Original Research Article

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A study on clinical profile and management of lump in breast at tertiary rural hospital, Wardha, Maharashtra, India

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ABSTRACT

Background: Breast lumps diseases are one of the most common diseases in India which include congenital, traumatic, inflammatory, hormonal mastopathy, benign and malignant neoplastic conditions. Around 200,000 cases of breast diseases are diagnosed annually. In India, as there is no study of breast disease conducted separately in rural India hence studies are required to evaluate the incidence and prevalence of breast lump diseases so that interventions can be done to educate and guide people about the risk factors, importance of screening and management strategies.

Methods: We have conducted our study on 50 cases of lump in breast with the objective to know their incidence, clinical, pathological and radiological features of various breast swellings and different investigative approach different treatment modalities and their outcome presenting in rural India.

Results: The present study of lump in the breast was based on 50 cases admitted in AVBRH, Wardha, Maharashtra, India. During this period maximum patient were of benign breast lump as compared to malignant. All patients were females with age variation from 15 years to 55 years. Majority of patients had lumps varying from 2 months to more than 12 months.

Conclusions: Most of the patients from benign lump were managed with excision of lump and all patient of malignant lump underwent mastectomy.

Keywords: Breast lump, Breast carcinoma, Benign breast lump, Fibrocystic breasts

INTRODUCTION

Breast diseases include congenital, traumatic, inflammatory, hormonal mastopathy, benign and malignant neoplastic conditions. Around 200,000 cases of breast diseases are diagnosed annually. Breast diseases are more prevalent among females as compared to males and the pattern of breast diseases and their aetiology varies among different countries and ethnic groups.

Benign diseases can be classified as inflammatory, epithelial and stroma proliferations, neoplasm and developmental anomalies. Benign breast diseases are more prevalent as compared to malignant and inflammatory, as seen throughout the world.³ Fibro

adenomas are in greater frequency among the population, constituting almost half of all cases of benign diseases.⁴ Incidence of benign lesions is common in the second decade reaching on its peak at fourth and fifth decade of life.⁵ Risk factors for benign and malignant breast diseases include low parity, null parity, low age at first birth and late menopause, highlighting the fact towards excessive circulating oestrogen levels.^{6,7}

Breast cancer is the most commonly diagnosed cancer accounting for 23% of all diagnosed cancers and the most common cause of death in women worldwide. It is the fifth leading cause of death in both sexes combined.⁸ Breast cancer is one of the most frequently occurring cancer and cancer related deaths are highly prevalent

worldwide, which has become a major public health challenge. After skin cancer, breast cancer is the most common malignancy in women accounting of 16% cancer in women. It has also been present as unknown origin tumour and also one of the first tumours to be ruled out in the presence of tumour of unknown origin in women. Immunohistochemistry is a diagnostic tool for the classification of tumour and up to date several breast markers has been postulate such as beta-catenin, FAK, PIP, MUC1, PSE, e-cadherin, cytokeratin7 (CK7), oestrogen and progesterone receptors, gross cystic disease fluid, mammaglobin (MAG)-A and MAG-B. Incidence of malignant lesions is more frequent after menopause.

Breast problems for which patients consult doctors are breast pain, nipple discharge and palpable masses. Pathological or physiological nipple discharge is worrisome. 10 to 15% of women with benign breast diseases will complain of pathological nipple discharge. A breast mass and a cyst need histological diagnosis whereas the breast pain (mastalgia) remains the most common symptom in women. A study at Illinois Chicago states that 36% of the women with breast cancer had breast pain only. 11

In India, as there is no study of breast disease conducted separately in rural India so no statistics available on breast diseases occurring in rural India hence studies are required to evaluate the incidence and prevalence of breast diseases so that interventions can be done to educate and guide people about the risk factors, importance of screening and management strategies. Some patient may require assurance only to alleviate cancer phobia.

The objective of this study is to evaluate lump in the breast admitted in Acharya Vinobha Bhave Tertiary Rural Hospital, Sawangi (Meghe), Wardha, Maharashtra, India and to study their incidence, clinical, pathological and radiological features of various breast swellings and different investigative approach different treatment modalities and their outcome.

METHODS

Prospective study was done on 50 cases of lump in breast for 6 months at Acharya Vinobha Bhave Tertiary Rural Hospital, Wardha, Maharashtra, Indi.

Inclusion criteria

- Patients with complaints of lump in the breast.
- Male and female patient of all age group.
- Both out and inpatient (OPD and IPD).

Exclusion criteria

• Non palpable breast lump disease.

RESULTS

The present study of 50 cases of lump in breast were studied during the period of study from January 2016 to July 2016.

