

## Benign Breast Lump-Value of Age and FNAC

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### Abstract:

**Aim:** 1) To find out the clinical & pathological diagnosis of benign breast lump among various age groups.

2) To correlate the clinical findings with preoperative cytological reports and post operative histopathology reports of patients operated.

### Methodology:

1) Study population: Patient presenting with benign breast lump at Department of Surgery, R.G.Kar Medical College and Hospital.

2) Sample size: 100

3) Study design: Descriptive observational study.

4) Inclusion criteria: All patients with benign breast lump during the study period.

5) Exclusion criteria: Patients with carcinoma breast.

**Conclusion:** Majority (93%) of benign breast diseases fall in the age group of 11-40, of these 73% are represented by early and mid reproductive age group. Majority of them (45%) belong to the age group of 21-30 years with average age being 25.6 years. The mean age of highest age of fibroadenoma is 24.4 years, majority (84%) within the age group of 11-30 years. About 83% of fibrocystic diseases fall within 31-50 years age group. Phylloides tumours and anti-bioma are commoner in the age group of 21-30 years. Two cases of galactocele belong to the age group of 21-30. Fat necrosis and lipoma have no significant age specific distribution. FNAC shows 100% accuracy in diagnosis of fibroadenoma and fat necrosis, 75% accuracy in Phylloides tumour and Fibrocystic diseases.

**Keywords:** Benign breast lump, age specific distribution, Fine needle aspiration cytology

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### I. Introduction:

Breast is a dynamic structure which undergoes changes during women's reproductive life, and superimposed on this, cyclical changes throughout the menstrual cycle. The pathogenesis involves disturbances in the breast physiology extending from an extreme normality to well defined disease process. Approximately 40% of all patients attending a breast clinic have a benign breast lump. Different types of benign breast diseases along with their pathophysiology, diagnosis and management have already been described in different books by different authors. FNAC is a widely accepted diagnostic aid. Still studying the cases of benign breast diseases is important because -1) the main problem from women's point of view is fear that such a lump may be cancer. 2) many are infrequently difficult to differentiate from breast cancer clinically. 3) some breast lumps are incorrectly diagnosed and inappropriately treated. We have done this clinicopathological study to find out the age specific distribution of different benign breast diseases and also the accuracy of FNAC in the diagnosis of these conditions.

### II. Aims and objectives:

1) To find out the clinical & pathological diagnosis of benign breast lump among various age groups.

2) To correlate the clinical findings with preoperative cytological reports and post operative histopathology reports of patients operated.

### III. Material and methods:

Study area: Department of Surgery, R.G.Kar Medical College and Hospital

Study population: Patient presenting with benign breast lump at Department of Surgery.

Study period: January 2013 to June 2014.

Sample size: 100

Study design: Descriptive observational study.

Inclusion criteria: All patients with benign breast lump during the study period.

Exclusion criteria: Patients with carcinoma breast.

Study tools: BHT, OPD tickets, Discharge certificate.

Proforma for collection of data.

