



An Analytical Study of Benign Breast Disease

KEYWORDS

Benign Breast Diseases (BBD), Breast lump, mammography, Fine-Needle Aspiration Cytology (FNAC), Triple assessment

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ABSTRACT *Aims:* Benign breast disease (BBD) is one of the most confused areas of surgical diseases, largely resulting from the undue but understandable preoccupation with cancer at the expense of benign conditions. The aim of this study is to exclude cancer and, once this has been done, to treat any remaining symptoms. **Materials and Methods:** All patients with benign breast disease undergoing treatment in Surgery Deptt of Fakhruddin Ali Ahmed Medical College, at Barpeta from 1st of January 2015 to 31st December 2015 were included in this study. Cases were analysed prospectively for a period of 6 to 12 months. **Results:** 83 cases of benign breast disease were treated during this period. Fibroadenoma formed the most common benign breast disease 33 cases. Most commonly affected age group was 21-30 years. The most commonest symptoms was pain less Lump in 47 cases. Only 25 cases were operated. Excision is most commonly used method of treatment. **Conclusion:** BBD is the most common breast ailment. The risk of malignancy is still not uniformly proven. A regular follow-up is mandatory to rule out any atypical changes during the evaluation of BBD.

Introduction

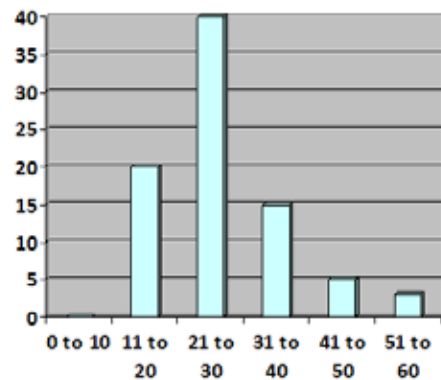
The term benign breast diseases (BBD) can be defined as any nonmalignant breast condition and encompasses a wide range of clinical and pathologic disorders. Benign breast disease is the commonest cause of breast problems; up to 30% of women will suffer from a benign breast disorder requiring treatment at some time in their lives¹.

Materials and Methods

All patients with benign breast diseases undergoing treatment in Surgery Deptt of Fakhruddin Ali Ahmed Medical College, at Barpeta from 1st of January 2015 to 31st December 2015 were included in this study. 83 cases of benign breast diseases were treated during this period. All cases were studied with detailed history regarding duration, mode of onset of lump, whether associated with pain in breast, its nipple discharge, history of undergoing operation previously for a similar lump, family history of same complain, menstrual and obstetrical history, history of taking contraceptive pill. A detailed local examination of presenting lesion was carried out. Cases were investigated with Ultrasonography, in some cases mammography (as mammography is not available in my institution) and FNAC. However normal routine investigation were done that required for preoperative preparation. Only 25 cases were operated. Enucleation or Excision is most commonly used method of treatment. Most of the Patients were discharged on 2nd postoperative day. Cases were analysed prospectively for a period of 6 to 12 months. Carcinoma of breast and lactating breast were excluded in this study.

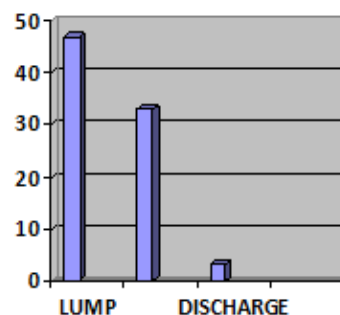
Results

83 cases of benign breast diseases were treated during this period. Age distribution shows minimum age was 13 years and maximum age was 56 years and out of this maximum no 40(33.2%) cases in the age group between 21 to 30 years and mean age is 34.5.



Age Distribution

The symptomatology with which the women presented to the out patient department were lump, pain, and discharge. The most commonest symptoms was pain less Lump in 47 cases (39.01%). Pain was present in 33(27.39%) patients and Nipple discharge was seen in 3 (2.47%) patients.