Incidence of breast lumps

During the period of study of six months total number of 50 cases were taken which presented with complaints of breast lump. Therefore the incidence of breast lumps to be benign is 74% whereas Malignant is 26% (Table 1).

Male female ratio

Out of 50 patients all were female with 100% female ratio (Table 2).

Table 1: Incidence of breast lumps in surgical admissions of AVBRH, Wardha, Maharashtra, India.

Year	Total breast lumps cases	Benign		Malignant	
2016	50	37	74%	13	26%

Table 2: Male female ratio of breast lumps.

Gender	Breast lump
Male	00
Female	50

Table 3: Breast in lump incidence according to its diagnosis.

Diagnosis	Age in groups				Total
Diagnosis	< 20	20-30	30-40	> 40	Total
Fibroadenoma	6	10	6	4	26
Fibroadenosis	0	2	5	3	10
Mastalgia	0	0	0	0	0
Galactocoele	0	0	0	0	0
Lipoma	0	0	0	0	0
Phylloids	0	1	0	0	1
Carcinoma breast	0	0	1	12	13
Total	6	13	12	19	50

Age incidence

The age of the patients varied from less than 20 years to more than 40 years. The highest incidence was between 20-30 years of age in case of benign lumps constituting nearly 38% of total cases.

But in case of carcinoma of the breast the highest incidence was in the age group of more than 40 years constituting almost 92% of total cases (Table 3).

Duration of complaint

During the present study 37 cases of benign breast lumps and 13 cases of carcinoma breast were studied. Majority of patients had lumps varying from 2months to more than 12 months. 11 cases of benign lumps had the lump for a period of time exceeding 12 months (Table 4).

Side of the breast involved

Out of 50 cases of carcinoma breast studied 27 cases had lump in the right breast (54%) whereas 18 cases had tumor in the left breast (36%) and 5 patients reported lumps in both breasts (10%) (Table 5).

Table 4: Duration of complaint of breast lumps.

Diamania	Duration of symptoms (in months)				
Diagnosis	< 2	2-6	6-12	> 12	
Benign	1	21	5	11	
Malignant	6	4	2	0	
Total	7	25	7	11	

Table 5: Side of involvement of breast lump.

Side of involvements	No. of cases
Right	27
Left	18
Both	5
Total	50

Table 6: Clinical features of breast lump.

	Pain	Nipple discharge	Mobility
Benign	3	0	37
Malignant	13	2	7
Total	16	2	44

Table 7: Treatment modality of treatment of breast lump

Diseases	Medical	Surgical	Reassure.	Total
Benign	11	24	2	27
Malignant	0	13	0	13
Total	11	37	2	50

Clinical features

Out of 37 benign breast lump 3 shows pain and 37 showed mobility whereas out of 13 malignant lump 13 showed pain, 2 showed nipple discharge and 7 showed mobility of lump (Table 6).

Treatment modalities

Out 27 cases of benign lump 24 underwent surgical excision, 11 went for medical therapy and 2 for

reassurance. Out of 13 cases of malignant lump all underwent surgical excision of lump (Table 7).

DISCUSSION

The present study of lump in the breast was based on 50 cases admitted in AVBRH, Wardha from January 2016 to July 2016. During this period out of the total inpatient and outpatient of 50 cases were evaluated for lump in the breast. Out of 50 cases, 13 cases were admitted for carcinoma of breast and 37 cases were admitted for benign breast lumps (Figure 1 and Figure 2).



Figure 1: Lump in left breast (upper quadrant).



Figure 2: Lump in right breast involving all the quadrant.



Figure 3: Ultrasound view of lump of breast.

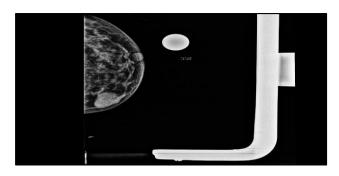


Figure 4: Mammography showing lump in lower quadrant of breast.



Figure 5: Excised malignant breast lump.

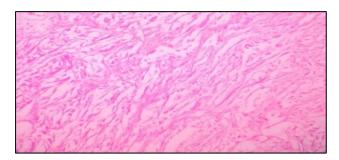


Figure 6: Histopathology view of breast lump (malignant).

All patients were females. The age of the patients varied from 15 years to 55 years. The highest incidence was between 20-30 years of age in case of benign lumps constituting nearly 38% of total cases. But in case of carcinoma of the breast the highest incidence was in the age group of more than 40 years constituting almost 92% of total cases. Majority of patients had lumps varying from 2 months to more than 12 months. 11 cases of benign lumps had the lump for a period of time exceeding 12 months

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