

## Research Article

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# Clinical Profile of Patients with Fibroadenoma of Breast

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### Abstract

**Aims and Objectives:** To study the clinical profile of patients with fibroadenoma of breast. **Methods and Materials:** Fifty cases with histologically diagnosed cases of fibroadenoma were included in the study and were compared with previous data from literature. **Result:** All the fifty patients included in this study were indoor patients. Maximum number of patient were in third decade [64%]. Urban females have higher incidence of fibroadenoma [72%]. Most fibroadenoma are unilateral [86%]. Fibroadenoma are commonly present in upper lateral quadrant of breast [34%]. Large sized fibroadenoma are common [58%]. Pericanalicular pattern is most common histopathological finding [84%]. Surgical excision is the commonest mode of treatment [36%]. **Conclusion:** Fibroadenoma are common in third decade, urban female population. Fibroadenoma are usually unilateral, large size, pericanalicular, type situated in upper lateral quadrant.

**Keywords:** Fibroadenoma; Surgical excision; Histopathological; Breast

### 1. Introduction

Breast is a modified Sweat Gland derived from ectoderm, and a branching epithelial cord emerging from this ectoderm forms this lactiferous duct. True Secretary alveoli develop during pregnancy and lactation. Topographically breast extends from second to sixth rib vertically. Horizontally it extends from side of Sternum to mid axillary line [1]. Microanatomy of breast reveals two type of tissue Component. They are epithelial and Stromal Components. In fully developed non lactating female breast, the epithelial component comprises less than 10% of total volume. But this epithelial component is more significant pathologically since majority of lesion arises from this portion of breast Tumors of the female breast are more common and clinically significant. These Conditions are rare in Men [2]. Benign breast disorders are classified as congenital disorders, Injury Related inflammatory and infective condition, aberration of normal differentiation and involution, duct ecstasies, and congenital breast conditions such as inverted nipple, tietze's disease which is also known as costochondritis, sebaceous cyst and

others skin condition. Aberration of normal differentiation and involution of breast consist of cystic nodularity and mastalgia, cysts and fibroadenoma [3].

## 2. Aims and Objectives

1. To study the incidence of fibroadenoma of breast demographically and histologically.
2. To study the clinical profile and management of patients with fibroadenoma of breast.

## 3. Materials and Methods

‘Clinical profile of patients with fibroadenoma of breast’ is a descriptive observational study conducted in tertiary care center of north Karnataka from 1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2017. In this study histologically diagnosed cases of fibroadenoma were included. Totally fifty patients were included in this study and all were inpatient. The detailed history and clinical examination with required relevant investigation were carried out in every patient.

## 4. Inclusion Criteria

1. Female patients presenting with breast lump.
2. Age more than 12 years
3. Patients admitted between 1<sup>st</sup> January 2014 to 31 December 2017
4. Admitted Patients.
5. Histologically confirmed fibroadenoma of breast patients.

## 5. Exclusion Criteria

1. Male Patients.
2. Age less than 12 years.
3. Patients admitted before 1<sup>st</sup> January 2014 and after 31 December 2017.
4. Non admitted Patients.
5. Histologically confirmed Non fibroadenoma Patients.

All the Patients included in this study were subjected to fine needles aspiration cytology for confirmation and differentiation of diagnosis.

## 6. Observations

| Age group in year | Number of patients | Percentage |
|-------------------|--------------------|------------|
| 12 – 20 Yr        | 08                 | 16%        |
| 21-30Yr           | 32                 | 64%        |
| 31-40yr           | 6                  | 12%        |
| 41-50yr           | 4                  | 8%         |
| 50Yr & above      | 0                  | 0          |

