

Analytical study of pattern and presentation of benign breast diseases in patients between age group 15 to 35 years

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Abstract

Introduction: The term benign breast disorder (BBD) can be defined as any nonmalignant breast condition and encompasses a wide range of clinical and pathologic disorders.

Material and methods: Study of pattern and presentation of benign breast diseases in patients between age group 15 to 35 years was carried out to evaluate the different types of benign diseases of the breast and their mode of clinical presentation. In present study, 50 cases were examined and analysed.

Results: Fibroadenoma formed the most common benign breast disease which is accounting for 32 cases (64%), followed by Cystosarcoma phylloides 10 cases (20%). Most commonly affected age group of B.B.D. was 20-25 years. All benign diseases presented with Lump, among these 37 cases (74%) presented with painless lump and 13 cases (26%) presented with painful lump. Fibroadenoma occurred more often in Left Breast (50%) than in Right Breast (43.7%).

Conclusions: Fibroadenoma was the most common benign breast disease. Most common age group for benign breast disease was 20-25 years (42% cases), for Fibroadenoma most common age group was 15-20 years (46.87%) and for Cystosarcoma phylloides it was 25-30 years (50%). Most common clinical presentation in benign breast disease is lump (painless). Most common site of involvement was left breast and most common quadrant was upper outer quadrant. Lymph node involvement in benign breast disease is rare.

Keywords: breast disorder (BBD), Fibroadenoma, Cystosarcoma phylloides

1.Introduction

Literature on benign breast disorders and diseases in India is scanty. The vast majority of the lesions that occur in the breast are benign. Until recently benign disorders of the breast were regarded as relatively unimportant: far more attention was focused on breast cancer. This has resulted in many patients with benign breast disease receiving rather scant attention from clinicians. Benign breast disease has also suffered from the major disadvantage of confusing terminology, inadequate classification and poor correlation between clinical, radiological and pathological features.[1]

The term benign breast disorder (BBD) can be defined as any nonmalignant breast condition and encompasses a wide range of clinical and pathologic disorders. Even clinical diagnosis remains simple, pathological evaluation of each condition should be undertaken. Although BBD is not life threatening,

clinicians require an in-depth understanding of its significance so that clear explanations can be given to affected patients, appropriate treatment can be instituted, and unnecessary long-term follow-up can be avoided.[2] Present study was aimed to study the pattern and presentation of benign breast diseases in patients.

2. Materials and Methods

Present prospective study was conducted in VIMS Hospital Bellary during the year November 2006 to October 2007. This survey was mainly meant for studying the age distribution, to evaluate the different types of benign diseases of the breast and their mode of clinical presentation. Patients with Benign Breast diseases in age group between 15 to 35 years were included in the study. Patients with malignant breast diseases or having infectious

disorders of breasts were excluded from the study. A detailed history was taken regarding the presenting complaints particularly the duration, mode of onset of lump and pain in breast, its progress, nipple discharge, history of undergoing operation previously for a similar lump, Family history of occurrence of benign breast disease, menstrual and obstetric history, history of taking contraceptive pills and whether the patient was pregnant or lactating. A detailed local examination of presenting lesion was then carried out and a diagnosis arrived at.

3. Observation and Results

In present study, 50 cases were examined and analysed. Fibroadenoma formed the most common benign breast disease which is accounting for 32 cases (64%), followed by Cystosarcoma phylloides 10 cases (20%). Most commonly affected age group of B.B.D. was 20-25 years. All benign diseases presented with Lump, among these 37 cases (74%) presented with painless lump and 13 cases (26%) presented with painful lump. Fibroadenoma occurred more often in Left Breast (50%) than in Right Breast (43.7%). Cystosarcoma Phylloides occurred more often in left breast (60%) than Right Breast (40%)

Table 1: Type of Benign Breast Disease

Type	No of Cases	Percentage
Fibroadenoma	32	64
Cystosarcoma phylloides	10	20
Galactocele	2	4
Lipoma	2	4
Tubular	2	4
Ductal ectasia	2	4
Total cases	50	100%

Table 2: Age (years) distribution of different benign breast disease

Diseases	< 15	15 – 20	20 – 25	25 –30	30 – 30	> 35
Fibroadenoma	-	15 (46.87%)	13 (40.66%)	3 (9.37%)	1(3.12%)	-
Cystosarcoma Phylloides	-	-	3(30%)	5 (50%)	2 (20%)	-
Galactocele	-	-	2(100%)	-	-	-
Lipoma	-	1(50%)	1(50%)	-	-	-
Tubular Adenoma	-	1(50%)	1(50%)	-	-	-
Ductal Ectasia	-	1(50%)	1(50%)	-	-	-
Total Cases	-	18 (36.5%)	21(42%)	8 (16%)	3(6%)	-

Table 3: Duration of symptoms

Duration	1 – 3 M	4 – 6 M	7 M – 1 Y	1 – 2 Y	2 – 4 Y
Fibroadenoma	6	14	4	7	1
Cystosarcoma Phylloides	-	5	3	2	-
Galactocele	-	1	1	-	-
Lipoma	-	-	1	1	-
Tubular Adenoma	-	-	1	1	-
Ductal Ectasia	-	-	1	-	1
Total	6	20	11	11	2