Symptoms Lump 47 Pain 33 Nipple Discharge 3

Breast lump was the predominant complaint in fibroadenoma, fibroadenosis, cystosarcoma Phylloides, galactocele and chronic mastitis. Lump associated with pain was seen in fibroadenosis, mastalgia and chronic mastitis. Duration of Symptoms was variable. Maximum no of patients 48(39.48%) had symptoms for less than 6 months, 25(20.75%) patients had symptoms for more than 6 months and 10(8.3%) patients had symptoms for more than 1 year. Size of Lump: In 45(37.35%) patients the size of the breast lump were 2-5 cms, in 13(10.79%) cases Lump is >5 cms and in 25(20.75%) patients lump was <2 cms.

The left breast is involve in 40(33.2%) cases , Rt breast in 34(28.22%) cases and in 9 (7.47%) cases both breast was involved. Fibroadenoma formed the most common benign breast disease which is accounting for 33(27.39%) cases, followed by fibroadenosis 26 cases (21.58%). Upper and outer quadrant is the most commonest site 24 cases(19.92%) for Benign Breast Diseases.

Table 1 Type of Benign Breast Diseases

Fibradenoma	33	27.39%
Fibroadenosis	26	21.58%
Giant Fibroadenoma	2	1.66%
Mastitis nonlactating	7	5.81%
Mastalgia	9	7.47%
Cystsarcoma Phylloids	2	1.66%
Galactocele	3	2.49%
Lipomatous lump	1	0.83%

Table 2 Age (years) distribution of different Benign Breast Diseases

	11-20	21-30	31-40	41-50	51-60
Fibradenoma	11	16	4	2	0
Fibroadenosis	2	13	7	2	2
Giant Fibradenoma	2	---	---	---	---
Mastitis (Non lactating)	3	3		1	
Mastalgia	2	3	3		1
Galactocele		2	1		
Cystsarcoma Phylloids		2			
Lipomatous lump		1			

Table 3 Quadrant topography of the symptoms

Disease	UO	UI	LI	LO	Central	>IQ	Bilateral	Total
Fibradenoma	8	6	5	5	3	4	2	33
Fibroadenosis	7	3	2	3	2	5	4	26
Mastalgia	2	1	0	1	1	2	2	9
Mastitis non-lactating	2	0	1	1	0	2	1	7
Galactocele	2	1	0	0	0	0	0	3
Giant Fibroadenoma	2	0	0	0	0	0	0	2
Cystsarcoma Phylloids	1	1	0	0	0	0	0	2
Lipomatous lump	0	1	0	0	0	0	0	1
Total	24	13	8	10	6	13	9	83

Protocol for diagnosis of BBD is the Triple assessment

– physical examination, imaging and tissue cytology. Triple assessment was done to provided a quick diagnosis and it alleviated unnecessary anxiety for the patients about breast cancer and it also prevent, unnecessary surgical procedures . Out of 83 patients 25 cases were operated and the tissue were sent for histological study. Enucleation was done in Fibroadenoma (15 cases) and in giant Fibroadenoma (2 cases). Wide local excision with a rim of normal breast tissue done in cystosarcoma Phylloids(2cases) , excision done in Galactocele(3cases) & Lipomatous lump(1case) . In Fibroadenosis out of 26 patients 24 treated conservatively but in two cases excision were done and mastalgia patients were treated conservatively.

Table 4 Operative findings

Fibradenoma	15	12.45%
Cystsarcoma Phylloids	2	1.66%
Giant Fibroadenoma	2	1.66%
Galactocele	3	2.49%
Fibroadenosis	2	1.66%
Lipomatous lump	1	0.83%

DISCUSSION

Age Incidence

In this study the maximum numbers 40(33.2%) cases in the age group between 21-30. The most commonly affected age group by BBDs was 20-30 years (38.75%) in Akshara Gupta study(2). It was consistent with studies done by Olu-Eddu (3) . and Onuka4 in which the peak age of incidence was 20-29 years.

