

Reappraisal of Spectrum of Benign Breast Diseases in Women of Reproductive Age

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Abstract

Original Research Article

Objective: To assess the prevalence of various benign breast diseases (BBD) in females of reproductive age in a corporate hospital of Kolkata. **Methodology:** This is a prospective cohort study of female patients of reproductive age with breast problems visiting the surgical OPD and breast clinic of Peerless hospital and B. K. Roy Research centre, Kolkata. This study was conducted in a period of about two years starting from September 2017 to August 2019. All female patients in reproductive age visiting the Surgical OPD of this hospital with breast problems were included in the study. Patients with obvious clinical features of malignancy or those who on work up were diagnosed as carcinoma were excluded from the study. **Results:** A total of 108 patients were included in the study. About 48% (52/108) patients belonged to 4th decade of life (age between: 31-40 years) followed by 36% (39/108) from 3rd decade (age between: 21-30 years). Fibrocystic disease was the most common benign breast disease, seen in 31.5% (34/108) of patients, followed by fibroadenoma in about 29.6% (32/108) patients. **Conclusion:** Benign Breast Diseases (BBD) are common problems in females of reproductive age. Fibrocystic disease is the commonest of all benign breast disease in our set up mostly seen in 2nd and 3rd decades of life. Fibroadenoma of the breast is the next common BBD whose incidence is highest in 3rd decade of life age.

Keywords: Fibrocystic disease, Fibroadenoma, Mastalgia.

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INTRODUCTION

The term “benign breast diseases” (BBD) consists of a heterogeneous group of lesions, which present as a wide range of symptoms or may sometimes be detected as incidental finding microscopic finding. BBD includes all nonmalignant conditions of the breast, including benign tumours, trauma, mastalgia, mastitis and nipple discharge. Benign tumours include pathologic changes which do not increase the risk of the patient developing malignant disease. Sometimes they may be detected as incidental microscopic findings too. In spite of its benign nature, BBD leads to significant sufferings on the part of patients due to fear psychosis of having breast cancer. It needs detailed counselling, symptomatic empirical treatment and sometimes surgery as part of management protocol. The objective of this study was to reassess the magnitude of BBD in female population of reproductive age attending the surgical OPD of this hospital.

METHODOLOGY

This was a prospective study conducted at Peerless Hospital and B.K. Roy Research centre, Kolkata over two years period from September 2017 to August 2019. Those females with diagnosed malignancy or proved so during the workup of these cases were excluded from study. Detailed clinical history including age, marital status, parity, age of menarche, age at 1st pregnancy, detailed menstrual and obstetrical history were recorded. History of contraception used, any breast lump or obvious nodule, nipple discharge were noted. FNAC, Core biopsy or open biopsy were performed as and when indicated apart from radiological workup, depending upon the merit of individual cases. Postmenopausal women with BBD were excluded. Data was entered on a pre-designed proforma and frequencies of various BBD in different age groups were calculated.

RESULTS

Results were recorded in a tabulated manner.

Sl. No	Disease	Age in Years					TOTAL
		11-20	21-30	31-40	40-50	Above 50	
1	Fibroadenoma	3	20	6	2	1	32
2	Breast Abscess	1	1	5	1	-	8
3	Mastalgia	1	3	10	1	-	15
4	Tuberculosis mastitis	-	1	3	-	-	4
5	Duct Papilloma	-	-	2	1	1	4
6	Galactocele	-	1	4	1	-	6
7	Duct Ectasia	-	-	2	-	-	2
8	Fibrocystic Disease	3	12	18	1	-	34
9	Fat Necrosis	-	1	2	1	-	3
	TOTAL	8	39	52	8	2	108

A total of 108 patients were included in the study during the two years period from September 2017 to August 2019. About 48% (52/108) patients belonged to 4th decade of life (age between 31-40 years) followed by 3rd decade (36%). Fibrocystic disease was found to be the most common BBD affecting mostly ladies in 4th and 3rd decades of life. Fibroadenomas were encountered most commonly in 3rd decade (18.5%). Sufferers of mastalgia without any breast lump or nodule were the patients mostly belonging to 4th decade of life. Other less common BBDs found included breast abscess (7.4%), galactocele (5.5%), duct papilloma & tuberculous mastitis (3.7% each), fat necrosis (2.7%) and duct ectasia (1.85%).

