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Clinicopathological study of benign breast diseases a study of 50 cases

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ABSTRACT

Background: Benign breast diseases are a neglected entity in developing countries despite the fact that they involved in the majority of breast complaints. Benign breast disorders can be defined as any non-malignant breast condition and involved wide range of clinical and pathological disorders. Breast diseases present as swellings. It is a symptom/sign for a different lesion varying from developmental abnormality, inflammatory lesions, epithelial and stromal proliferation to malignancy. Patients were studied on the basis of i.e., clinically, and histopathological ultrasound has done. Our purpose of study is to document various benign Brest diseases to study different mode of presentations of diseases and correlation of clinical and pathological diagnosis

Methods: The given study was a prospective and observational study, undertaken in the department of general surgery, govt. medical college Surat, during the study period of March 2018 to September 2019.All the female and male patients with breast related disease were included in this study. Female patients with biopsy proven malignancy were excluded from the study.

Results: The study comprised of 50 patients with benign breast diseases; the most common is Fibro adenoma which formed 68% then fibrocystic diseases 20%. With most common age group involved in our study is 21-30 years.

Conclusions: Benign breast diseases are more common but ignored entity though it carries majority of complaints and occur mainly in young women less than 30 years of age and were mostly fibro adenoma and fibrocystic change.

Keywords: Breast cancer, Duct papilloma, Inflammation, Radiology

INTRODUCTION

Breast is a modified sweat gland derived from ectoderm during fifth or sixth weak of embryogenesis. It is secondary sexual organ in females. ¹ It is rudimentary in males. Breast development and function are initiated by a variety of hormonal stimuli, including estrogen, progesterone, and prolactin, oxytocin, and growth hormone. The secretion of neurotrophic hormones from the hypothalamus is responsible for regulation of the secretion of the hormones that affect the breast tissues.

Benign diseases of breast are the commonest diseases affecting the female covering much morbidity and fear in them. Premenopausal women are most affected. The

breast has always been a symbol of feminineness and ultimate fertility. So, both disease and surgery of the breast cause a fear of mutilation and loss of felinity. Benign breast diseases assumed increasing importance in recent years because of the public awareness of breast cancer.² The most common symptoms are pain and swelling. Benign breast diseases involved non-proliferative breast lesions, proliferative breast lesions without atypia, And proliferative breast lesions with atypia.³

Aims and objectives

Aim and objectives of the study were to document the various benign breast diseases treated/attending tertiary

care institute of South Gujarat, to evaluate the different mode of presentation of benign breast diseases and to correlate clinical diagnosis with the pathological diagnosis.

METHODS

The present study was a prospective and observational study, undertaken in the department of general surgery, govt. medical college Surat, during the study period of March 2018 to September 2019.

Source of data

Data was collected from among the patients attending surgery OPD or admitted in surgery ward with history of benign breast diseases.

Sample size

50 patients with breast lumps from all surgical units were considered for the study after taking an informed consent from each of the patients during the period of March 2018 to September 2019.

Inclusion criteria

Patients with any clinically benign disorder/disease and both sexes were included in the study.

Exclusion criteria

Infectious breast diseases and the patient with malignant breast lumps were excluded from the study.

A detailed history was taken and diagnosis was done by clinical examination, ultrasound and histopathological examination. All quadrants of breast were examined for any lump in the breast. Both breasts were examined along with axillary lymph node examination on both sides' surgery was done wherever needed and reassurance with conservative treatment was given to those patients who were needed.

RESULTS

In our study the highest number of cases among patients was noted in the age group of 21-30 years. Mean age of the patients was 24 years. Youngest patient is eleven years old and oldest patient is fifty-five years old. The average duration from which patients noticed a lump in their breasts was 5 months. Out of fifty patients, three patients had significant the family history of breast disease.

In our series lesion were more common in the right side. In our study, most common mode of presentation was breast lump without pain followed by painful breast lump.

In our study the most common benign breast disease is fibro adenoma followed by fibrocystic.

In our study, from history and clinical examination we can diagnose benign breast diseases which were correlate with the FNAC/true cut biopsy with accuracy of 91.89%.

Table 1: Age distribution in benign breast diseases.

Age (years)	Number of cases	Percentage (%)
<21	12	24
21-30	28	56
31-40	7	14
41-50	1	2
>50	2	4

Table 2: Comparison of side of breast involved in benign breast diseases.

Sides affected	Number of cases	Percentage (%)
Left	21	42
Right	27	54
Bilateral	2	4

Table 3: Mode of presentation of benign breast diseases.

Presentations	Number of patients	Percentage (%)
Breast lump without pain	37	74
Painful lump	12	24
Nipple discharge	1	2
Total	50	100

Table 4: Incidence of different type of benign breast diseases.