#### IV. Results and analysis:

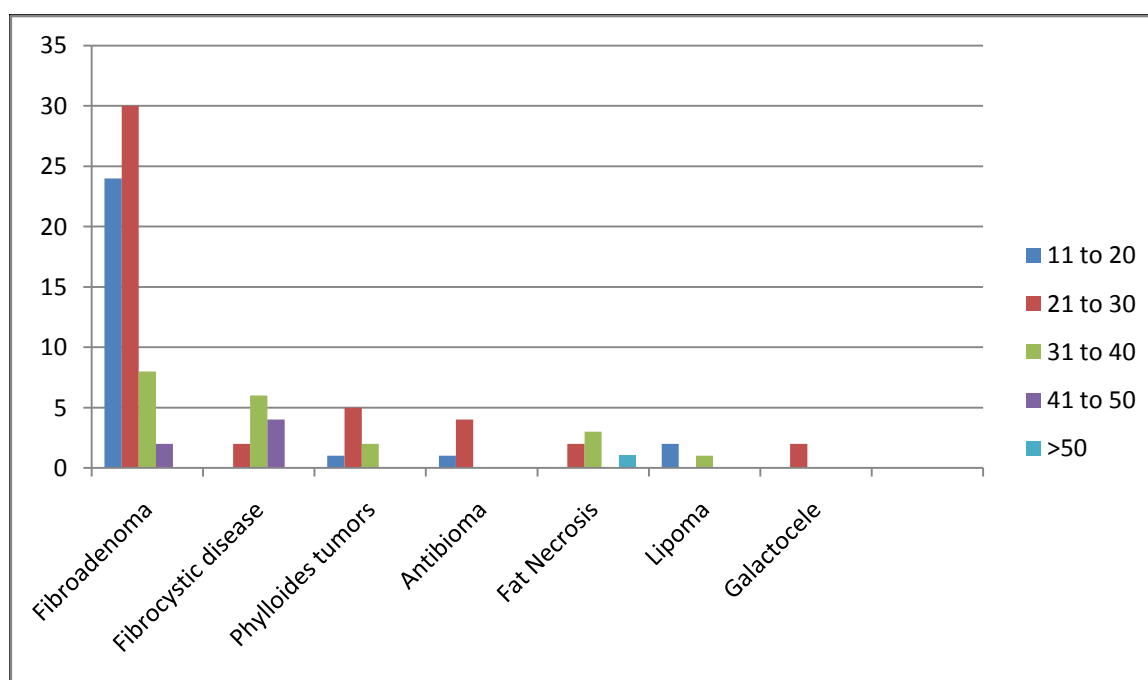
In the present study Fibroadenoma predominated with 64 cases(64%).Next common benign tumor found was Fibrocystic disease i.e. 12 cases(12%).Phylloides tumor was 8cases(8%),Antibioma was 5cases(5%),Fat necrosis was six cases(6%),lipoma was three cases(3%),and Galactocele was two cases(2%) found.

#### AGE SPECIFIC DISTRIBUTION OF BENIGN BREAST LUMPS

**Table 1.AGE INCIDENCE**

Diagnosis(Lesions)	Age inGroups				
	11 to 20	21 to 30	31 to 40	41 to 50	>50
Fibroadenoma	24	30	8	2	0
Fibrocystic disease	0	2	6	4	0
Phylloides tumors	1	5	2	0	0
Antibioma	1	4	0	0	0
Fat Necrosis	0	2	3	0	1
Lipoma	2	0	1	0	0
Galactocele	0	2	0	0	0
Total	28	45	20	6	1
Percentage	28	45	20	6	1

93% of all cases of benign disorders fall in the age group of 11-40 years,of these 73% are represented by early & mid reproductive age group (2<sup>nd</sup> & 3<sup>rd</sup>).Majority of them (45%) belong to the age group 21-30 yrs with average age being 25.6 yrs. The mean age of highest incidence of fibroadenoma is 24.4 years, majority (84%) are with in the age group of 11-30 years. In this study youngest patient of fibroadenoma is 11 year old, eldest being of 48 years. Only six cases were noted between the age group of 40-65 years, of which two were fibroadenoma, three being fibro cystic disease & one was Fat Necrosis.About 83% of the cases of fibro cystic disease fall within 31-50 year age group. Youngest patient of fibro cystic disease is 27year old, treated conservatively and eldest being 50year old. There were six cases of phylloides tumor, youngest being 20 years and eldest 37 years. Among these, three cases were diagnosed as fibroadenoma but HPE showed phylloides tumor in three cases. Among 100 cases studied two patients were diagnosed as fibroadenoma and treated with excision & HPE showed, for one patient fibroadenoma on right breast and fibro cystic disease on left breast. For other patient HPE showed fibroadenoma on right breast and phylloides tumor on left breast.