**Table 1:** Age distribution.

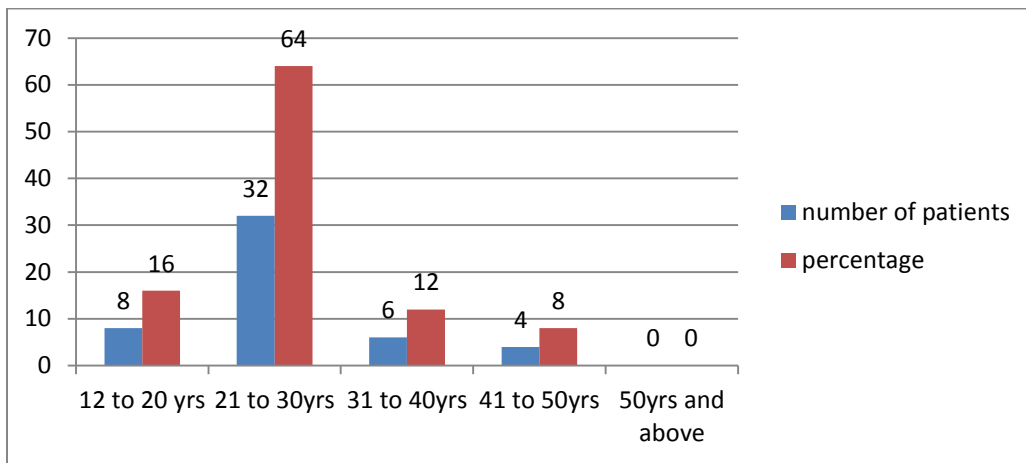


Figure 1: Age distribution.

|       | Number of Patients | percentage |
|-------|--------------------|------------|
| Urban | 36                 | 72%        |
| Rural | 14                 | 28%        |

Table 2: Residential Locality of Patients.

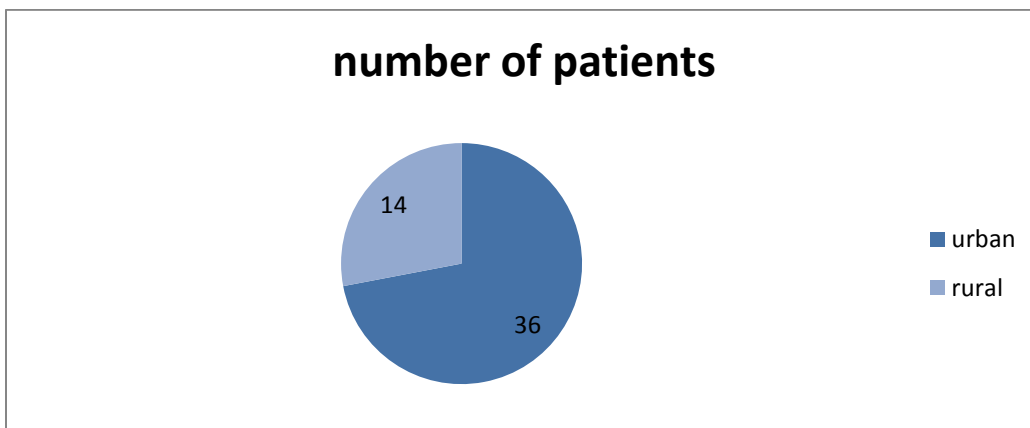


Figure 2: Residential Locality of Patients.

|            | Number of Pt | percentage |
|------------|--------------|------------|
| Unilateral | 43           | 86%        |
| Bilateral  | 7            | 14%        |

Table 3: Location of Fibroadenoma.

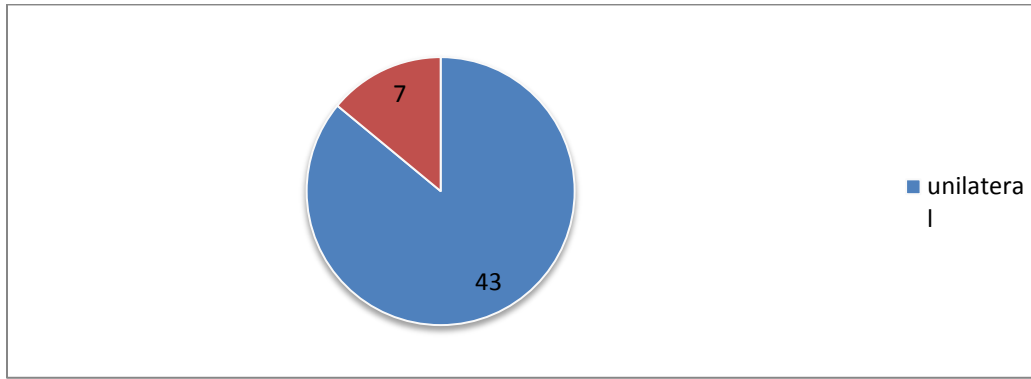


Figure 3: Location of Fibroadenoma.

