

Pattern of Presentation and Diagnostic Evaluation of Breast Lumps

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ABSTRACT

Aim: To determine frequency of different presentations and diagnosis of breast lumps

Methods: This cross sectional descriptive study was conducted on 200 female of breast lumps from 1st August 2015 to 29th February 2016 at Department of Surgery, Services Hospital Lahore and DHQ Hospital, Attock. Breast imaging ultrasound and mammography was done where required and fine needle aspiration cytology was also be done. In some cases like nodularity of major part of the breast, tru-cut or incision biopsy was performed. Final diagnosis was based on the histological examination of the tissues biopsies from the lump.

Results: The majority of the patient's sites were upper outer quadrant i.e. in 84(42%) patients while there were 40(20%) patients of upper inner quadrant. The various types of breast lump were found in our study, the most common type was fibroadenoma in which 65(32.5%) patients were diagnosed, the other main common type was invasive ductal carcinoma in which 48 (24%) patients were diagnosed and the other most common type was breast abscess in which 38(19%) patients were diagnosed. The fibrocystic disease was found in 21(10.5%) patients.

Conclusion: In our study the common benign breast lesion is fibroadenoma and the other type of breast lesion was found to be invasive ductal carcinoma. Breast abscess was also the common breast lesion.

Keywords: Breast lump, Diagnostic evaluation, Pattern of presentation, Fibroadenoma.

INTRODUCTION

Breast lumps are common surgical presentation among the female patients of surgical outdoor. A variety of lesions ranging from fibroadenoma to carcinoma are presented by patients. Both surgeon and patient are deeply concerned about the nature of lumps and triple assessment is required to exclude or establish the diagnosis of carcinoma breast¹.

A number of women experience and seek advice for breast condition that they perceive to be abnormal. Concern about breast condition is understandable because benign conditions can be difficult to differentiate from malignant. There is also widespread awareness of prevalence of breast cancer and importance of this early cancer detection. Therefore, careful assessment must be performed in all women presenting with breast lump^{2,3}.

Breast lumps always demand a great attention because of chance of being cancers. In Pakistan and in other world, the common malignancy affecting females is breast cancer. Despite of medical and scientific efforts of centuries, the most dreaded of human illness is the breast cancer. Study conducted

on pattern of breast lesions in surgical specimens, out of 566 patients, breast carcinoma was most common lesion encountered (31.3%), cystic disease (30.2%). In younger females, fibroadenoma was found in (27.6%) cases. Inflammatory breast had found in 7.2% cases. It is observed that breast carcinoma is the most common lesion in female patients in which require surgery for breast lumps, absolutely due to late diagnosis because of cultural, socioeconomic and various reasons^{4,5,6}.

In most of the females diagnosis of breast lump that require them to medical treatment.⁷ As about 10% of breast lumps at the end lead to diagnosis of breast cancer^{7,8}. Appropriate evaluation will be done for women with breast lump^{9,10}. The scientific recommendations are supported by the examination that failure to diagnose breast cancer¹¹. The most common argue occupy a premenopausal female with a self-identified breast lump.¹² Despite the existence of clinical guidelines, many women with a breast lump may not receive evaluation beyond mammography¹³.

MATERIALS AND METHODS

This cross sectional descriptive study was conducted on 200 female of breast lumps from 1st August 2015 to 29th February 2016 at Department of Surgery, Services Hospital Lahore and DHQ Hospital, Attock.

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Post menopausal and pre-menopausal female patients with palpable breast masses (Lumps) and Female with breast lumps not disappearing during menstrual cycle (non-cyclical) were included. Already known and operated cases and trauma to breast were excluded. All patients in the study were examined clinically. Their breasts were examined and also lymph node status was checked out clinically. Breast imaging ultrasound and mammography was done where required and fine needle aspiration cytology was also be done. In some cases like nodularity of major part of the breast, tru-cut or incision biopsy was performed. Final diagnosis was based on the histological examination of the tissues biopsies from the lump.

Mean and standard deviation was calculated for age. Frequency (%) was calculated for different diagnosis of lump and so on. The pattern description was categorized units groups and proportion. The type of lump was tested for signification by applying Chi Square test as the outcome was mainly qualitative. P value was less than or equal to 0.05 was considered to be significant.

