

### **Pevelence of Various Type of Brest Lesion at Tertiary Care Hospital**

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#### **Abstract**

**Introduction:** Benign as well as malignant breast lesions are quite common in Indian population. It is the second most common cancer site after cancer cervix. Fine-needle aspiration cytology (FNAC) is safe, reliable, and time saving outdoor procedure with little discomfort to the patient. FNAC is useful in diagnosis and further planning of treatment without need for biopsy. The current study was carried out with aims of studying the frequency of various breast lesions on FNAC in Tertiary care hospital.

**Materials and Methods:** This was 1 year retrospective study carried out from jan2022 to december2022. Physical examination of breast mass by palpation was done. Smears were stained with May-Grunwald Giemsa and Papanicolaou stain. Results: Of the 272cases, 161 were in the benign category and 68 belonged to the malignant category, while the cytology study of 6 cases was unsatisfactory. Seventy-six cases were available for histological correlation. Of 29 cytological benign cases, 26 were confirmed as benign, but 3 turned out to be malignant. Out of 36 cytological malignant cases, 35

were confirmed as malignant. FNAC was 88.37% sensitive and 96.42% specific in diagnosing malignant lesions.

**Conclusion:** Fine-needle aspiration cytology is a rapid and effective method for the primary categorization of palpable breast lumps into benign, malignant, atypical, suspicious, and unsatisfactory categories. Benign breast lesions are common than malignant lesions. Histological correlation indicated FNAC to be a good diagnostic tool.

**Keywords:** FNAC, Lumps. Breast.

#### **Introduction**

Diseases of breast, with their uncertain causes and confusion of treatments, have intrigued physicians and medical historians throughout the ages. As an appendage of the skin, it usually reveals its disorders to touch or sight. Evaluating a breast mass can be a difficult task. It may be difficult for the patient because of the anxiety associated with her underlying fear of a breast malignancy, and it may be difficult for the physician to be

Confident of the fact that what he or she is palpating is truly a mass, rather than a variation of normal breast parenchyma. Majority of breast symptoms or lesions will prove to be of a benign etiology. Physical, psychological and financial costs of investigating benign breast disease, primarily to exclude malignancy are substantial. Benign as well as malignant breast lesions are quite common in Indian population. It is the second most common cancer site after cancer cervix in Indian females. Currently, 75,000 new cases of breast cancer are detected in India yearly.[1] This figure must be viewed against the backdrop that the National Cancer Registry and the Hospital-based Tumor Registries hardly sample 3% of the total population. Locally advanced breast cancer constitutes >50-70% of the patients presenting for treatment.[1] The information on the epidemiology of breast cancer in India is very limited, except for a few reports on limited samples. Fine-needle aspiration cytology (FNAC) method was introduced as a primary test in the diagnosis of breast carcinoma. The procedure is safe, reliable and time saving outdoor procedure with little discomfort to the patient. FNAC is not only useful in diagnosis and further planning of treatment without need for biopsy, but also helpful in prognostication of the tumour factors such as nuclear grading, mitotic index, hormone receptor status anperiodd DNA.

Table 1: Cytological spectrum of various palpable breast lesions

Cytological type	Number of cases	Percentage (%)
Benign	161	59
Atypical	02	0.73
Suspicious	02	0.73
Malignant	68	25
Unsatisfactory	06	2.20
Inflammatory	33	12
Total	272	100

### Results

During the study period January 2022 to December 2022 of the study, a total 272 FNAC's of breast were done.

The cytological spectrum of various palpable breast lesions in the presence study shows that out of total 272 cases,161 were in benign category, 33 were in inflammatory , 02 were in Atypical category, 02 were in suspicious category and 68 belong to malignant category while the cytology study of 6 cases was unsatisfactory.

The cytological spectrum of various benign breast lesion encountered in presents study shows that out of total 161 cases that could be satisfactorily labelled as benign in the presents study , fibro adenoma accounted for 121(75%) cases, fibrocystic disease for 34(21%) cases, Phyllodes for 6(3.72%) cases, 01 case of Galactocele & 01 case of Fat Necrosis.

On the other hand,cytological spectrum of various malignant breast lesions encountered in present study shows that total 68 cases that could be satisfactorily labelled as malignant,infiltrating ductal carcinoma accounted for 63 (92.6%) cases,medullary carcinoma for 2 (2.9%),papillary carcinoma for 2 (2.9%) and lobular carcinoma for 1 (1.4%) case each.

Benign lesions were seen in age group of 19-50 years; whereas suspicious and malignant cases are seen in age group of 31-70 years. Right and left both sides were

almost equally involved by the different types of cytological lesions. Upper and outer quadrant is the most commonly involved quadrant by all types of cytological lesions.

### **Conclusion**

Fine-needle aspiration cytology is a rapid and effective method for the primary categorization of palpable breast lumps into benign, malignant, atypical, suspicious, and unsatisfactory categories. Benign breast lesions are common than malignant lesions, fibro adenoma and fibrocystic disease are more common in benign disease, whereas IDC accounts for the highest number of malignant lesions.

### **Reference**

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