



PROSPECTIVE CLINICAL STUDY ON BENIGN BREAST CONDITIONS

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ABSTRACT **Background:** Benign breast conditions are the most common clinical presentations related to the breast. Benign breast disorders are commonly seen in the reproductive period of life, thought to be largely hormone induced. **Method:** Patients of benign breast diseases were assessed with detail clinical history and examination. After assessment, necessary biochemical, pathological and radiological investigations like routine blood investigations such as CBC, Urea, creatinine, serum electrolytes (Na, k, Cl) FNAC, and radio imaging studies such as ultrasonography of breast, will be done in all cases. **Results:** Out of the 100 female patients who were studied, 55% of cases are fibroadenoma, 15% are breast abscess, 14% Gynecomastia, 08% fibrocystic disease, 03% Phyllodes tumor and periductal mastitis each, 02% Duct ectasia. They were treated in our hospital and were advised follow up. **Conclusion:** Benign breast diseases are common in female patients and fibroadenoma is the commonest of them all. Triple assessment provided a quick diagnosis and it alleviated unnecessary anxiety from the patients about breast cancer. The clinical diagnosis of a breast lump, as confirmed by cytology and histology, was accurate in 91.95 % of the cases.

KEYWORDS : Benign breast disease, management protocols, microdocheotomy, subcutaneous mastectomy.

INTRODUCTION

Benign breast conditions are the most common clinical presentations related to the breast. About 30% of all women suffer from breast disorders requiring treatment at sometime in their life time. Benign breast disorders are commonly seen in the reproductive period of life, thought to be largely hormone induced. There is a drastic fall in the incidence after menopause due to cessation of ovarian stimulation. The most common symptoms are pain (47%) and a lump (37%). Benign breast disease is 4-5 times more common than breast cancer. The concept of ANDI-Aberrations of Normal Development and Involution is gaining acceptance. Most benign breast diseases are relatively minor aberrations of normal process of development, cyclical hormonal response, pregnancy and lactation related and involution that interact throughout a woman's life.

METHODS

Patients of benign breast diseases were assessed with detail clinical history and examination. After assessment, necessary biochemical, pathological and radiological investigations like routine blood investigations such as CBC, Urea, creatinine, s. electrolytes (Na, k, Cl) etc., FNAC, and radio imaging studies such as ultrasonography of breast, was done in all cases.

RESULTS

In this study total 100 cases of benign breast diseases were studied prospectively over a period of 2 years, those were admitted as in patients at Dept of General Surgery NRIIMS, and the following analysis were made.

Table 1: Distribution Of Benign Breast Diseases

	Present study (n=100)	
Type of Lesion	No. of Lesions	Percentage
Fibroadenoma	55	55%
Fibrocystic Disease	08	08%
Phyllodes tumour	03	03%
Gynecomastia	14	14%
Duct Ectasia	02	02%
Breast abscess	15	15%
Periductal mastitis	03	03%
Total	100	100%

In the present study, 55% of cases are fibroadenoma, 15% are breast abscess, 14% Gynecomastia, 08% fibrocystic disease, 03% Phyllodes tumour and periductal mastitis each, 02% Duct ectasia.

Table 2. Age Distribution Of Benign Breast Diseases

Age in years	no of patients (n=100)	% of patients
15-25yrs	20	20%
26-35yrs	46	46%
36 - 50yrs	27	27%
>50yrs	07	07%
TOTAL	100	100%

In the present study 46 cases (46%) are found in the age group of 26- 35 years, 27 cases (27%) in the age group of 36-50 years, 20 cases (20%) in the age group of 15-25 years and 07 cases (07%) aged above 50 years.

Table 3: Sex Incidence

	No of BBD	Percentage
Female	86	86%
Male	14	14%
TOTAL	100	100%

In the present study among 100 patients there are 86 (86%) females and 14 (14%) males

Table 4

Marital status	No. of patients with BBD	% of patients with BBD
Married	64	64%
Unmarried	36	36%
Total	100	100%

Out of 100 patients in our study 64 patients (64%) with Benign Breast Disease were married and 36 (36%) of them were not married.

Table 5. Menstrual History

Pre-menopausal	81	94%
Post-menopausal	05	06%

In the study group, 81 patients (94%) were premenopausal and 5 (06%) were post menopausal

Table 6. Socio-Economic Status

Socio-economic Status	No Of Patients (n=100)	Percentage
Upper class	30	30%
Middle class	45	45%
Lower class	25	25%

The most common presenting complaint of non inflammatory type of benign breast diseases noted was lump in the breast. In the present study 75 patients (92%) presented with only lump, 33 patients (40%)

presented with lump associated with mastalgia , 2 patients(2%) nipple discharge.

Table 7: Symptomatology Of Non Inflammatory Breast Diseases

Complaints	Fibroad enoma (n=55)		Fibrocystic disease (n=08)		Phyllodes tum. (n=03)		Gynecomastia (n=14)		Duct ectasia (n=02)	
	No	%	No.	%	No	%	No	%	No	%
Lump	55	100%	0	0%	3	100%	14	100%	2	100%
Lump& Pain	18	32%	08	100%	1	34%	05	35%	1	50%
Nipple Discharge	0	0%	0	0%	0	0%	0	0%	2	100%

Table 8: Spectrum Of Benign Breast Diseases

Type of breast disease	No. of patients (n=100)	% of patients with BBD
Inflammatory	18	18%
ANDI / Non inflammatory	82	82%
Total	100	100%

In the present study Non Inflammatory breast diseases are 82 cases (82%) and inflammatory breast diseases are 18 cases (18%)

Table 09: Symptomatology Of Inflammatory Breast Disease

Parameter			Breast abscess	Periductal mastitis
			No. of cases	No. of cases
Complaints	Lump		15	03
	Pain	Throbbing	15	03
		Dull aching	0	0
		Persistent	0	0
	Fever		15	0
	Discharge		05	0
	Duration	< 7 days	15	0
		>7 days	0	03

All 18 patients with inflammatory breast diseases presented with lump and throbbing mastalgia , fever was noted in 15 patients of Breast abscess, pus discharge noted in 05 patients. All 15 patients presented with symptoms of duration less than 7 days and 3 patients of periductal mastitis presented with duration more than 7 days .