RESULTS

The mean age of the patients was 31.8±13.2 years. The mean age of menarche of patients was 13.4±1.25 years. The majority of the patients were of pre-menopausal i.e., 178(89%) while only 22(11%) patients of post-menopausal. The majority of the patients site were upper outer quadrant i.e., 84(42%) patients while 40(20%) patients of upper inner quadrant and most common site was lower outer quadrant in which 32(16%) patients. The various types of breast lump were found in our study, was fibroadenoma in 65(32.5%) patients diagnosed, infiltrated ductal carcinoma in 48(24.0%) patients diagnosed and breast abscess in 38(19%) patients diagnosed. The fibrocystic disease was found in 21(10.5%) patients (Table 1).

Table 1: Diagnosis of breast lumps (n=200)

Diagnosis	n	%age
Breast abscess	38	19.0
Fibroadenoma	64	32.0
Fibrocystic disease	27	13.5
Infiltrative ductal carcinoma	15	7.5
Invasive ductal carcinoma	31	15.05
Granulomatus lesion	8	4.0
Invasive lobular carcinoma	7	3.5
Others	10	5.0

DISCUSSION

In our study 89% of the women were pre-menopausal and 11% women were found to be post-menopausal.

While in the study of Raina et al⁷ 49.7% women were pre-menopausal.

In our study 68% of the women were married and 32% women were unmarried. While in the study of Homesh et al¹⁴ 69.3% of the women were married and unmarried were 30.7% women.

In our study lactation within 6 months was documented in 2% of patients and lactation from 6 months to 12 months were 0.5% women. As compared with the study of Bani-Hani et al¹⁵ the lactation within 6 months was documented in 16.67% patients.

The upper outer quadrant was the most commonly involved site in our study i.e., in 42% of patients and the other most common site was upper inner quadrant i.e. in 20% patients while lower inner quadrant was involved in 16% of patients. While in the study of Alam et al¹⁶ the upper outer quadrant was involved in 60% of patients.

In our study the fibroadenoma was found in 32% patients. The fibroadenoma was diagnosed by fine needle aspiration cytology and confirmed with histopathologically. The similar finding was diagnosed in the study of Khan et al⁵ in which the fibroadenoma was found in 32.57% of patients. According to another study conducted by Adesunkanmi and Agbakwuru¹⁷ at Wesley Guild Hospital, Nigeria the fibroadenoma was diagnosed in 39.5% patients. While in the study of Foxcroft et al¹⁸ fibroadenoma was to be found in 29.24% patients. So our study is comparable with the study of Khan et al⁵ in which fibroadenoma was same i.e. 32.57% and our study is comparable with the study of Adesunkanmi and Agbakwuru¹⁷ and Foxcroft et al¹⁸ While in a local study of Lakhnana and Khalid⁴ conducted in Pakistan Institute of Medical Sciences, Islamabad the fibroadenoma was diagnosed in 27.6% patients.

In our study the fibrocystic disease was to be found 13.5% of patients. While in the study of Adesunkanmi and Agbakwuru¹⁷ fibrocystic disease was to be found in 42.7% patients. While in a local study of Lakhnana and Khalid⁴ conducted in Pakistan Institute of Medical Sciences, Islamabad the fibrocystic disease was found in 30.2% patients.

In this study the breast abscess was found in 19% of patients. While in the study of Khan et al⁵ demonstrated that breast abscess was found to be 24.19% of patients.

In present study the infiltrated ductal carcinoma was found to be 7.5% of patients. As compared with the study of Benchellal et al¹⁹ the infiltrated ductal carcinoma was found to be 89% of cases.

In our study there were 1% women of ductal carcinoma in situ. While in the study of Fentiman et al²⁰ the ductal carcinoma in situ was found in 10% of cases. In another study by Mander et al²¹ the ductal

carcinoma in situ was found in 3% of cases and this finding is similar and comparable with our study.

CONCLUSION

In our study the common benign breast lesion is fibroadenoma and the other type of breast lesion was found to be invasive ductal carcinoma. Breast abscess was also the common breast lesion in our study.

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