which reveal that fibroadenoma is one of the most common benign lump as reported 46 % by Hamid et al in Pakistan and 55% in Kewaba et al<sup>9,10</sup>. In another study carried out in Nigeria 97% patients had unilateral fibro adenomas and 300 patients presented with solitary fibroadenoma<sup>10</sup>. The lesion invariably has relation to estrogen sensitivity and it predominantly occurs in second and third decade of life<sup>11</sup>. In present study the common age of fibroadenoma is also in second and third decade of life, which is comparable to the above report.

## CONCLUSION

Benign breast diseases are common in females. Fibro adenoma is the most common of all breast lesions with breast abscess and fibrocystic disease as the other common diseases. Patients present late with locally advance disease because of lack of awareness and knowledge. No national data is available because of lack of breast clinics and screening programmes and efforts are the need of time for building and generating a proper incidental data which will help the timely diagnosis and treatment of the diseases.<sup>3</sup>

**Limitations:** We faced certain limitations in our study like unavailability of tumor markers for more specific diagnosis and lack of follow up.

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