Table 10: Side And Quadrant Of The Breast Involved Inflammatory Breast Disease

Parameter			Breast abscess	Periductal mastitis
			No. of cases	No. of cases
Breast involved	Unilateral	Right	10	3
		Left	5	0
	Bilateral		0	0
Quadrant involved	Upper outer		10	3
	Upper inner		8	1
	Lower outer		5	1
	Lower inner		7	0
	Central		3	0

The right breast was involved in 10 cases of breast abscess,03 cases of periductal mastitis. The lump and mastalgia was noted in the upper outer quadrants in 13 patients ,Upper inner quadrants in 9 patients. 06 cases showed involvement of lower outer quadrants and 07 patients had lower inner quadrants involvement. 03 cases of breast abscess had central quadrant involvement .

DISCUSSION

In the present study, 100 cases of benign breast diseases were studied.

The available literature was studied and reviewed. After detailed history, clinical examination , relevant investigations and treatment following observations were made.

Distribution Of Benign Breast Disorders

Fibroadenoma accounts for 55% of the total cases studied. Malik MAN et al reported 77% Oluwole^[1] reported 70.5%, Rosen PP et al 45%, Greenberg et al^[2] 50%. Present study incidence is consistent with Greenberg et al.

Fibrocystic disease accounts for 8% in present study, where as 13% in Malik MAN et al and 14.2% in Rangabhashyam N, Gnanaprakashan D et al

Phyllodes tumor incidence in present study is 3%, whereas it is 2.3% in Oluwole^[1] and 0.4% in Malik MAN et al

Duct ectasia accounts for 2% in the present study, Shukla et al showed 2.5% in their prospective study.

Gynecomastia accounts for 14% in present study, and it was 4.5% in study by Malik MAN et al

Age Incidence

Youngest patient in this series is 16 years old with fibroadenoma, and oldest being 59 year old with fibroadenoma too. In the present study majority of the patients are in the age group of 26 – 35 years (46%) while according to Shukla S Hari peak incidence of Benign Breast Disorders is between 21-30 years.

Fibroadenomas occur at younger age group than fibroadenosis according to Haagensen^[3]

There were 02 (04%)cases of giant fibroadenomas in present study, whereas in the study by Onukak and Ceberquist it was found as 29%.

45 cases (82%) of fibroadenomas occurred between age group 15-35 years, whereas the corresponding literature of Haagensen reported 70% which is similar to present study.

Gynecomastia accounts for 14% in present study, Gupta et al^[4] found the incidence to be 6.1%.

Mode Of Presentation And Duration

The commonest type of presentation of BBD was lump in the breast in constituting 92% in present study. According to Haagensen lump was common type of presentation.

Mastalgia is seen in 51 cases accounting for 51% in the present study whereas 56.9% in study by Uma Krishnaswamy^[5]

In present study cyclical mastalgia is seen in 25% and non cyclical mastalgia are present in 75% of patients, whereas in study by Preece et al^[6] it was 67% and 33% respectively.

There were 2 cases (2%) of nipple discharge in present study, however Geschitceker CF noted 4% and Uma Krishnaswamy^[5] 1.4% in their study.

Menstrual History

94% of our patients were in pre menopausal period. 58 out of 86 female patients (67%) were married, of whom 50(86%) had experienced pregnancy and all of them have breast fed their babies. Decholnoky Et al^[6] had 27.5%patients who experienced pregnancy and 63 % were nulliparous.28 patients (33%) were nulliparous in present study. Early marriage and multiparity seems to influence the higher incidence in our population. None of the patients in present in present study used oral contraceptive pills. Vessey et al ascertained they can be protective if taken for more than 2 years.

Side Of The Disease And Distribution

In this study 57% of the lesions were on right side, 27% on left side and bilateral being 16%.

Soju F. Oluwole et al^[7] showed 45% benign lesions in right breast, 41% in left breast and bilateral 14% which approximates the present study

Quadrant Wise Distribution

UOQ was the common site of distribution of lump with 75%

distribution compared to 30.2% in study by Oluwole^[1].

Tibor Decholonky^[6] noted that 50% of the lump in his study were UOQ of the breast.

CONCLUSION

Early diagnosis of benign breast disease is beneficial to patient to institute the appropriate treatment. 100 cases of Benign breast diseases were evaluated in the present study.

- The most common benign lesion encountered was fibroadenoma with slight right side preponderance accounting for 55 (55%) followed by breast abscess in 15 (15%) patients, 14 patients with gynecomastia (14%), 08 (8%) patients with fibrocystic disease, 3 cases of periductal mastitis (3%) , 03 phyllodes tumor (3%) , 02 patients with duct ectasia (2%).
- The Lump in the breast is the common presentation in the study group in 2nd - 3rd decade of age.
- Clinical examination, USG of breast, FNAC were used as diagnostic tools. FNAC was most useful with the sensitivity and specificity of 100% in the present study .
- All 55 cases of Fibroadenomas were managed by surgical procedure excision and followed by histopathological examination .
- Incision and drainage was done for all 15 cases of breast abscess.
- Subcutaneous mastectomy was done for all 14 cases of gynecomastia. Conservative management was done for 7 fibrocystic disease, 3 cases of periductal mastitis and microdochotomy was done for 2 cases of duct ectasia.

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