Diagnosis	Number of patients	Percentage (%)
Fibro adenoma	34	68
Fibrocystic diseases	10	20
Duct hyperplasia	4	8
Duct papilloma	1	2
Fibroadenosis	1	2
Total	50	100

Table 5: Comparison of clinical diagnosis with FNAC or Tru-cut biopsy.

Diagnosis	Clinical diagnosis	FNAC/ TRU- CUT Biopsy
Fibro adenoma	37	34
Fibrocystic diseases	12	10
Duct hyperplasia	0	4
Duct papilloma	1	1
Fibroadenosis	0	1

DISCUSSION

The patients of benign breast diseases s generally present with one or more of these complaints-breast lumps, breast pain or nipple discharge. It has been recommended that all the patients with discrete breast lumps should undergo FNAC or Tru-cut biopsy to make an early diagnosis.

Fibro adenomas accounted for 68% of the benign breast lumps in our study. Our finding was in agreement with most of the available literature on benign breast lumps, where the frequency of fibro adenoma ranged from 56.6%-75.6%. ⁴⁻⁷

The peak incidence of fibro adenoma ranged from the 2nd to the 3rd decade of life, which was consistent with the findings of other studies. FNAC was the quickest and the most reliable method which helped in making the diagnoses of the breast lumps.

Next common benign breast diseases in our study are fibrocystic diseases and a majority of the patients belonged to the 3rd and 4th decades. The incidence varies geographically. Many authors like Adesunkanmi et al and Ihekwaba found that the incidence of the fibrocystic changes ranged from 29.5-42.2% for the benign breast lumps smaller figure, with 20%. ^{4,5} We had a slightly smaller figure, with 20%.

In our study, the mean age of presentation was 24 years. In the age group of 21-30 years, there were 28 patients. This was almost similar to the observation which was made by Kaur et al.⁸

In our study the incidence of painful breast lump was 24%, which was nearly equal to the painful breast lump series, which ranged from 12.8%-30.3%. 4-10

Leis et al reported that the incidence of breast discharge was only 9% of all the breast complaints in his study, which was lower to the 2% incidence which was found in our study.¹¹

Patient who had complain of nipple discharge, the diagnosis was duct papilloma. The treatment of the nipple discharge must be done first, to exclude carcinoma on occult blood test and cytology. A simple reassurance may then be sufficient, but if the discharge is proving to be intolerable, an operation must be done to remove the affected duct or ducts.⁸ A total excision intraductal papilloma was done.

In the study of Dupont et al, atypical hyperplasia was identified in only 4% of the biopsy samples. ¹² In our study, no breast lumps had proliferative lesion with atypia on the biopsy samples. However, our samples were smaller in number than theirs.

The incidence of benign breast diseases s in our study was found to maximum in upper outer quadrant (26

patients), followed by upper inner quadrant (13 patients). Lower inner quadrant was involved in 06 patients while lower outer quadrant was involved in 04 patients.¹³

In the study of Foncroft et al, 60, they found that 87.4% of the women who attended the Wesley breast clinic had presented with breast lumps without pain, while in the series of Chaikanont 61, a breast lump without pain was the presenting symptom in 72.35% of the 331 benign breast patients. The corresponding figure for our study was 74%.^{10,13}

CONCLUSION

Benign breast diseases are a common problem in women. Breast lump without pain is the most common mode of presentation. Painful lump and nipple discharge are the other symptoms. Commonest age group which is affected is the 21-30 years age group followed by <21 years age group. Upper and outer quadrant of breast is more commonly involved followed by upper inner quadrant.

Among the breast lumps, fibro adenoma is the commonest, followed by fibrocystic changes. The other lumps are relatively uncommon.

From the history and clinical examination, we have diagnosed benign breast diseases, which are correlated with FNAC/Tru cut biopsy. The clinical diagnosis was accurate in 91.89% cases.

FNAC is a very useful tool in the evaluation of breast diseases. It is highly sensitive and specific in the diagnosis of the breast diseases. It is a useful adjunct to clinical examination in the confirming nature of breast diseases. When combined with clinical examination, it has the highest accuracy in diagnosis. This will not only save the cost, but also allays the anxiety of patient. Though USG has less sensitivity and specificity compared to FNAC, it has advantage of identifying smaller impalpable lesion in the affected and asymptomatic lesion in opposite breast which can be further investigation.

FNAC and USG is easily available in all tertiary care institutions in our country, it is cost effective and useful adjunct tool to clinical diagnosis for confirmation of benign breast disease upon which modalities of treatment can be planned and by doing this apprehension and anxiety to the patients can be relieved.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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