

## Evaluation of Benign Breast Diseases in Females: A Clinicopathological Study

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Conflict of interest: Nil

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### Abstract

**Aim:** To study the clinicopathological correlation of benign breast disease.

**Material & Methods:** A prospective study of 50 female patients attending the Outpatient and Inpatient, Department of Surgery, Shri Krishna Medical College and Hospital, Muzaffarpur, Bihar, India, over a period of one year was carried out.

**Results:** In this study of 50 patients, 24 cases had fibroadenomas, followed by fibroadenosis in 16 cases and breast abscess in 5 cases. Thus, fibroadenoma is found to be the most common lesion, followed by fibroadenosis in our current study.

**Conclusion:** Epidemiology of benign breast diseases still remains the same when analyzed with a past and recent study on benign breast diseases. Triple assessment remains the key in the evaluation of breast lumps.

**Keywords:** Aberrations in the Normal Development and Involution, benign, clinicopathological study

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### Introduction

Mammary glands, or breasts, are a distinguishing feature of mammals and have physical as well as psychological importance in females. [1-2] Many hormones regulate its development and growth, as well as physiologic states such as pregnancy and lactation. [1] The majority of breast lesions are overwhelmingly benign.[3] The mammary gland is unique among reproductive organs since it is not fully formed at birth, undergoes cyclical changes during childbirth.[4] Aberration in normal development and involution [ANDI] is the term referring to benign proliferative changes in the breast.[5] Breast benign

disorders are common during the reproductive period of life, and they are believed to be hormone-related. There is a dramatic drop off in their incidence after menopause, since the ovary is no longer stimulated.[6] Occurrence of benign breast diseases can occur at any time during the lifetime of a female, though male cases are rare.[7]

Benign diseases of breast are the commonest diseases affecting the female covering much morbidity and fear in them. Premenopausal women are most affected. The breast has always been a symbol of feminineness and ultimate fertility. So, both disease and surgery of the breast

cause a fear of mutilation and loss of femininity. Benign breast diseases assumed increasing importance in recent years because of the public awareness of breast cancer.[8] The most common symptoms are pain and swelling. Benign breast diseases involved non-proliferative breast lesions, proliferative breast lesions without atypia, And proliferative breast lesions with atypia. [9]

Thus, we aim to study the clinicopathological correlation of benign breast disease.

### Material & Methods:

A prospective study of 50 female patients attending the Outpatient and Inpatient, Department of Surgery, Shri Krishna Medical College and Hospital, Muzaffarpur, Bihar, India, over a period of one year was carried out. Some of the patients were diagnosed and treated on an outpatient basis while some required admission.

### Inclusion criteria:

- All females from menarche to 50 years of age.

### Exclusion criteria:

- Postmenopausal women

- Patients with carcinoma breast
- Premenarche females.

Informed consent was taken. Institutional ethical clearance was obtained. A detailed history was taken from each patient, followed by thorough clinical examination.

While most investigations could be carried out on an outpatient basis (including referral for mammography outside the hospital since the facility was not available in the hospital itself), some patients were admitted for completion of investigations and treatment. Various parameters such as age, sex, disease pattern, lesion types, histopathological diagnosis, and clinical diagnosis were studied and compared.

Data were tabulated and analyzed in detail covering the various clinicopathological aspects of benign breast disease presenting with a lump. An appropriate statistical test (Cramer's V test was applied) was applied in this analysis, and appropriate conclusions were drawn. Those patients fulfilling the inclusion and exclusion criteria were selected.

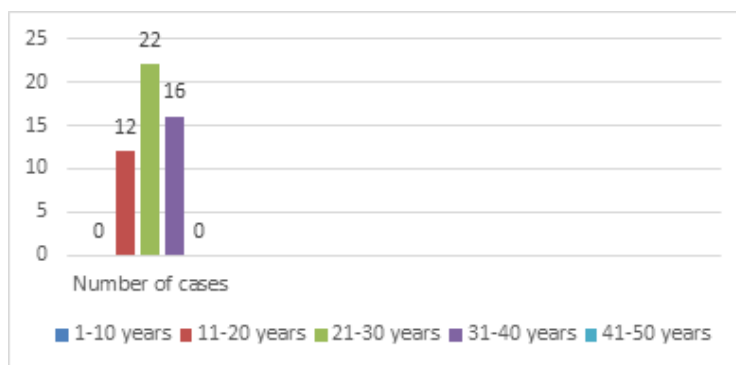
### Results:

It was found that benign lump incidence was more years (35 patients) followed by Lump and pain (8 patients). [Table 1]