In the present study the most commonest symptoms was Lump in 47 cases(39.01%), pain in 33cases (27.39%),Nipple discharge was seen in 3cases (2.49%) in . Breast lump was the commonest presenting symptom in studies by Sangma et al (87%) (5). Krishnaswamy (6) reported pain as the major complain (56.9%). Cyclical and non cyclical mastalgia were present in 65.38% and 34.61% of patients respectively by B.V.Sreedevi (7). Size of Lump: In the present study in 45(37.35%) patients the size of the breast lump were 2-5 cms, in 13(10.79%) cases Lump is >5 cms and in 25(20.75%) patients lump was <2 cms. Majority of lumps (76.08 %) were in between 2 to 5 cms by Akshara Gupta(2) while Krishnaswamy 6 showed majority (55.6%) of lumps sized <2 cms and 44.3% sized 2-5 cm. In the present study Fibroadenoma formed the most common benign breast disease which is accounting for (33) cases (27.39%), followed by fibroadenosis 26 cases (21.58%). Upper and outer quadrant is the most commonest site (24 cases 19.92%)for Benign Breast Diseases. Fibroadenoma accounted for 45% of the total patients by Akshara Gupta(2) . Similar findings were reported by Umanah et al (8) (54.8%), Naveen et al. (9)(52%), Greenberg et al. (10) (50%) and Malik et al. (11) (49%).

In the present study left breast was involved in 40 cases(33.2%) , Rt breast in 34 cases (28.22%) and in 9 cases(7.47%) both breast were involved. Upper and outer quadrant 24 cases(19.92%) was the most commonest site for Benign Breast Diseases. Majority 10 cases presented with a lump in the upper outer quadrant and 7 cases presented with the lump involving more than 1 quadrant by Ramesh Sagar (12). Foster ME. et al,(13) reported in their series of 362 cases of fibroadenoma, upper outer quadrant was more frequently involved and 55% occurred in left breast and 45% in the Right breast. Out of 50 cases 19 cases was found in the upper and outer quadrant by Mallikarjuna(14). Most common site of involvement was

left breast and most common quadrant was upper outer quadrant by Dr Ramesh Sagar (12) In the present study Triple assessment was done for quick diagnosis and it alleviated unnecessary anxiety for the patients about breast cancer and it also prevent, unnecessary surgical procedures. Triple assessment provided a quick diagnosis and it alleviated unnecessary anxiety for the patients about breast cancer by Dr. B.V. Amruthavalli (15). According to study by Larsen & Faurshou (16) for adult women triple test is a prerequisite for conservative treatment. Housami et al(17) accepted that conservative approach is safe and acceptable, provides the result of an adequate triple test is both negative for cancer. Management Out of 83 patients 25 cases were operated and the tissue were sent for histological study. Enucleation was done in Fibroadenoma (15 cases) and in giant fibroadenoma (2 cases). Wide local excision with a rim of normal breast tissue was done in Cystosarcoma Phyllodes (2 cases), excision done in Galactocoele (3 cases) & Lipomatous lump (1 case). In Fibroadenosis out of 26 patients 24 were treated conservatively but in two cases excision were done and mastalgia patients were treated conservatively. Out of 80 patients, 35 patients (43.75%) underwent surgical intervention 29 patients were of fibroadenoma (80.55%), 2 patients (14.28%) were of fibroadenosis, 3 were of galactocoele and 1 was of lipoma by Akshara Gupta 1. Out of 50 cases 47 underwent surgical intervention 36 cases were fibroadenoma, 6 cases Cystosarcoma Phyllodes, 2 cases each of Galactocoele, lipoma, Tubular Adenoma and Ductal Ectasia by Dr. Mallikarjuna (13). Phyllodes tumor should be excised completely with clear margins to obviate any chance of local recurrence. In cases of recurrent disease, mastectomy is often performed (18)

CONCLUSION

BBD is the most common breast ailment. The most commonest symptoms was Lump. Most common site of involvement was left breast and most common quadrant was upper outer quadrant. Fibroadenoma is the most common benign breast disease. BBD most commonly affected in 3rd decade. Triple assessment provided a quick diagnosis and fairly well establish the absence of malignancy in the BBD. Reassurance is all that is required once the fear of presence of malignancy is alleviated. Surgical excision is the effective treatment for most of the benign breast disease. A regular follow-up is mandatory to rule out any atypical changes during the evaluation of BBD.

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