| Quadrant      | Number of Patients | Percentage |
|---------------|--------------------|------------|
| Central       | 6                  | 12%        |
| Upper Lateral | 17                 | 34%        |
| Upper Medial  | 10                 | 20%        |
| Lower Lateral | 13                 | 26%        |
| Lower Medial  | 4                  | 8%         |

Table 4: Quadrant wise distribution of Fibroadenoma.

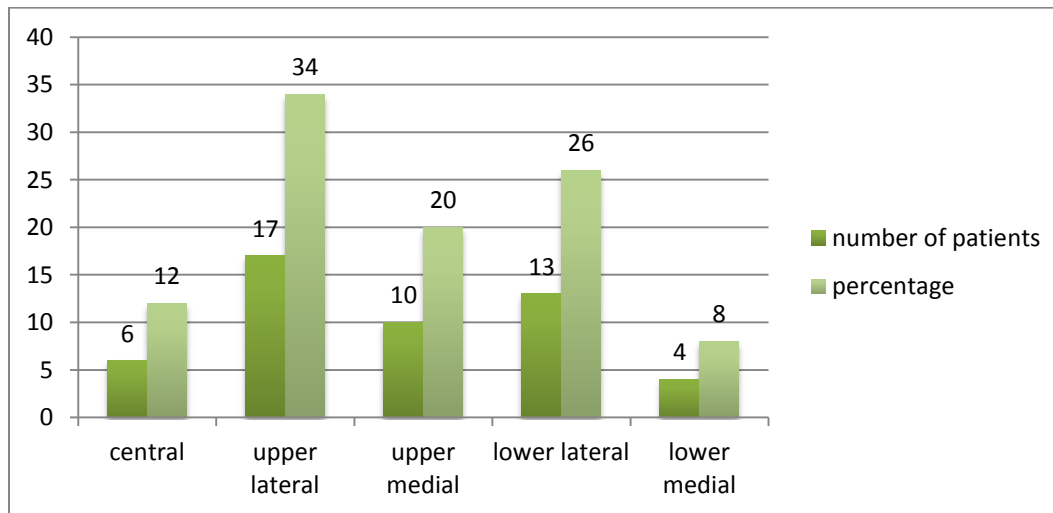


Figure 4: Quadrant wise distribution of Fibroadenoma.

| Size         | Number of Patients | Percentage |
|--------------|--------------------|------------|
| Small: <1cm  | 14                 | 28%        |
| Large: 1-3cm | 29                 | 58%        |
| Giant: >3cm  | 7                  | 14%        |

Table 5: Size of Fibroadenoma.

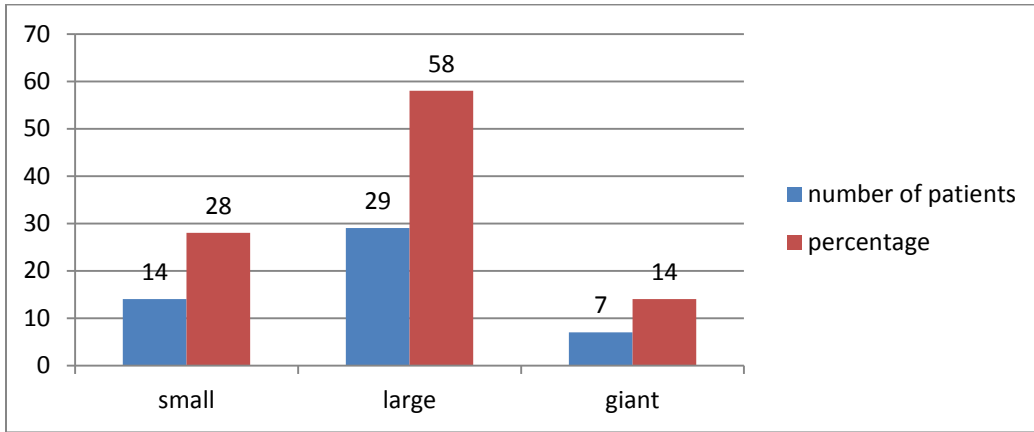


Figure 5: Size of Fibroadenoma.

