

BREAST LUMPS AND HISTOPATHOLOGICAL FINDINGS IN A TERTIARY HEALTH FACILITY IN NORTH –CENTRAL NIGERIA: A FIVE YEAR REVIEW

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Abstract

Background: Breast lumps are common reasons why majority of females irrespective of age present to the surgical out-patient departments (SOPD). Breast lumps are either benign or malignant.

A greater percentage of breast lumps that present are benign but breast lumps evokes anxiety and it is important to allay the fears of presenting with breast lumps.

Aim: To determine the frequency of breast lumps and their histopathological findings

Materials and Methods: The study was a five year retrospective review from January,2012 to January,2017 of female patients who presented with breast lump, had excision/biopsy and histology reports of biopsy samples.

Ethical clearance was obtained from the institutional review board. The demographic details, symptom on presentation and histopathology result were documented and analyzed using epi-info 16 versions.

Results: A total of one thousand seven hundred and eighty six (1786) patients had surgery within the study period. Fifty nine (59) of these had breast lump excision constituting 3.3% of all the surgeries carried out within the period of review. The mean age of the patients was 31 ± 13.4 years. Majority (79.7%) of the breast lumps were in females less than forty years of age. The commonest lesions were benign in 44 patients (74.6%) while malignant lesions were in 15 patients (25.4%). The commonest benign lesion was fibroadenoma in 34 patients (57.6%), followed by breast abscess in 5 patients (8.5%), fibrocystic changes in 4 patients (6.8) and then duct ectasia in one patient (1.7%). Out of fifteen (15) patients with malignant lesions; invasive ductal carcinoma was observed in thirteen patients (22%) while lobular carcinoma was observed in two patients (3.4%). Twenty eight (47.5%) of the breast lesions were on the left, 28 (47.5%)

on the right and three were bilateral (5%). Married women constituted 23 (39%) of the total patients who had breast lump while those aged forty years and more constituted 18(30.5%).

All the malignant breast lesions were in married women and in patients forty years and above.

Conclusion: Benign breast lesions are the commonest presentation in this study with fibroadenoma as the most frequent lesion.

Key words: Female, breast, lump, benign, malignant, histopathology

INTRODUCTION:

Breast lump is one of the commonest presenting symptom responsible for surgical and hospital visitation in females.^{1,2} This is because of the anxiety and fear associated with such complains because of the increasing prevalence of breast cancer.^{1,2} The fear lives with the patient until they receive special assessment, conduct necessary investigations and are reassured of the findings if not cancerous using the triple assessment.^{3,4,5}

The breast is one of the most puzzling areas of surgical diseases resulting from undue but understandable perception with carcinoma at the expense of benign lesions.⁶ Breast lumps could either be benign or malignant. The benign breast lumps are more prevalent than malignant breast lesions especially in younger females. Among the benign breast lumps, fibroadenoma is the most common histological finding.¹⁻⁵

Management of breast lumps varies depending on the patient's presentation, clinical findings and histopathology results. It is important to tackle the disease at the early stage especially if it is malignant to reduce morbidity and mortality associated with malignancies.^{3,4}

Any female presenting with a breast lump is expected to be thoroughly examined and investigated. Diagnosis starts from a good history including the biodata of the patient and clinical examination. The sensitivity and specificity of clinical examination is 54 and 84% respectively.^{3,5}

Materials and Methods: This study was a descriptive, retrospective study carried out in the surgical department of the state owned hospital. The hospital is a one hundred and sixty nine bed capacity center which offers medical, obstetric and gynecology, pediatric and surgical services. The facility offers comprehensive HIV care to both adults and children. It is also center for residency training and involved in research.

The study was a five year retrospective review of female patients who presented with breast lump, had excision/biopsy and histology report. The review was from January, 2012 to January, 2017.

A review and documentation of the age, sex, presenting complaint, marital status and histopathology results were done. Analysis was done using epi-info-16 version

Ethical clearance was obtained from the institutional research board.

