



## A Study of Benign Breast Diseases in a Tertiary Rural Hospital

Authors

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### Introduction

Benign diseases of the breast are the commonest diseases affecting the female covering much morbidity and anxiety in them. Up to 30% of the women will suffer from benign breast lesions requiring treatment at some time of their life. Premenopausal women are most affected.

The most common symptoms are lump (47%) and pain (35%).

Aim of the treatment is to exclude malignancy and once this has been done, to treat any remaining symptoms.

Our study is intended to find out the common Benign breast diseases affecting the women in reproductive age group and the common clinical presentation and various investigations adopted and analyze different modalities of the treatment in my Vinayaka Missions Kirupananda Variyar Medical College Hospital.

### Objectives of The study

To assess

A. The age groups commonly affected in various Benign Breast Diseases.

B. The clinical presentation of various Benign Breast Diseases (BBD)

C. The cytological features

D. The accuracy of FNAC in BBD

E. The efficacy of medical and surgical management of various BBD in patients who were admitted in our hospital from the period of October 2009 to October 2011.

### Materials and Methods

**Study Design:** Prospective Descriptive Study

**Study Period:** October 2009 to October 2011

**Study Population:** 75 Cases

**Type of Sample:** Purposive Sample

### Methods

#### (Parameters of Measurements)

- Age Incidence
- Clinical Features
- Quadrants Affected
- FNAC
- HPE Report

### Inclusion Criteria

- Male breast (gynaecomastia)
- Pre and post menopausal women

### Exclusion Criteria

- Malignancy proven with FNAC.
- Palpable axillary nodes

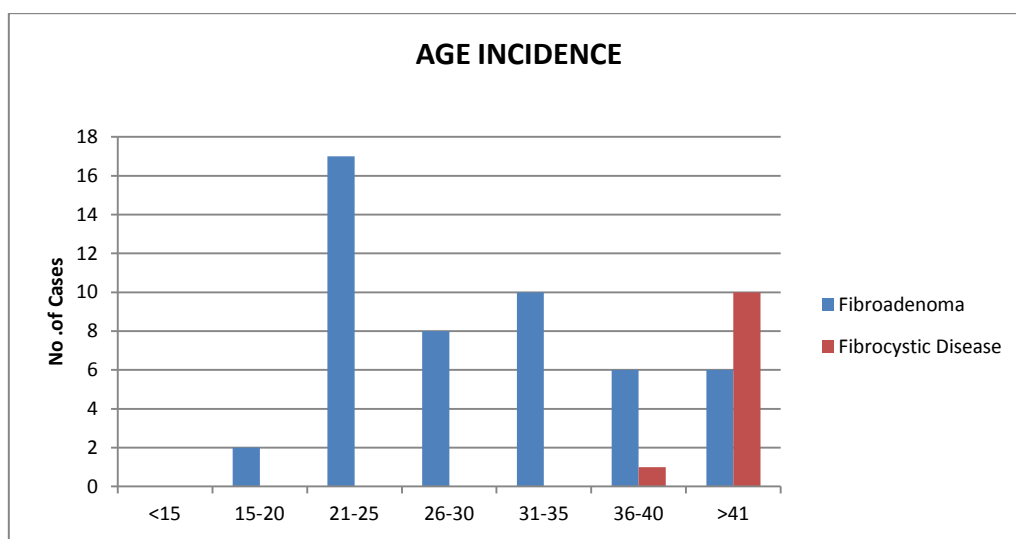
**Observations and Results**

In our study includes 75 patients in which 62 patients are in between the age group of 15 to 45 years, 13 patients are above the age group of 45 yrs.

Age incidence, Clinical presentation, FNAC, Excision biopsy and Management were taken into consideration & analyzed in this study.