| FNAC                           | Number of pt | Percentage of Pt |
|--------------------------------|--------------|------------------|
| Intra canalicular Fibroadenoma | 8            | 16%              |
| Pericanalicular Fibroadenoma   | 42           | 84%              |

Table 6: Fine Needle Aspiration Cytology findings.

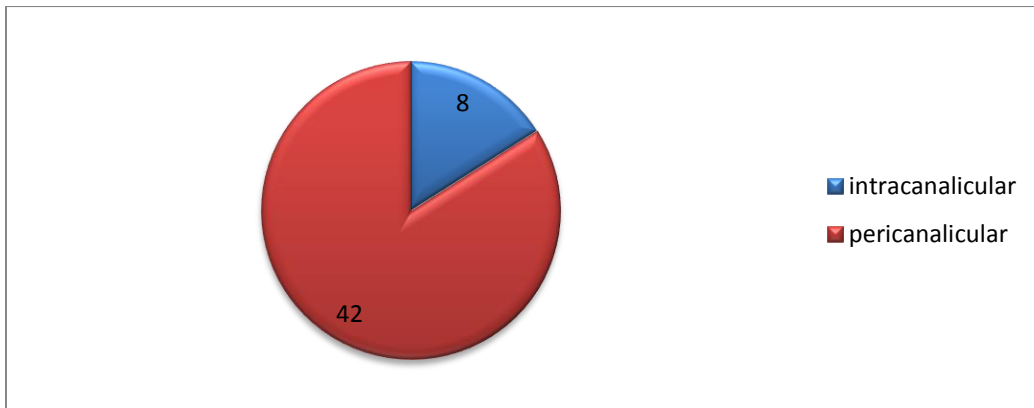


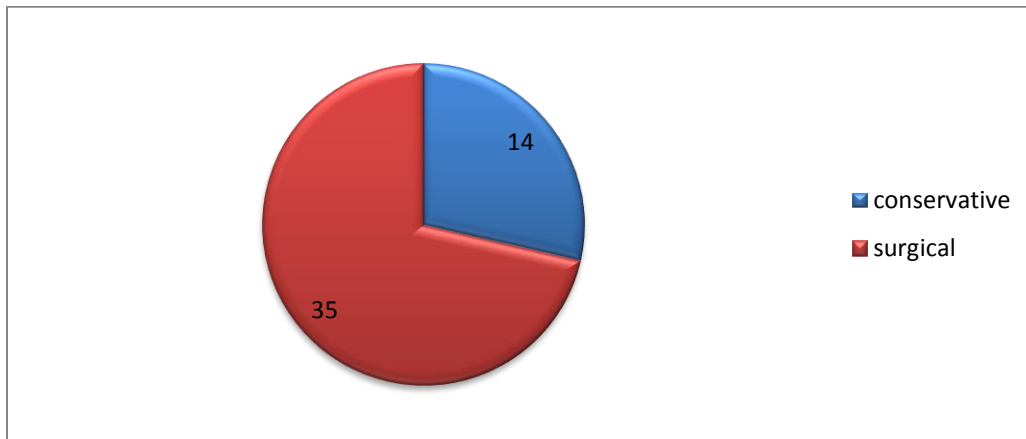
Figure 6: Fine Needle Aspiration Cytology findings.

