

## An Analytic and Clinical Correlation Study of Breast Lump

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### ABSTRACT

**Introduction:** Breast lump is commonly the presenting complaint. A dynamic physiological alter in female breast makes it prone to diverse diseases, lump being the common one. Transformation in the breast continue throughout the life so no age group is bar from the breast disorders. These lumps have two main causes: benign and malignant breast disease.

**Materials and Methods:** The study comprise of 70 cases of breast lump was assume at government hospital Sikar. Methods for evaluation of breast lump were anamnesis and physical examination, which was supplement with radiological investigations. Finally a tissue diagnosis was obtained with Fine needle aspiration cytology.

**Results:** More than 70% of patients with menopause between age group of 45 - 49 years, 50% of Ca breast patients attain their menopause more than 7 years, whereas only 2 patients with benign lumps were menopausal and both of them presented after 7 years of menopause. Positive family history was noted in around 15% and around 11% of patients of malignancy and benign lumps respectively.

**Conclusion:** Benign breast lumps are more frequent than

malignant ones. Benign lump was more frequent in 21-30 years age group whereas Carcinoma in 41-50 years age group. Breast cancer occurs at younger age as compared to women in west with more than 70% of patients being below 50 years of age.

**Keywords:** Breast Lump, Benign, Carcinoma.

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### INTRODUCTION

Breast lump is commonly the presenting complaint.<sup>1</sup> A dynamic physiological alter in female breast makes it prone to diverse diseases, lump being the common one. Transformations in the breast continue throughout the life so no age group is barring from the breast disorders.<sup>2</sup> These lumps have two main causes: benign and malignant breast disease. Breast tissue is naturally a glandular type of tissue, approximately all women develop nodules or lumps in their breasts at some time or another. Lumps, also call dominant lumps, Feel different from surrounding tissue (AMA 1989)<sup>3</sup>. Some may be pretty large, while others are tiny and even diffuse over time (Lark 1996). Fibrous tissue in the breast can be even mistaken for a lump. Significance of breast lump as a major health trouble is highlighted by the fact that breast carcinoma is the second commonest carcinoma in females.<sup>4</sup> Better understanding of whole picture requires analysis of many factors known to influence the outcome. These comprise age, marital status, and menstrual status, breast feeding and varied clinical presentations.

In this study an effort has been made to find out the function of some of these factors in the outcome of disease. Diagnosis of breast lump is made by a thorough history, careful clinical examination together with examination of breasts, regional lymph nodes and systemic examination. Before reaching at the diagnosis, examination is supplement by investigations like fine needle aspiration cytology, mammography, ultrasound and biopsy.<sup>5</sup> Multi factorial approach has led to widespread transitions in conclusion making and management of breast lump over the past century, which continue to change.

### AIMS AND OBJECTIVES

1. To study the age wise allocation of benign and malignant breast lumps.
2. To study the breast lump in contrast to menstrual, marital status of patient.
3. To study breast lump in contrast to breast feeding, family history and oral contraceptive usage.

4. To study the breast lump in contrast to different clinical presentations, size, side and quadrant of involvement.
5. To study breast lump in contrast to lymph node association, metastases and stage of involvement

## MATERIALS AND METHODS

The study comprise of 70 cases of breast lump was assume at government hospital Sikar.

Methods for evaluation of breast lump were anamnesis and physical examination, which was supplement with radiological investigations. Finally a tissue diagnosis was obtained with Fine needle aspiration cytology. However a biopsy for pathological assessment should be performed for exact diagnosis.

**Table 1: Showing Distribution of Cases According to Histology**

Malignancy	n	%
Carcinoma (infiltrating)	20	76.9
Medullary	6	23.1
<b>Benign</b>		
Fibroadenoma	26	59.1
Breast abscess	1	2.3
Tuberculosis	1	2.3
Galactocele	2	4.5
Fibroadenosis	9	20.5
Cystosarcoma phyllodes	2	4.5
Gynaecomastia	3	6.8

**Table 2: Distribution of Cases According to Lump Size at Presentation**

Size	Carcinoma		Benign	
	No.	%	No.	%
0-2 cm.	1	3.8	4	9.1
2-5 cm.	5	19.2	25	56.8
5-10 cm.	17	65.4	10	22.7
>10 cm.	3	11.5	5	11.4

Lump size of 5 – 10 cm. was the most common in cases of Carcinoma.