DISCUSSION

Breast tissue is a dynamic structure and continues to undergo various stages of physiological changes during reproductive life of a woman. Breast development includes cyclic changes during menses, pregnancy, lactation and involution. These physiological changes have created the concept of aberration of normal development and involution (ANDI). This term needs to be reserved for disorders of such severity that they are frankly abnormal. Physiological changes create a concept of possibility of aberration of normal development and involution (ANDI). In our study about 91% of the patients with BBD were in the age group between 11-40 years with peak incidence (48.1%) in age group between 31-40 years. These results are slightly different from those of Out AA [21] in which majority of the patients were below the age of 30 years. Ihekwa [6] in his study from Western Africa recorded that about 80.5% of the BBD occur in the age group of 16-35 years. Chaudhary *et al.*, [7] found almost equal incidence of BBD in patients between age group of 21-30 & 31-40 years. However Dunn *et al.*, [8], contradicts the results of all above mentioned studies in which the mean age of the patient with BBD was 50 years. In our study fibrocystic disease was the most common BBD seen in 34 patients, mostly affecting women of 31-40 years age group. Fibroadenoma was less common (32 cases) in our study in contrast to others. The figure of fibrocystic disease in our study is similar to the observations of Chaudhary *et al.*, [7] in his study of 234 patients. They found

fibrocystic disease as the most common BBD, but the majority sufferers fell in the age group of 5th decade of life. Kamal *et al.*, [13] found about 65% of patients with fibrocystic disease of breast were from 31–50 years of age with peak incidence (36%) between 31-40 years. The difference between the age groups in patients with fibrocystic disease may differ due to geographical and other factors. The possible reasons being social belief and customs, age of menarche and parity, and breast feeding procedures, use of contraceptive pills and self awareness. Because of low literacy rate among females, more so in rural areas, the female affected with fibrocystic disease tend to consult doctors only if the symptoms are alarming or causes suffering in the form of pain. Recently it has been appreciated that fibrocystic changes in breasts constitute the most common and frequent form of BBD. Different names have been used from time to time to describe this entity over the years such as; fibrocystic disease, Cystic mastopathy, chronic cystic disease, mazoplasia, Reclus's disease etc. The term "fibrocystic disease" is now preferred because this process is observed clinically in up to 50% cases of BBD. Fibroadenoma is the next frequent form of BBD in our study. Murillo *et al.*, [4] found 38% incidence of fibroadenoma. Breast abscess was seen in 7.4% of our patients with peak incidence in patients from 4th decade of life. This was most commonly observed in lactating females during the first three months after child birth. Barton *et al.*, found acute bacterial mastitis common at any age but most frequently in lactating breast. Mammary duct ectasia, also called periductal mastitis is a distinctive clinical entity that can mimic invasive carcinoma clinically. In our study, only 1.8% of the patients had duct ectasia with sole incidence seen in 4th decade of life. Khandaza *et al.*, found 12% incidence of this condition. Duct ectasia is quite common in the 30 - 50 years age groups in Western population and more than 40% have substantial duct dilatation by the age of 70 years. It usually presents with nipple discharge, a vague palpable subareolar mass of varying size, breast pain, slit like nipple inversion or rarely even nipple retraction. Smoking has been implicated as an etiological factor in mammary duct ectasia. No such history was seen in our study. Mastalgia was seen in 13.8% of patients in our study, mostly in 4th decade of life. 25% of referral to breast clinics in western world are due to mastalgia and it affects up to 70% women at

some times during their lives. In contrast, this troublesome symptom is less common in our population. 66.6% of the patients with mastalgia in our study were from 31-40 years of age group. However it was found more common in the 4 and 5 decade of lives in western women. Duct papilloma was seen in 3.7% of the patients in our study, the commonest presentation being serosanguinous nipple discharge. Granulomatous mastitis resulting from infective etiology, foreign material or systemic autoimmune disease can involve breast. In our study, only 4 patients (3.7%) had granulomatous mastitis, proved later to be tuberculosis. Though rare in Western world Tuberculosis [19] is not uncommon in our country. Complete cure with appropriate antituberculous therapy is achieved. The overall incidence is less than 0.1% of all breast lesions in developed countries and 3-4% in developing countries which is comparable in our study.

CONCLUSION

BBD are common problems in females of reproductive age. The common problems for which women consult or are referred to breast clinics are palpable lump, breast pain and nipple discharge. Fibrocystic disease is the commonest of all benign breast disease followed by fibroadenoma in our hospital setup, mostly seen in 3rd and 4th decades of life. The anxiety of harbouring breast cancer sometimes compels these patients to seek early medical attention.

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