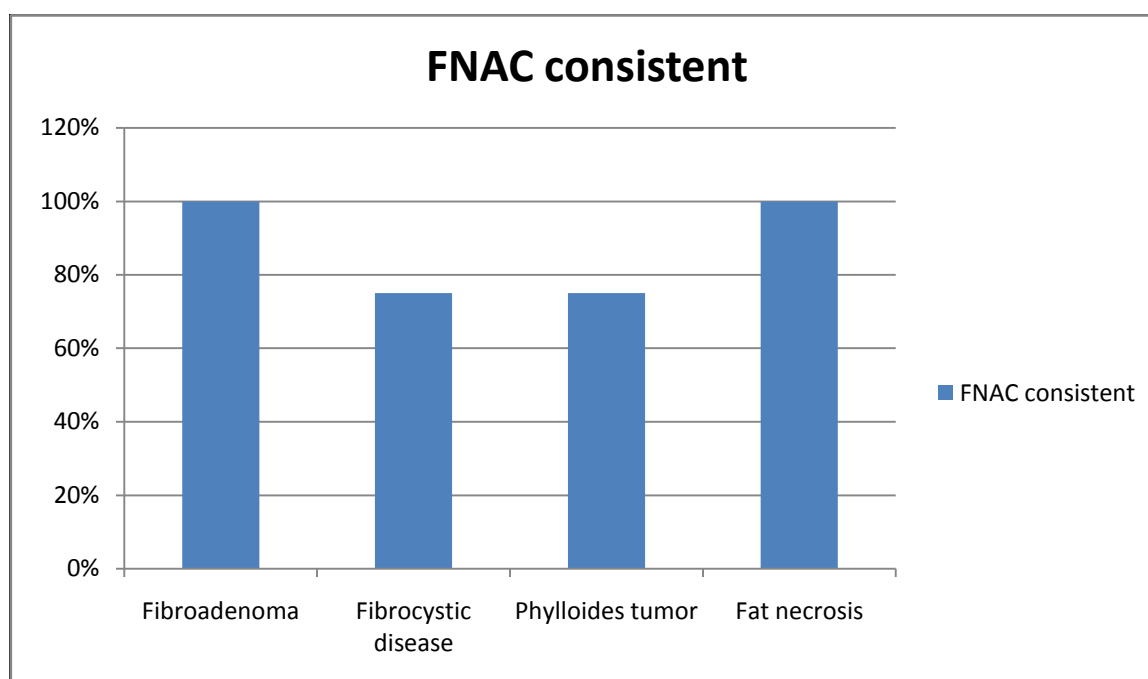


## ACCURACY OF FNAC AGAINST HPE

Table 16. ACCURACY OF FNAC AGAINST HPE

Diagnosis	No. of cases	FNAC			
		Consistent		Non consistent	
		No of cases	Percentage	No of cases	Percentage
Fibroadenoma	64	64	100%	-	-
Fibrocystic disease	12	9	75%	3	25%
Phylloides tumor	8	6	75%	2	25%
Fat necrosis	6	6	100%	-	-

Among 64 of fibroadenoma all 64 cases FNAC results are 100% accurate. Among 12 fibrocystic diseases 9 (75%) were given as fibrocystic diseases and other 3 (25%) are false negative as fibroadenoma. Among 8 phylloides tumor 6(75%) cases are accurately given as phylloides tumor and the remaining 2(25%) cases are false negative as fibroadenoma. In the diagnosis of fat necrosis FNAC is 100% accurate.