Table 4: Mode of presentation

Disease	Total	Painless Lump	%	Painful Lump	%
Fibroadenoma	32	25	78.13%	7	21.87%
Cystosarcoma Phylloides	10	6	60%	4	40%
Galactocele	2	2	100%	-	-
Lipoma	2	2	100%	-	-
Tubular Adenoma	2	2	100%	-	-
Ductal Ectasia	2	-	-	2	100%
Total	50	37	74%	13	26%

Table 6: Site of involvement

Disease	Rt Breast	%	Lt Breast	%	Both
Fibroadenoma	14	43.7%	16	50%	2
Cystosarcoma Phylloides	4	40%	6	60%	-
Galactocele	1	50%	1	50%	-
Lipoma	1	50%	1	50%	-
Tubular Adenoma	1	50%	1	50%	-
Ductal Ectasia	1	50%	1	50%	-
Total	22		26		2

Table 7: Quadrant topography of diseases

Diseases	Total	UO	UI	LO	LI	Central	>1Q	Bilateral
Fibroadenoma	32	10	3	6	3	1	7	2
Cystosarcoma Phylloides	10	3	1	1	0	-	5	-
Galactocele	2	1	-	-	-	-	1	-
Lipoma	2	2	-	-	-	-	-	-
Tubular Adenoma	2	2	-	-	-	-	-	-
Ductal Ectasia	2	-	-	-	-	2	-	-
Total	50	18	4	7	3	3	13	2

UO-Upper Outer, UI-Upper Inner, LO-Lower Outer, LI-Lower Inner. >1Q- More than one quadrant

4. Discussion

Benign Breast Disease is a common disease affecting women in our country. According to the Statistics obtained from VIMS hospital Bellary, the majority of diseases affecting the female breast were benign disease.

In present study, the most common benign breast disease was fibroadenoma occurring in 64% of cases. In the study Conducted by Rangabashyam et al, [3] fibroadenoma was the main type of disease in 57%. Khanna et al[4] and Farrow JH et al[5] also reported fibroadenoma as the commonest breast disease of female breast. Oluwole and freeman,[6] reported them as the most common breast lesions in black women and adolescent white females.

The next common benign disease in present study was Cystosarcoma phylloides occurring in 20% of cases. The other types of benign disease found were two cases each to lipoma, galactocele, tubular adenoma and Ductal ectasia.

In present study, fibroadenoma was the commonest benign disease with highest incidence in age group 15-20 years (46.87%). The youngest patient was 15 years old and the oldest patient was 35 years. Duray and Collegues[7] described fibroadenoma most likely to occur in adolescents. Pike and oberman[8] reported the tendency of fibroadenoma to occur at the time of menarche. Mies and Rosen[9] have described a series of patients with an average age of 26 years for fibroadenomas. Foster ME. et al[10] in their series of 362 cases of

fibroadenoma reported the largest number of patients in the group of 21-25 years.

Around 96.87% of fibroadenoma were observed in 15-30 years age group in the present study. In a study by Rangabashyam et al[3] maximum numbers of fibroadenoma (75.39%) were noted in 11-30 years age group. In the same way in Sushila Khanna[4] study 82.78% of fibroadenoma were presented between 11-30 years age group.

There were two cases with a past history of excision of lump and diagnosed as recurrent fibroadenoma. Moffat and colleagues[11] have reported incomplete excision of fibroadenoma as a major determinant for local recurrence. Briggs and colleagues[12] have reported that malignant behavior in phylloides tumour of young women is extremely rare.

In present study, the most prominent presenting symptom was the presence of painless lump in 37 cases (74%) and 13 cases presented with painful lump (26%).

In 32 cases of fibroadenoma, 25 cases (78.13%) presented with a painless lump which was accidentally noticed by the patient and 7 cases (21.87%) presented with a lump which was a painful and pain started after the lump. The pain was reported as dull aching, non radiating, continuous and not in relation to menstruation. There was no positive family history although it is known that there may be a familial predisposition for bilateral fibroadenomas. In 10 cases of Cystosarcoma phylloides, 6 cases (60%) presented with a painless lump and 4 cases

(40%) presented with a lump associated with pain which started later. 5 cases (50%) occurred with duration of 4-6 months. 4 cases complained of irregularity of Menstrual cycle and none of them had any significant change in the size of the swelling during menstruation or before it.

In present study, out of the 32 cases of fibroadenomas, 16 cases (50%) presented with involvement of left breast, 14 cases (43.7%) presented with involvement of Right Breast and 2 cases presented with bilateral involvement. Majority (10 cases) (31.25%) presented with a lump in the upper outer quadrant and 7 cases presented with the lump involving more than 1 quadrant. Foster ME. et al,[10] 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 which correspond to present study.

In present study, of the 32 cases of fibroadenoma 2 cases (6.37%) had Bilateral involvement, In Haagensen's series[13] of 619 cases of fibroadenomas, multiple fibroadenoma occurred in 19.9%. Forest ME. et al[10] reported multiplicity of fibroadenomas in 7.5% cases in their series of 362 cases of fibroadenomas.

5. Conclusion

Fibroadenoma was the most common benign breast disease. Most common age group for benign breast disease was 20-25 years (42% cases), for Fibroadenoma most common age group was 15-20 years (46.87%) and for Cystosarcoma phylloides it was 25-30 years (50%). Most common clinical presentation in benign breast disease is lump (painless). Most common site of involvement was left breast and most common quadrant was upper outer quadrant. Lymph node involvement in benign breast disease is rare.

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