**Table 1: Symptomatology of each benign breast disease**

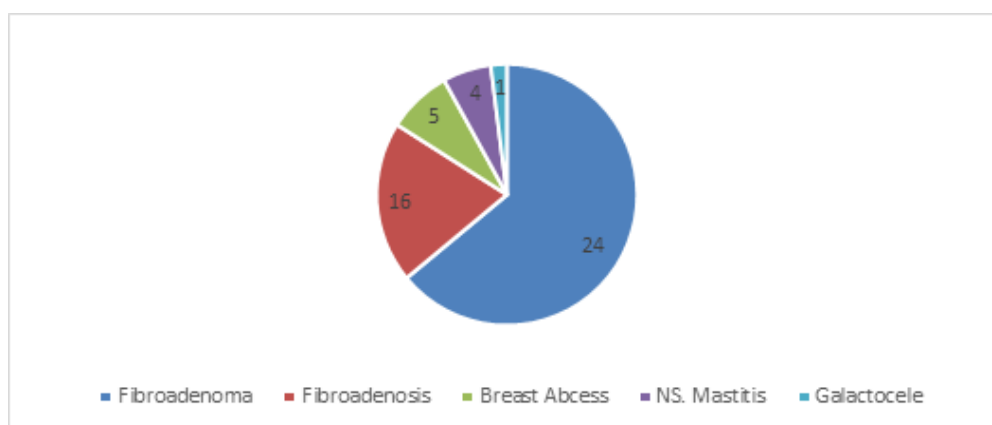
Complaints	Clinical diagnosis					Total
	Breast abscess	Fibroadenoma	Fibroadenosis	Galactocele	Mastitis	
Lump	0	20	15	0	0	35
Lump and pain	1	4	1	1	1	8
Lump, pain, and fever	4	0	0	0	3	7
Total	5	24	16	1	4	50

On analysis of the study 50 patients, it was found that benign lump incidence was more in the age group of 21–30 years (22 patients), followed by 31–40 years in 16 cases. [Figure 1]



**Figure 1: Age distribution of benign breast diseases**

In this study of 50 patients, 24 cases had fibroadenomas, followed by fibroadenosis in 16 cases and breast abscess in 5 cases. Thus, fibroadenoma is found to be the most common lesion, followed by fibroadenosis in our current study. [Figure 2]



**Figure 2: Disease pattern of benign breast diseases**

### Discussion:

The breast lump is the most common symptom of women presenting to breast centers, accounting for more than half of the complaints. Although most are benign, the presence of a mass can cause considerable anxiety because of the concern for cancer. The most important task of the physician evaluating a breast mass is to exclude the presence of malignancy and provide an accurate diagnosis.

The incidence of benign breast disease begins to rise in the 2nd decade, and it peaks in the 4th or 5th decade as compared to the malignant lesions, for which the incidence continues to rise after menopause [12]. In the present study, on analysis of the study 50 patients, it was

found that benign lump incidence was more in the age group of 21–30 years (22 patients), followed by 31–40 years in 16 cases. Similar age distribution with majority of the patients being in the age group of 21–30 years was found in the previous studies done by Sankar et al, Das et al, and Khanna et al, Sangma et al. [10–13]

Benign breast diseases include a heterogeneous group of conditions which range from normal, to aberrations in the physiology, to frank disease. The patients of BBDs generally present with one or more of these complaints – breast lump, breast pain or nipple discharge. It has been recommended that all the patients with discrete breast lumps should undergo a triple assessment to make an early diagnosis. By this approach, we provided

the diagnoses of most of the benign breast conditions within 72 hours of the initial consultation. In the study of Foncroft LM et al., [14], they found that 87.4% of the women who attended the Wesley Breast Clinic had presented with breast lumps, while in the series of Ratana Chaikanont T [15], a breast lump was the presenting symptom in 72.35% of the 331 benign breast patients. The corresponding figure for our study was 87%. Fibroadenomas accounted for 52.74% of the benign breast lumps in our study. Our finding was in agreement with most of the available literature on benign breast lumps, where the frequency of fibroadenoma ranged from 46.6%-55.6% [16-19].

Women are ignorant of the lump and other associated complaints due to lack of education. Fibroadenoma is the most common benign breast lump presenting in young females. Patients usually want removal of the lesions for social reasons and also for the fear of malignancy.[20]

Knowledge of general features of individual breast diseases such as incidence, age distribution, symptoms, and palpatory findings is important to make accurate diagnosis. The literature available suggests that benign conditions of breast are significantly more common than the malignant conditions in developing countries.[21]

There is usually a delay in the diagnosis and management of benign as well as malignant lesions in developing countries because of illiteracy, social taboo, and unawareness. Triple assessment of the breast which is a combination of clinical examination, breast imaging, and aspiration cytology has been shown to be accurate in preoperatively diagnosing breast lumps.[22,23]

### Conclusion:

Epidemiology of benign breast diseases still remains the same when analyzed with a past and recent study on benign breast

diseases. Triple assessment remains the key in the evaluation of breast lumps.

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