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To Study Incidence of Benign Breast Diseases in Females

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Abstract: ***Background: Benign lesions of the breast are common. They are known to affect both males and females. About 30% of women suffer from benign breast disorder and require treatment in their life. At least 90% of patients attending a breast clinic will have a benign breast condition. The various breast lesions range from mastalgias, inflammatory diseases, palpable mass, swelling, or generalized lumpiness, which varies from aberrations of normal development and involution, nipple discharge, benign breast tumors to malignant breast disease. In this study, we analyzed the various Benign Breast Diseases incidence with respect to age. Methodology: Prospective studies of fifty patients of benign breast disease in the age group of 16-40 years were studied for their clinical profile, investigative study, and management. This study was carried out for 12 months from September 2018 to September 2019. FNAC was done for all the patients, and HPE was done for eight operated cases. Results: Fifty cases of benign breast diseases were studied. Six cases were treated conservatively, and rest underwent surgery. Fibroadenoma was the commonest followed by fibroadenosis. Lump in the breast was the most frequent presenting complaint. The upper outer quadrant was the most typical location. Conclusion: Benign Breast Diseases are a spectrum of breast diseases that are common among reproductive women and for which effective management protocol can be instituted based on FNAC and Histopathology.***

Keywords: Benign breast disease, Fibroadenoma

1. Introduction

Benign Breast Diseases (BBDs) are a group of breast diseases that are not cancer and are the most common cause of breast pathology in females, and it is more frequent than the malignant ones[1-6]. In fact, it is at least ten times more common than breast cancer in the west[7]. Around 30% of the women who suffer from BBDs require management at some time in their lives [8]. A triple assessment is done clinically, radiologically, and a pathological examination – FNAC or core needle biopsy, during the initial consultation. As most of the benign lesions are not associated with an increased risk for breast carcinoma, unnecessary surgical procedures can be avoided. Making an early diagnosis and planning for the treatment within 72 hours of the first consultation helps in alleviating unnecessary anxiety about breast carcinoma and those BBDs patients with an increased risk of malignancy like atypical hyperplasia are given prompt treatment, a proper follow-up, and awareness regarding the risk of breast cancer. The classification of BBDs, according to the Aberration of the Normal Development and Involution (ANDI), there is lack of clarity in distinguishing between the normal physiological changes and the pathologic ones. One of the more satisfying classifications would be the one which was devised by Love S et al.[9], the so-called Nashville classification. According to this, BBDs are classified, pathologically (a) non-proliferative lesions, (b) proliferative lesions Section without atypia, and(c) atypical proliferative lesions. Clinically, BBDs are classified as (a) physiologic swelling and tenderness, (b) nodularity, (c) breast pain, (d) palpable lumps, (e) nipple discharge, and (f) infections or inflammation. In this study, we profiled the incidence of BBDs, the relative frequencies of the different types of BBDs.

1.1 Objective of the study

A clinical study of benign breast diseases to analyze age incidence &incidence of different benign breast diseases

2. Results

Table 1: Age incidence

Diagnosis	Age Groups (in years)		
	11-20	21-30	31-40
Fibroadenoma	14	11	05
Fibroadenosis	0	7	1
Cystosarcoma phylloides	0	0	2
Breast abscess	1	1	1
Simple cyst	0	1	1
Gynaecomastia	2	0	0
Duct Papilloma	0	1	0
Antibioma	0	1	0
Galactocele	0	1	0
Total	17 (34%)	23 (46%)	10(20%)

On the whole, over 80% of the benign breast lumps present in the second and third decades of life. The number of lesions in the third decade (46%) was significantly higher than that of the other age groups. There were only ten patients (20%) whose age was more than 30 years and 17 patients (34%) in the age group 11-20 years. The youngest patient was a female patient aged 15 years with fibroadenoma, and the oldest patient in this study was a female patient aged 39 years. The majority of the fibroadenoma (83.3%) present in the age group of 11-30 years. However, almost all the patients with fibroadenosis presented a decade later between 20 and 40 years of age. Regarding the cystosarcoma phyllodes it presented in the 4th decade of life, gynaecomastia was common in adolescence, duct papilloma, and galactocele was noticed in the third decade. The mean age group for benign breast disease in this

study was 24 years.

Table 2: Distribution of cases

S. No.	*Lesion*	*No. of cases*	*Percentage (%)*
1	Fibroadenoma	30	60
2	Fibroadenosis	8	16
3	Breast abscess	3	6
4	Cystosarcoma phylloides	2	4
5	Gynaecomastia	2	4
6	Simple cyst	2	4
7	Intraductal papilloma	1	2
8	Antibioma	1	2
9	Galactocele	1	2

The most common benign breast lesion in this study is fibroadenoma accounting for 60%, followed by fibroadenosis; accounting for 16%.

3. Discussion

Age incidence

This study consists of a total of 50 cases of BBD studied for one year period from September 2018 to September 2019. The youngest patient in this study was 15 years, and the oldest being 39 years. In the current study, 46% of the lesion occurred in the third decade of life, whereas 34% and 20% presented in the second and fourth decades, respectively. Guptha JC et al[10] study shows 85% of the patients were in the age group of twelve to forty years. Tibor Decholnoky[11] reported a similar age distribution.83.3% fibroadenomas were present in the age group of 11-30 years. Rangabhashyam N, Gnana Prakasan D et al[12] in the Madras Journal reported as 82%. Haagensen CD[13]reported the corresponding figures as 70%. Almost all the patients with fibroadenosis were between 20 and 40 years being a decade later compared to fibroadenoma. There are 16% of fibroadenosis in this study. This figure correlated with Rangabhashyam N, Gnanaprakasan D, et al[12] as 14.2%. Varanasi series reported as 10.6%. Regarding benign cystosarcoma phylloid, we had presented at 31 to 39 years. Haagensen CD[13] found 60% of his patients to be aged between the third and fifth decade of life.

Distribution of cases

Fibroadenoma (60%) was the most common BBD encountered, while fibroadenosis constitute 16% of the patients. According to Guptha JC et al[10], the incidence of fibroadenoma is 64% and fibroadenosis 22%. According to Rangabhashyam N, Gnanaprakasam D et al[12] the incidence of fibroadenoma is 56.7% and fibroadenosis 14.2%. Soju F Oluwole14 reported similar figures in American black. In most of the studies from the west, gross cysts or macrocysts are commonest benign breast lumps; however, in the current study, two gross cysts were encountered. Gupta JC et al[10] did not encounter many gross cyst in his research. Clinical and

4. Conclusion

BBD occupies the majority of total breast diseases. This study of 50 cases includes the clinical profile and management of BBD. Fibroadenoma was the most common benign lesion encountered (60%) followed by fibroadenosis (16%) and breast abscess (6%). Fibroadenoma presented most often in the second and third decade while fibroadenosis present a decade later. Lump in the breast was the commonest presentation of BBD; mastalgias was the second commonest symptom of BBD. Diffuse nodularity and nipple discharge are other symptoms that are seen in benign breast diseases. The majorities of BBD presented as lump ranges from 2-5cm and were located in the upper outer quadrant. Fibroadenoma remains a diagnostic challenge.

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