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RESEARCH ARTICLE

A RETROSPECTIVE STUDY OF BENIGN BREAST DISEASES IN CORRELATION WITH CLINICO PATHOLOGICAL EXAMINATION

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ABSTRACT

Benign breast diseases constitute a heterogenous group of lesions including developmental abnormalities, inflammatory lesions, epithelial and stromal proliferations and neoplasms. Many of these are clinically suspected as malignant lesions but diagnosed as benign after histopathological examination. ANDI [Aberration of normal development and Involution] classification provides a comprehensive framework within which to correlate clinical presentation with pathogenesis. In this study, we studied spectrum of benign breast conditions in Indian women with reference to ANDI system and performed clinicopathological correlation. We studied a total of 571 patients in and out patient basis, who underwent clinical examination, FNAC, and excision biopsy

Aim of the study:

-To analyse the incidence of different benign breast lesions.
-To analyse the correlation between the clinical presentation of benign breast diseases and their pathological findings.
- To analyse the age incidence of benign breast diseases.

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INTRODUCTION

Benign breast diseases represents a spectrum of disorders that come to clinical attention are imaging abnormalities as palpable lesions found on physical examination. Most of the benign epithelial lesions are labelled by many pathologists with variety of terminologies such as fibrocystic disease, cystic mastitis, cystic mastopathy, epithelial hyperplasia. Benign breast diseases are 10 times more common than breast cancer world wide. Since a majority of the benign lesions are not associated with an increased risk for subsequent breast cancer, unnecessary surgical procedure can be avoided. Benign breast diseases can be classified as (a) non proliferative lesions, (b) proliferative lesions section without atypia and (c) atypical proliferative lesions. Clinically Benign breast diseases is classified as (a) physiological swelling and tenderness (b) nodularity, (c) breast pain, (d) nipple discharge, and (e) palpable lump and infections/ inflammation. The purpose of this study was to profile the incidence and spectrum the different types of benign breast diseases in Indian women on a in and out patient basis and correlate with pathological examination.

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Background

To study the pattern of clinically benign breast disease in females and to correlate them with the pathological findings

MATERIALS AND METHODS

The present study was a retrospective study in the Department of general surgeryand Department of pathology from January 2013 to December 2015. Total of 571 female patients were studied of which their age ranges from 15 to 55 years having benign breast diseases attending surgical out patient department. A detailed history of symptoms and their duration, menstrual patterns, marital status, pregnancy, lactation, oral contraceptive pill intake taken from all patients. All patients underwent FNAC of the lesion, later excision biopsy and core biopsy was done and results were noted.

Inclusion criteria

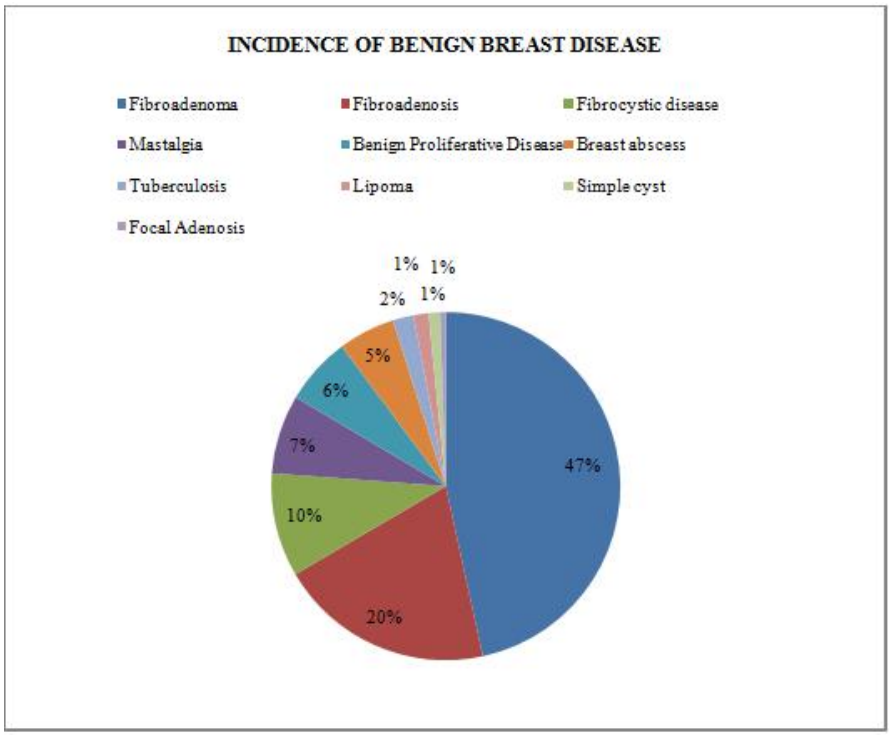
Female patients with benign breast diseases for example breast lump, breast pain or a nipple discharge were included. Patients initially presenting as benign later found to have malignancy was excluded. Male patients with gynaecomastia was excluded.