**Table 1: Age Incidence**

| Age in years        | <15 | 15-20 | 21-25 | 26-30 | 31-35 | 36-40 | >41 |
|---------------------|-----|-------|-------|-------|-------|-------|-----|
| Fibroadenoma        | -   | 2     | 17    | 8     | 10    | 6     | 6   |
| Fibrocystic disease | -   | -     | -     | -     | -     | 1     | 10  |
| Breast abscess      | -   | 1     | 2     | 1     | 1     | -     | -   |
| Fibroadenosis       | -   | -     | 1     | -     | 2     | 1     | -   |
| Phylloides tumour   | -   | -     | -     | -     | -     | -     | 1   |
| Gynaecomastia       | -   | 3     | -     | -     | -     | -     | 1   |
| Ductal ectasia      | -   | -     | -     | 1     | -     | -     | -   |



**Figure 1: Age distribution**

**Clinical Features**

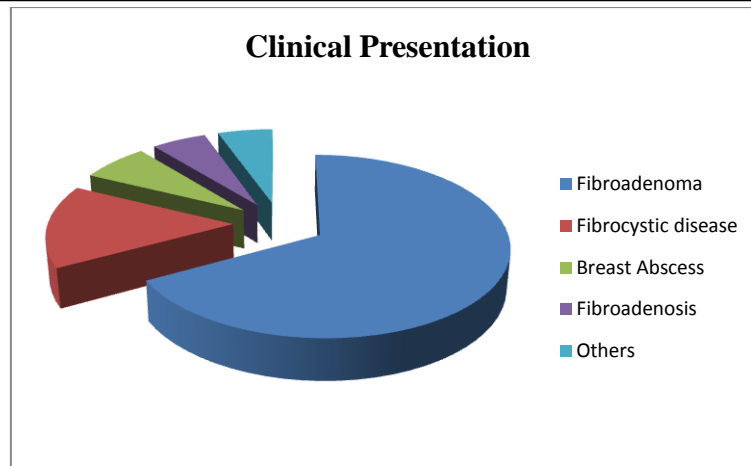
- Breast lump is the main complaint of all 75 cases
- Out of 49 cases of Fibroadenoma, 10 cases had vague non specific pain in the lump.
- Out of 11 cases of Fibrocystic disease, 7 cases had lump with pain , not associated with menstrual cycle.

- All 4 cases of Fibroadenosis had pain in both breast during menstrual cycle.
- All 5 cases of Breast Abscess had lump, pain and fever. All were lactating women.
- Nipple discharge found in one patient (ductal ectasia).

**Clinical Presentation**

**Table 2: Clinical features:**

| Clinical Features | Fibro adenoma | Fibrocystic disease | Breast abscess | Fibro adenosis | Ductal Ectasia | Others |
|-------------------|---------------|---------------------|----------------|----------------|----------------|--------|
| Lump              | 49            | 11                  | 5              | 4              | 1              | 5      |
| Pain              | 10            | 7                   | 5              | 4              | 1              | -      |
| Nipple discharge  | -             | -                   | -              | -              | 1              | -      |
| Fever             | -             | -                   | 5              | -              | -              | -      |



**Figure 2** Clinical Presentation

### Investigations

- FNAC done for all cases except Breast Abscess.
- Mammogram done for 20 cases of Fibroadenoma, 11 cases of Fibrocystic disease and 4 cases of Fibroadenosis.
- USG done for all Breast Abscess patients.

### Management

- Excision biopsy was done in all cases of Fibroadenoma in which 2 cases associated with Fibrocystic disease by HPE.
- 11 cases of Fibrocystic disease were treated with analgesics and anti inflammatory drugs
- 4 cases of Fibroadenosis were treated conservatively with analgesics and anti inflammatory drugs.
- All 4 cases of Gynaecomastia treated by Webster's Procedure.
- All 5 cases of breast abscess were treated by Emergency Incision and Drainage. Post operatively treated with antibiotics and analgesics.
- One case of Phylloides Tumour treated by Simple mastectomy.
- One case of Ductal Ectasia treated by Microdochectomy.

