AN ANALYSIS AND CLINICAL CORRELATES OF BREAST LUMPS

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KEYWORDS : Breast lump Benign Malignancy

INTRODUCTION
Breast lump is frequently the presenting complaint. A dynamic physiological change in female breast makes it prone to varied diseases, lump being the common one. Changes in the breast continue through out the life thus no age group is bar from the breast disorders. These lumps have two chief causes: benign and malignant breast disease. Breast tissue is naturally a glandular type of tissue, almost all women develop nodules or lumps in their breasts at some time or another. Lumps, also called ‘dominant lumps,’ ‘feel different from surrounding tissue (AMA 1989). Some may be quite large, while others are small and even diffuse over time (Lark 1996). Fibrous tissue in the breast may be even mistaken for a lump.

Importance of breast lump as a major health problem is highlighted by the fact that breast carcinoma is the second commonest carcinoma in females.

Better comprehension of whole picture requires analysis of many factors known to influence the outcome. These include age, marital status, and menstrual status, breast feeding and varied clinical presentations.

In the present study an effort has been made to find out the role of some of these factors in the outcome of disease.

Diagnosis of breast lump is made by a detailed history, careful clinical examination including examination of both breasts, regional lymph nodes and systemic examination.

Before arriving at the diagnosis, examination is supplemented by investigations like fine needle aspiration cytology, mammography, ultrasound and biopsy.

Multi factorial approach has led to extensive transitions in decision making and management of breast lump over the past century, which continue to evolve.

AIMS AND OBJECTIVES
1. To study the age wise distribution of benign and malignant breast lumps.
2. To study the breast lump in relation to menstrual, marital status of patient.
3. To study breast lump in relation to breast feeding, family history and oral contraceptive usage.
4. To study the breast lump in relation to various clinical presentations, size, side and quadrant of involvement.
5. To study breast lump in relation to lymph node involvement, metastases and stage of involvement

MATERIALS AND METHODS
The study comprising of 70 cases of breast lump was undertaken at premier tertiary care hospital and teaching institute in Mumbai.

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

OBSERVATIONS

SHOWING DISTRIBUTION OF CASES ACCORDING TO AGE

SHOWING DISTRIBUTION OF CASES ACCORDING TO SEX

TABLE NO. 1

SHOWING DISTRIBUTION OF CASES ACCORDING TO HISTOLOGY

<table>
<thead>
<tr>
<th>Malignancy</th>
<th>No. of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinoma (infiltrating)</td>
<td>20</td>
<td>76.9</td>
</tr>
<tr>
<td>Medullary</td>
<td>6</td>
<td>23.1</td>
</tr>
<tr>
<td>Benign</td>
<td>26</td>
<td>59.1</td>
</tr>
<tr>
<td>Fibroadenoma</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Breast abscess</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Galactocele</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Fibroadenosis</td>
<td>20</td>
<td>20.5</td>
</tr>
<tr>
<td>Cystosarcoma phyllodes</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Gynaecomastia</td>
<td>3</td>
<td>6.8</td>
</tr>
</tbody>
</table>

In our 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 attained 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 presented with pain, and fibroadenosis being the most common. All cases of malignancy were...
2. Benign lump was more common in 21-30 years age group whereas benign breast lumps are more common than malignant ones. Recorded and critically analyzed and the following conclusions drawn:

SUMMARY AND CONCLUSION

Relevant literatures were reviewed, observations were systematically recorded and critically analyzed and the following conclusions drawn:

1. Benign breast lumps are more common than malignant ones.
2. Benign lump was more common in 21-30 years age group whereas Carcinoma in 41-50 years age group. Breast cancer occurred at a younger age as compared to women in west with more than 70% of patients being below 50 years of age.
3. Protection through marriage against carcinoma was not evident as most of the Indian women get married and few remain single. No relation of benign lump to marital status was seen.
4. Menarche, age at first childbirth, parity and breast-feeding did not show textbook correlation with breast lump in this study.
5. Incidence of breast Ca was more common in postmenopausal women whereas that of benign lump was in menstruating women.
6. Positive family history of carcinoma seen in 15% and 5% of cases of malignant and benign breast lumps. No correlation with hormonal usage in form of oral contraceptive pill was seen.
7. Most common carcinoma was infiltrating ductal Ca. and most common benign lump was fibroadenoma.

REFERENCES


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

DISCUSSION

This study comprising of 70 cases of breast lump was undertaken at a Premier Tertiary Care Hospital in Mumbai, Carcinoma of breast is fairly common in our country. The other lesions of breast are equally important. They at times simulate so much with malignancy that it is often difficult to differentiate the two lesions on clinical grounds. One reason for interest in the epidemiology of benign breast disease is to learn whether it shares epidemiological features with cancer of the breast.

In the present study 85% of cases were married. Only four patients in the benign and none in the malignant group were unmarried.

The onset of menarche is at an earlier age in India. Association of increased breast cancer risk with early menstruation has been reported in may case control studies.

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 sharp rise of incidence of carcinoma breast in the patients after menopause. Incidence of carcinoma breast increase with age. In India the duration of breast-feeding is longer than in the affluent West. Epidemiological study conducted at various centre in India (1980) has revealed 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). The study came up with a figure of 19% who had not breastfed –fed since it was generally presumed 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.

Overall 26 of patients with 40% belonging to benign category and 30% with malignant lumps showed a positive history of oral contraceptive pill intake. Most of the Ca cases were seen in sizes of 5-10 cm. whereas 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). In cases of benign lumps it was followed in order of frequency by fibroadenosis, gynaecomastia, galactocele, cystosarcoma phylloides, breast abscess and tuberculosis. Incidence of carcinoma breast was 37% of all lumps. Fibroadenoma was by far, the commonest benign tumour seen in the younger age group as has also been observed by others.

In our country the average size of the tumour is comparatively bigger as compared to western countries. This is probably due to the late visit to the hospital by our patients as they are completely ignorant about the importance of the disease and try to hide the lump unless it has acquired a sufficient size.

### DISTRIBUTION OF CASES ACCORDING TO LUMP SIZE AT PRESENTATION

<table>
<thead>
<tr>
<th>Size</th>
<th>Carcinoma</th>
<th>Benign</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>0 – 2 cm.</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>2 – 5 cm.</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>5 – 10 cm.</td>
<td>17</td>
<td>65.4</td>
</tr>
<tr>
<td>&gt;10 cm.</td>
<td>3</td>
<td>11.5</td>
</tr>
</tbody>
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