Correlation of diagnosis by clinical, Fnac, and Histopatholgical Examinaton

Final Diagnosis	Clinical	FNAC	HPE	Total Patients
Fibroadenoma	201	35	30	266
Fibroadenosis	70	12	32	114
Fibrocystic disease	20	15	20	55
Mastalgia	42	0	0	42
Benign Proliferative Disease	0	6	30	36
Breast abscess	30	0	0	30
Tuberculosis	0	3	8	11
Lipoma	0	2	6	8
Simple cyst	0	3	3	6
Focal Adenosis	0	1	2	3

Comparison of various diagnostic modalities in diagnosis of benign breast diseases

Final Diagnosis	FNAC %	HPE %
Fibroadenoma	13.16	11.28
Fibroadenosis	10.53	28.07
Fibrocystic disease	27.27	36.36
Mastalgia	0.00	0.00
Benign Proliferative Disease	16.67	83.33
Breast abscess	0.00	0.00
Tuberculosis	27.27	72.73
Lipoma	25.00	75.00
Simple cyst	50.00	50.00
Focal Adenosis	33.33	66.67



Incidence of benign breast diseases

RESULTS

Among 571 patients, fibroadenoma was the most common pathology encountered in 266 patients (Foncroft *et al*., 1985; Mansel and Benign, 1982; Hutchinson *et al*., 1980), followed by, fibroadenosis in 114 patients, fibrocystic disease in 55 patients, mastalgia in 42 patients, benign proliferative disease in 36 patients, breast abscess in 30 patients, tuberculosis in 11 patients, lipoma in 8 patients, simple cyst in 6 patients, focal adenosis in 3 patients.

Age Distribution

Among these 571 patients, 85% of the patients of benign breast disease fall in the reproductive age group of 15-40 years. Majority 70.13% of the patients belong to age group of 20-40 years. 29.87% patients fall in the age group of 40-55 years. The mean age of fibroadenoma was 15-30 years.

Mode of Presentation

The patients were broadly divided into 4 groups, depending on their symptoms or presentation, such as breast lump (Cole

et al., 1978), pain, nodularity, nipple discharge. The commonest complaint was lump in the breast which was present in 62.10%, 24.66% had pain, 17% had nodularity, 13.24% patients had nipple discharge and other associated complaints. The above table shows comparison of the outcome of various diagnostic modalities for the diagnosis of benign breast diseases. Clinical examination, USG, HPE were compared with the final diagnosis. FNAC was taken as the final diagnostic test for fibroadenoma (Hutchinson *et al*., 1980), HPE for fibrocystic disease, tuberculosis, focal adenosis, and benign breast disease. Clinical diagnosis was taken as final for mastalgia after investigation

DISCUSSION

Fibroadenoma encountered 47% of the total patients studied[3,6]. In this study, Fibroadenoma was the most common benign breast disease noted in our institute. The most common age group affected was 20-40 years. 20% patients was diagnosed to have Fibroadenosis, 10% had Fibrocystic disease, 6% had Benign Prolieferative breast disease, 5% had Breast abscess, 7% had Mastalgia, 2% had Tuberculosis, 1% had focal adenosis, 1% had simple cyst in our study.

Age Distribution

Fibroadenoma is common in 20-30 years of age, mean age incidence, fibroadenosis is more common in 30-40 years of age, mean age incidence is 35 years. Mastalgia is common in 20-40 years, mean age incidence is 30 years, tuberculosis is common in 35 to 45 years, mean incidence is 40 years. Fibrocystic disease is common in 25-35 years, mean incidence 30 years.

Conclusion

Thus we conclude from this study that the commonest beningn breast lesion encountered in clinical practice is fibroadenoma 32.67% (Foncroft *et al*., 1985), followed by fibroadenosis, fibrocystic disease. Presentation of fibroadenoma is 25 years, Fibroadenoma most commonly presented in 2nd or 3rd decade, while fibroadenosis in 3rd decade. FNAC has highest sensitivity and specificity in diagnosis of benign proliferative diseases after HPE. It also helps in conservative management of small lumps, thus avoiding surgical intervention. Majority of the fibroadenoma cases are treated surgically, while fibroadenosis, mastalgia have conservative approach. 571 patients had benign breast diseases in our study from january 2013 to december 2015. Thus we conclude that clinipathpological correlation helps in accurate diagnosis and management of benign breast diseases (Hutchinson *et al*., 1980; Foncroft *et al*., 1985).

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