### Results

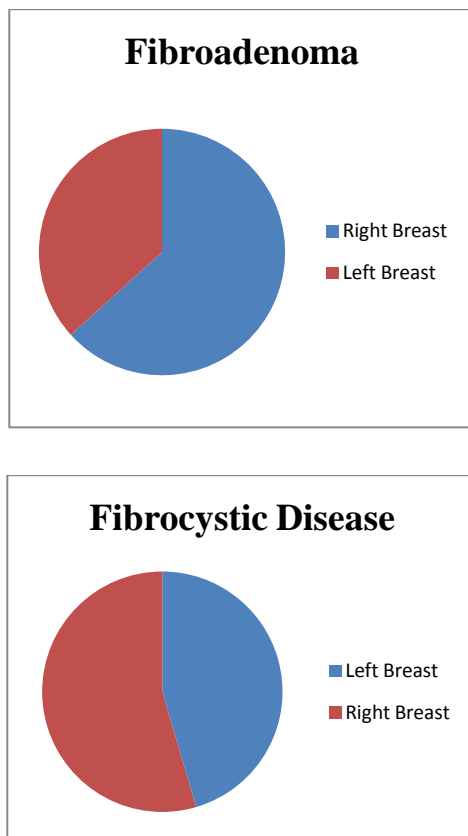
1. In our study population (75 cases), total number of cases of Fibroadenoma is 49 cases,
  - Right side involved in 31 cases
  - Left side involved in 16 cases
  - Bilateral involvement in 2 cases.
2. Fibroadenoma is commonly affected in the Right upper outer quadrant (27 cases) followed by left upper outer quadrant (14 cases), then by right upper inner quadrant (4 cases).
3. Total number of cases of Fibrocystic disease is 11 cases,
  - Right side involved in 6 cases
  - Left side involved in 5 cases
4. Common site of involvement is left upper inner quadrant (5 cases), followed by right upper inner quadrant (4 cases), then by right upper outer quadrant (2 cases).
5. 3 cases of Gynaecomastia involved in both breast and one patient involved in the left breast
6. A case of Phylloides Tumour affected in the left breast.
7. Benign breast diseases commonly occurs in the right breast (40 cases), then the left breast (27 cases) and then bilateral involvement (8 cases).

**Results**

**Table 3:**

| Quadrants      | Fibroadenoma | Fibrocystic Disease |
|----------------|--------------|---------------------|
| Rt upper outer | 27           | 2                   |
| Rt upper inner | 4            | 4                   |
| Rt lower outer | -            | -                   |
| Rt lower inner | -            | -                   |
| Lt upper outer | 14           | -                   |
| Lt upper inner | 2            | 5                   |
| Lt lower outer | -            | -                   |
| Lt lower inner | -            | -                   |
| Both           | 2            | -                   |
| Total          | 49           | 11                  |

**Figure 3**



**Discussion**

Benign Breast lesions are commonly affecting in the reproductive age group (20-40 yrs). In our study fibroadenoma and fibrocystic disease were common. The incidence for fibroadenoma was high in 21-25 yrs age group and fibrocystic disease was more than 45 yrs age group. Dominant symptoms were lump and pain. FNAC done in all cases except breast abscess. Number of patients: 75

**Table 4**

| Disease             | Clinical Diagnosis | FNAC Report | Accuracy of Report |
|---------------------|--------------------|-------------|--------------------|
| Fibroadenoma        | 51                 | 49          | 96%                |
| Fibrocystic Disease | 15                 | 11          | 73%                |

FNAC is very efficient investigation for confirming fibroadenoma and good for fibrocystic disease.

Surgical procedures done in all cases of Fibroadenoma.

Excision biopsy with HPE stands as the ultimate investigation involved in cases of doubtful diagnosis and suspected malignancy which has 100% accuracy.

Mammogram is 100% accuracy in the diagnosis of fibroadenosis.

USG is 100% accuracy in the diagnosis of breast abscess.

**Conclusion**

Our study proved that benign lesions are the commonest lesions of female breast especially of the reproductive age group (15-45yrs).

Fibroadenoma is the commonest followed by fibrocystic disease.

Right upper outer quadrant is the commonest area affected in fibroadenoma.

Left upper inner quadrant is the commonly involved in fibrocystic disease.

Pre menopausal women commonly affected with benign breast disease.

Lump & pain are the commonest symptoms.

FNAC is the single most useful investigation with high diagnostic accuracy in experienced hands. The accuracy in Fibroadenoma is 96% & in the fibrocystic disease is 73%.

Excision biopsy is the treatment of choice in fibroadenoma.

HPE report should be obtained if there is disagreement between cytological and clinical assessment.

In our study results are correlating with the literatures.

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