Effect of *Kanchnar Guggulu* in the management of *Mansaja Granthi* w.s.r. fibroadenoma breast

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Abstract

**Introduction:** Fibroadenomas of the breast are common accounting for 50% of all the breast biopsies performed. A clinician often faces the dilemma, whether to excise the mass or conservatively treat & monitor it during subsequent follow up. **Objective:** The study was designed to evaluate clinical efficacy of *Kanchnar Guggulu* in management of fibroadenomas of the breast. **Method:** Recent literature on detection, diagnosis, and natural history of fibroadenomas was reviewed. 30 female patients having sign and symptoms of fibroadenomas breast were randomly selected from outdoor/indoor department of Rishikul Ayurvedic P.G. college Haridwar Uttrakhand. A polyherbal compound Kanchnr guggulu was given orally in a dose of 1gm (2 tablet of 500 mg each) twice a day with luke warm water after meal for a duration of 90 days. Result were assessed on the basis of regression in size of lump.  **Results:** The lumps which were within the range of less than 10 mm showed maximum regression in size i.e. 100%, while those lumps which were in the range of 10-12 mm also showed considerable regression of about 87%. Percentage relief in the size of 12-23 mm sized lumps was 75, i.e. even though, not complete but yet remarkable improvement in decrease in size was seen in lumps of probably all sizes. **Conclusion:** Fibroadenoma are the most common benign lesions of the breast with average age of presentation 27yrs. Although the peak incidence is between the second and third decades of life, it is not uncommon in postmenopausal women, with an increased incidence after hormone replacement therapy. *Kanchnar Guggulu* showed significant result in management of fibroadenoma Breast.

**Key words:** Breast, fibroadenoma, *Kanchnar Guggulu*

INTRODUCTION

A fibroadenoma is a non-cancerous tumor in the breast that is commonly found in women under the age of 30. According to Mammotome, fibroadenomas are diagnosed in approximately 10 percent of women in the United States, African-American women are more likely to develop these tumors. The most common diagnosed cancers worldwide were those of the lung (1.8 million, 13.0% of the total), breast (1.7 million, 11.9%), and colorectum (1.4 million, 9.7%). In 2012, 1.7 million women were diagnosed with breast cancer and there were 6.3 million women alive who had been diagnosed with breast cancer in the previous 5 years. Since 2008, breast cancer incidences have increased by more than 20%, while mortality has increased by 14%. Breast cancer is also the most common cause of cancer death among women (522,000 deaths in 2012) and the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. It now represents one in four of all cancers in women. “Breast cancer is also a leading cause of death in the less developed countries of the world. This is partly because a shift in lifestyles is causing an increase in incidence, latest world cancer statistics shows global cancer burden rise to 14.1

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**MATERIALS AND METHODS**

**Method of Selection of Data**

Patients with classical symptoms and sign of fibroadenoma breast will be randomly selected from the out patients department/inpatient department of post-graduate Department of Shalya Tantra and Department of Prasuti Tantra, Rishikul Ayurvedic College and Hospital, Haridwar, Uttarakhand.

**Sample Size**

A single trial group of 30 patients was taken for the study to evaluate the efficacy of the trial drug.

**Inclusion Criteria**

Women of age group 15-40 years were selected with nodularity maximum of size 5 cm in diameter were considered for inclusion in the study. In the patients of >35 years of age, a thorough clinical examination of the breast was done followed by bi-planar mammography. Firm reassurance against cancer was given in all the patients.

**Exclusion Criteria**

Patients with discrete lump which were suspicious of malignancy after clinical, imaging, and cytological examination, women suffering from uncontrolled diabetes mellitus, hypertension, coronary artery disease or any other systemic disease.

**Criteria for Diagnosis**

Patients visiting OPD with the chief complaint of the presence of a movable breast lump were selected on the basis of a local examination of the breast, followed by fine needle aspiration cytology to rule out malignancy, ultrasonography (USG) and mammography.

**Investigation**

**Routine investigations**

Hematological investigations: Total leukocyte count, differential leukocyte count, hemoglobin concentration, erythrocyte sedimentation rate, fasting and postprandial blood sugar, blood urea, and serum creatinine.

**Specific investigation**

Fine needle aspiration cytology (pre and post therapy)

Mammography/USG

Histopathological examination

**OBSERVATION[6]**

In this clinical trial, only 4 (13.33%) patients reported of seeking prior medical advice after being aware of the disease, while 26 (86.60%) patients were new to the disease and freshly reported within 6 months of being aware of the lump. Thus, majority of the patients attend health clinic quite early due to the early presentation of lump. In fibroadenoma, lump is the only presenting symptom. These observations are opposite to carcinoma breast cases in which only 29.7% patients reported within 6 months of the appearance of symptoms for possible prophylactic intervention. Delay in appearance of lump and absence of pain leads to late detection and poor prognosis in breast cancer. But in fibroadenoma, lump is the early symptom, which forces the patients to seek early medical advice delay in the appearance of lump and absence of pain leads to late detection and poor prognosis in breast cancer. The most common age group affected in this study is between 15 and 25 years,[7] average being 20 which justify the incidences. None of the patients belongs to age group >46 years. In this study, most of, i.e., 24 (80%) patients belongs to urban area and only 6 (20%) belongs to rural area. Similarly, 56.66% of patients were from lower socio-economic status and 3.33% patients belong to the lower class and the rest of them belongs to middle class [Figures 1-3].
DISCUSSION\textsuperscript{[7]}