## V. Discussion:

## DISTRIBUTION OF VARIETY OF BREAST DISORDERS

Fibroadenoma accounts for 64% of the total cases studied. Malik MAN et al<sup>[1]</sup> reported 77%, Oluwole<sup>[9]</sup> reported 70.5%, Rosen PP et al<sup>[2]</sup> 45%, Greenberget et al<sup>[3]</sup> 50%. Present study incidence is consistent with Oluwel. According to all above mentioned studies fibroadenoma is the most common. Fibrocystic disease accounts for 12% in present study, where as 13% in Malik MAN et al and 14.2% in study by RangabhashyamN, Gnanaprakashan D et al<sup>[4]</sup> Phylloides tumor incidence in present study is 8%, 2.3% in Oluwole<sup>[5]</sup> 0.4% in Malik MAN et al<sup>[6]</sup>. Our hospital being a referral hospital may be the reason for this discrepancy. In India reports show a wide variation in the incidence of phylloides tumor: from 0.63% to 13.8% of the benign lesions

## AGE INCIDENCE

Youngest patient in this series is 11 year old with fibroadenoma, eldest being **52 year old with Fat necrosis**. In the present study majority of the patients are in the age group 21-30 years (45%) while according to Shukla S Hari<sup>[7]</sup> Peak incidence of Benign Breast Disorders is between 21-30 years, similar to our study. The mean age of highest incidence of fibroadenoma is 24.4 years, majority(84%) are within the age group of 11-30 years. The youngest patient of fibroadenoma was of 11 years old and eldest being 48 years old. About 83% cases of fibrocystic diseases fall within 31-50 age group with the youngest patient being of 27 years old and the eldest being 50 years old. There were 6 cases of phylloides tumour, youngest being 20 years and eldest being 37 years. Antibioma is common in the age group of 21-30, the youngest patient was of 15 years old. Fat necrosis

was found to be distributed among all age groups. Among total 6 cases 2 patients were of 21-30 age group, 3 patients of 31-40 age group and one patient of more than 50 years old. Among the 3 lipoma cases 2 patients belonged to 11-20 years age group and one patients was of 34 years old. Galactocele was found in the age group of 21-30 years old.



**Fig1: Fibroadenoma breast**



**Fig: Phylloides tumour**

#### **ACCURACY OF FNAC AGAINST HPE**

In our study, among 64 cases of fibroadenoma, FNAC finding was accurate for all 64 cases. So the accuracy of FNAC is 100%. Among fibrocystic diseases FNAC result was correct for 75% cases and other 25% were false negative as fibroadenoma. Among phylloides tumour 75% cases were accurately given as phylloides tumour and remaining 25% cases were false negative as fibroadenoma. In diagnosis of fat necrosis FNAC was 100% accurate.

#### **VI. Conclusion:**

Fibroadenoma was the predominant benign breast tumour occurring in 64% of cases. The next common tumours were fibrocystic disease occur in 12%, and phylloides tumour 8%. I found five cases of antibioma & three cases of lipoma, two cases of galactocele. Majority of the fibroadenoma (30%) cases were found in the age group of 21-30 years. Fibrocystic disease was maximum (50%) in 31-40 years of age group. FNAC was accurate in diagnosing fibroadenoma in 100% cases, 75% accurate in diagnosing fibrocystic disease & phylloides tumor both.

Statistical study regarding FNAC suggests that, FNAC is an accurate procedure with respect to benign breast diseases, especially for fibroadenoma, though other diseases can be misdiagnosed as fibroadenoma.

#### **References:**

- [1]. Winchester DP. ACP consensus statement, the relation of fibrocystic disease to breast cancer. *Am Coll Surg Bull* 1986; 71s: 29
- [2]. Johnson D, Shah P, Collins P, Wigley C. Breast. In: Standring S, editor. *Gray's*
- [3]. Uma Krishnaswamy *Indian Journal of Surgery*, Vol.65, No.2, March-April, 2003, pp. 178-181.
- [4]. Suen Jh, Sister Mary et al. A new score for the evaluation of palpable breast masses in women under age 40. *Am J Surg* 2002; 184: 346-347.
- [5]. Rosen PP, Ashikari R, Thaler H et al. A comparative study of some pathological features of mammary carcinoma in Tokyo, Japan and New York, U.S.A. *Cancer* 1977; 39: 429-434
- [6]. Greenberg R, Skomic Y, Kaplan O. Management of Fibroadenoma. *J Gen Int Med*. 1998; 13: 640-643.

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