Results: A total of one thousand seven hundred and eighty six (1786) patients had surgery within the study period. Fifty nine (59) were found to have breast lumps. Breast lump surgeries constituted 3.3%. The mean age of the patients was 31 ± 13.4 years. Majority (79.7%) of the breast lumps were in females who were less than forty years of age. The commonest lesions were benign in 44 patients (74.6%) while malignant lesions were in 15 patients (25.4%). The commonest benign lesion was fibroadenoma in 34 patients (57.6%), followed by breast abscess in 5 patients (8.5%), fibrocystic changes in 4 patients (6.8%) and then duct ectasia in one patient (1.7%). Out of fifteen (15) patients with malignant lesions; invasive ductal carcinoma was found in thirteen patients (22%) while lobular carcinoma was found in two patients (3.4%). Twenty eight (47.5%) of the lesions were on the left, 28 (47.5%) on the right and three were bilateral (5%). Married women constituted 23 (39%) of the total patients who had breast lump while those aged forty years and more were 18(30.5%).

All the malignant breast lesions were in married women (65.2%) and in patients more than forty years of age (83.3%).

DISTRIBUTION OF BREAST LESIONS:

HISTOPATHOLOGICAL DIAGNOSIS	NUMBER OF CASES	PERCENTAGE
Fibroadenoma	34	57.6%
Breast abscess	5	8.5%
Malignancy	15	25.4%
Duct ectasia	1	1.7%
Fibrocystic	4	6.8%
TOTAL	59	100

DISTRIBUTION OF MALIGNANT LESIONS:

TYPE OF LESION	NUMBER OF CASES	% MALIGNANT LESION	% TOTAL LESION REVIEWED
Invasive ductal carcinoma	13	86.7	22
Lobular carcinoma	2	13.3	3.4
TOTAL	15	100	

DISCUSSION:

Although benign breast lumps are more common than malignant breast lumps, it's presentation is accompanied by feelings of fear and anxiety. The feelings of fear and anxiety are thought to be as a result of increasing prevalence of breast cancers. These feelings affect the patients psychosocially and hence the need to investigate them thoroughly to abate and relieve the stress.^{1-3,7}

In this study; benign breast lesions constituted 74.6% of the breast lumps reviewed in the 5 year period, malignant lesions accounted for 25.4%. This was similar to a 5 year review in India where benign lesions accounted for 71.9% and malignant lesions accounted for 28.1% of the breast lumps studied.⁸ In most reported reviews, benign lesions accounted for approximately 60-70% of cases while malignant breast lesions constituted approximately 30-40% of all cases.^{3,9,10} This shows that even though malignant lesions need meticulous care, the distressing symptoms associated with benign lesion should not be ignored.^{1-3,11,12}

In this study, the mean age of the patients presenting with breast lumps was 31 ± 13.4 years while all the malignant lesions affected those who were more than 40 years. This was similar to findings from other studies as well as in an observational study conducted in India and Pakistan among 100, 180 and 84 patients respectively.^{1,3,11,14} This age presentation could be due to increasing awareness and knowledge about causes of cancers among females in addition to increased number of screening centers that help in early breast cancer detection.

In this 5 year review, 57.6% of the breast lesions found were fibroadenomas and they occurred in the younger age groups. Other lesions reported in this review were breast abscess (8.5%), fibrocystic changes (6.8%), duct ectasia (1.7%) and carcinomas in 25.4% of cases. This is similar to several reported findings where carcinomas accounted for between 18.86% to as high as 30.9% of breast lesions.^{15,16,17} In contrast, a report among 50 patients showed a prevalence of breast lesion of 4%, but this may be due to the small sample size and short duration of the study.¹²

In this study, invasive ductal carcinoma accounted for 22% of the breast lesions while lobular carcinoma accounted for 3.4% of the lesions. There was no medullary breast lesion reported. This is similar to the findings of other studies where invasive ductal carcinomas were the dominant presentation.^{3,9,18,19}

In this study, the breast lesions were distributed equally (47.5% each) in both right and left breast while 5% of the lesions occurred bilaterally. This is different from the findings of several studies where breast lumps affected the left breast more commonly.^{1,20,21}

CONCLUSION:

Although benign breast lesions were the commonest presentation in this study, the frequency of malignant breast lesion is said to be increasing rapidly in both developing and developed countries. Amongst benign breast lesions, fibroadenoma is thought to be the most frequent lesion.

It is important to create more awareness both locally and internationally about breast lesions, with the need for females to pay emphasis on self-breast examination. It is also important to and screen females at a younger age to detect breast cancers early. There is also need for health system strengthening to reduce morbidity and mortality indices related to breast cancers and other public health diseases.

COMPETING INTEREST:

The Authors do not have a competing interest to declare.

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