The breast had always been a symbol of womenhood and ultimate fertility. As a result, both disease and surgery of the breast evoke a fear of mutilation and loss of femininity [Table 1].

According to “International Journal of Research” it is associated with long-term risk of breast cancer. Cumulative risk of breast cancer is 0.7% after 5 years of diagnosis and 2.2% after 10 years of diagnosis. Data show the need of study. Kanchnar and Guggulu had all the necessary properties of Deepan, Pachan, Vatta-Kaph shanak, Shoth-har, Lekhan, Bhedi, etc., which helps to get rid of the cardinal symptoms of Mansaja-Granthi. Kanchnar’s alcoholic extract has anticancerous activity. Guggulu contains oleoresin which was found to be highly potent anti-inflammatory and anti-arthritis effect. Crude Guggulu has highly encouraging hypolipidemic activity. Stem and bark of varun contains lupeol which shows potent lithotripsic and anti-goiter activity. Fruit powder of Emblica officinalis said to have potent anti-diabetic and hypoglycemic activity. Anti-inflammatory activity, antioxidant property is also reported of lethal does 50% of chebulin and it also had anti-spasmodic effect. In this study of 30 cases of fibroadenoma of breast, there were 18 (60%) married patients and 12 (40%) patients were unmarried which indicate its maximum incidence among married women and these findings are just opposite to the incidences of carcinoma breast which occur commonly in nullipara, spinsters and nuns.

Regression in the Size of Lump

During this due course of 3 months, it was observed that the lumps which were within the range of <10 mm showed maximum regression in size, i.e., of about 100%, while those lumps which were in the range of 10-12 mm also showed

<table>
<thead>
<tr>
<th>Disease entity described in books of surgery</th>
<th>Distinguishing clinical features taken for congruence</th>
<th>Mansaja-Granthi/Arbuda described in ayurvedic classics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibroadenosis</td>
<td>Blue domed comparatively small cyst</td>
<td>Vataj Granthi\textsuperscript{[8]}</td>
</tr>
<tr>
<td>Fibroadenoma</td>
<td>Smooth, hard, mobile tumor</td>
<td>Mansaja – Granthi</td>
</tr>
<tr>
<td>Giant fibroadenoma</td>
<td>Usually, retrocomamary hard tumor causing unilateral hypertrophy of breast</td>
<td>Mamsa – Arbuda\textsuperscript{[9]}</td>
</tr>
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</table>
considerable regression of about 87%. Percentage relief in the size of 12-23 mm sized lumps was 75%. Percentage relief in the size of the lump was 69%, i.e., even though, not complete but yet remarkable improvement in size was seen in lumps of probably all sizes.

Before treatment, the mean of the size of lump of 30 patients was 3.27 and after treatment the mean of the size of lump was 1.29 and overall 69.27% of relief in the size was seen. On statistical observation \( P < 0.001 \). It means that the data was highly significant in reduction in the size of lump.

On modern parameter, it can be postulated that the drug might have reduced the enlargement by its anti-inflammatory, antihypolipidimic, anti-fibrinolytic activity exhibited by the chemical components of the drug. Furthermore, certain chemical constituent of the drug like Piperine (Marich) and beta-sitosterol of Kanchnar exhibits anti-tumor property thereby helping in regression in the size of the mass.

In this way, we experienced that Kanchnar Guggulu proved to be effective in the medical management of the condition of Mansaja Granthi related to fibroadenoma breast [Figures 4 and 5].

CONCLUSION AND RECOMMENDATION

“Breast health means more than breast cancer” much attention has been given to the care and cure of carcinoma breast, cases yet fibroadenoma remains still a “mystery” and a controversial disease. Although no exact description of this disease is available in ancient classics but its presentation and clinical features closely relates to “Granthi” (specially Mansa type). In ayurvedic literatures, Kanchnar Guggulu has been described for its special properties and effect over cystic and glandular swellings, therefore, this had been chosen and tried in 30 cases of fibroadenoma of breast and was found out to be considerably effective in alleviating the symptoms of the Granthi. This beneficial effect of the trial drug may be due to its Deepan, Pachan, Bhedi, Lekhan Tridosha-shamak, anti-oxidant, anti-inflammatory, anti-tumor, anti-fibrinolytic, and anti-hypolipidimic properties.

REFERENCES


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