| Clinical Features           | Number of patients | Percentage |
|-----------------------------|--------------------|------------|
| 1.Mobile breast lump        | 50                 | 10%        |
| 2.Pain in lump              | 1                  | 2%         |
| 3.Well localized            | 50                 | 100%       |
| 4. Axillary Lymphadenopathy | 0                  | 0%         |
| 5. Skin Changes             | 0                  | 0%         |
| 6.Discharge                 | 0                  | 0%         |
| 7.Firm lump                 | 42                 | 84%        |
| 8.Hard limp                 | 8                  | 16%        |

Table 7: Clinical Feature.

|                   | <b>Number of patients</b> | <b>Percentage</b> |
|-------------------|---------------------------|-------------------|
| Conservative      | 14                        | 28%               |
| Surgical excision | 36                        | 72%               |

**Table 8:** Management.



**Figure 8:** Management.

## **7. Discussion**

### **7.1 Age distribution**

Maximum number of patients were present in the age group of third decade. It accounted for 64% [n=32] cases. This was followed by next highest incidence in second decade with 16% [n=8] of Cases. There were 12% [n=6] of cases in fourth decade. Only 8% [n=4] of cases were present were present in the age group of above fifth decade. Our study correlates with the study done by Frany V K et al, where higher incidence of fibroadenoma was seen in second and third decade [4].

### **7.2 Residential locality of patients**

In this study 72% [n=36] of cases were from urban area. Minimum number of cases were from rural population. It accounted for 28% [n=14] of cases. Our study correlates with the study done by Soini.I et al, where they concluded that fibroadenoma is common in urban patients [5].

### **7.3 Location of fibroadenoma**

Maximum number of patients 86% [n=43] had unilateral fibroadenoma while remaining 14% [n=7] of cases had bilateral fibroadenoma. Our study correlates with the study done by Foster M E et al, where unilateral fibroadenoma were common [6].

#### **7.4 Site of fibroadenoma**

In this study 34% [n=17] of cases has fibroadenoma in upper lateral quadrant. Next highest was 26% [n=13] of cases, who had fibroadenoma in lower lateral quadrant. 20% [n=10] of patient had fibroadenoma in upper medial quadrant. 12% [n=6] cases had centrally situated fibroadenoma and 8% [n=4] cases had fibroadenoma in lower medial quadrant. Our study correlates with study done by Kelsey J L et al where fibroadenoma were common in upper lateral quadrant [7].

#### **7.5 Size of fibroadenoma**

In this study maximum number of cases i.e. 58% [n=29] had Large fibroadenoma. Large fibroadenoma have size between 1-3 cm. Small size fibroadenoma was present in 28% [n=14] of cases. Giant fibroadenoma was present in 14% [n=7] of cases. Our study correlates with study done by Hanna R et al., where the incidence of giant fibroadenoma was lowest [8].

#### **7.6 Fine needle aspiration cytology finding**

Maximum number of patient in this study had pericanalicular type of fibroadenoma. It accounted for 84% [n=42] of cases. 16% [n=8] cases had intracanalicular type of fibroadenoma. Our study correlates with the study done by Oluwole et. al., where pericanalicular type of fibroadenoma was common [9].

#### **7.7 Clinical features**

In our study all patients had well defined, mobile breast lump. All the patient had painless fibroadenoma except one patient who complained of occasional pain in breast lump. Maximum patient had firm breast lump except 8 cases, which had hard breast lump. There was no associated lymphadenopathy, skin change and discharge.

#### **7.8 Management of patients**

In our study 72% [n=36] was treated with surgical excision while remaining 28% [n=14] of cases were treated with conservative management. Our study correlates with the study done by Schuerch et al., where maximum cases had surgical management [10].

### **8. Result**

- Maximum number of patient were in third decade [64%]
- Urban females have higher incidence of fibroadenoma [72%]
- Most fibroadenoma are unilateral [86%]
- fibroadenoma are commonly present in upper lateral quadrant of breast [34%]
- Large sized fibroadenoma are common [58%]
- Pericanalicular pattern is most common histopathological finding [84%]
- Surgical excision is the commonest mode of treatment [36%]

## 9. Conclusion

Fibroadenoma are common in third decade, urban female population. Fibroadenoma are usually unilateral, large size, pericanalicular, type situated in upper lateral quadrant.

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