## RESULTS

In this study all subjects with Ca and around 87 % of patients with benign lumps were married. More than 70% of patients with menopause between age group of 45 - 49 years, 50% of Ca breast patients attain their menopause more than 7 years, whereas only 2 patients with benign lumps were menopausal and both of them presented after 7 years of menopause. Positive family history was noted in around 15% and around 11% of patients of malignancy and benign lumps respectively. Around 45% of patients with benign lumps existing with pain, and fibroadenosis being the most common. All cases of malignancy were Ca with more than 75% belongs to infiltrating group. Of the benign lumps, most common was fibroadenoma follow by fibroadenosis.

## DISCUSSION

This study comprise of 70 cases of breast lump was undertaken at government hospital Sikar, Carcinoma of breast is quite common in our country.<sup>6</sup> the other lesions of breast are similarly important. They at times replicate so much with malignancy that it is often difficult to differentiate the two lesions on clinical grounds. One reason for attention in the epidemiology of benign breast disease is to learn whether it shares epidemiological features with cancer of the breast. In our study 85% of cases were married.<sup>7</sup> Only four patients in the benign and none in the malignant group were unmarried. The arrival of menarche is at an earlier age in India<sup>8</sup>. Relationship of increased breast cancer risk with early menstruation has been reported in many case control studies.<sup>9</sup> In our study, 16 patients were post-menopausal, of which 14 subjects were having Ca. Most of these patients attained menopause in the age group between 45-49 years (78.6% of patients). Maximum patients of Ca breast presented within 1-3 years of menopause (around 43%). There was a spiky rise of incidence of carcinoma breast in the patients after menopause. Incidence of carcinoma breast rise with age.<sup>10</sup> In India the duration of breast-feeding is longer than in the prosperous West. Epidemiological study conduct at various center in India (1980) has exposed that although the mean breast-feeding duration in India was 1 year in some parts, patient's breast fed for 2-5 years (mean 2.5).<sup>11</sup> The study came up with a figure of 19% who had not breast-fed since it was generally assumed that nearly all Indian women breast-feed their children. In our study a positive family history was seen in 15% of malignant cases and 11% of the benign cases.<sup>12</sup> In general 26 of patients with 40% belonging to benign category and 30% with malignant lumps show a positive history of oral contraceptive pill intake. The majority of the Ca cases were seen in sizes of 5-10 cm. while in cases of benign lumps the size group was 2-5 cm. As per tissue diagnosis is concerned, the most common breast lump in our study turned out to be fibroadenoma (37% of all tumours and 59% of all benign lumps).<sup>13</sup> In cases of benign lumps it was follow in order of incidence by fibroadenosis, gynaecomastia, galactocoele, cystosarcoma phyllodes, breast abscess and tuberculosis. Occurrence of carcinoma breast was 37% of all lumps.<sup>14</sup> Fibroadenoma was by far, the commonest benign tumour seen in the younger age group as has also been observed by others.<sup>15</sup> In our country the regular size of the tumour is relatively bigger as compared to western countries. This is most likely due to the late visit to the hospital by our patients as they are completely unaware about the importance of the disease and try to hide the lump unless it has acquired a sufficient size.

## CONCLUSION

Benign breast lumps are more frequent than malignant ones. Benign lump was more frequent in 21-30 years age group whereas Carcinoma in 41-50 years age group. Breast cancer occurs at younger age as compared to women in west with more than 70% of patients being below 50 years of age. Shield through marriage against carcinoma was not marked as most of the Indian women get married and few remain single. No relation of benign lump to marital status was seen. Menarche, age at first childbirth, equivalence and breast-feeding did not show textbook correlation with breast lump in this study. Frequency of breast Ca was more common in postmenopausal women whereas that of benign lump

was in menstruating women. Positive family history was seen in only 15% and 11% of cases of malignant and benign breast lumps. No association with hormonal usage in form of oral contraceptive pill was seen. Most widespread carcinoma was infiltrating ductal Ca. and most common benign lump was fibroadenoma.

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