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NECESSITATE DELVING CORROBORATION RELATING UNORTHODOX THERAPY IN TREATMENT OF NON-CURATIVE BENIGN TUMOR – FIBROADENOMA

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ABSTRACT

Fibroadenoma is a benign tumor in female breast occurs most commonly in adolescent (14 to 35 years) and in pregnancy. Young adult females are being affected than elder women's. Though these tumors are harmless, lifestyle changes, modern food habits and physiological stress will have greater influence in developing simple fibroadenoma into complex/giant fibroadenoma which are at increased risk for breast cancer. Treatment modalities and curative measures are still in modern medicine, whereas surgery is opted in case of breast discomfort or in any other complications. This review explains about the exploration on medicinal plants used in management and treatment of fibroadenoma from ancient to thus far.

Key words: Fibroadenoma, Unorthodox theraphy, MED 12, Hormonal imbalance

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INTRODUCTION

Breast disorders may be noncancerous (benign) or cancerous (malignant) (Fig 1). Most of them are noncancerous and are not life threatening. Common type of benign tumor is fibroadenoma which are due to stromal and epithelial proliferation. Its benign nature was very firstly noted by Professor Astley cooper in year 1845, Almost 90% of benign breast disorders, in India are fibroadenomas. (Foram Joshi et al).

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Africans and Americans are affected at higher rate compare to other countries in the world. (Asra N. Shaik et al.,) More than 70% of fibroadenomas present as a single mass, and 10%-25% of fibroadenomas present as multiple masses. It is estimated that 10% of the world's female population suffers from fibroadenoma once in a lifetime. Although fibroadenomas are benign breast masses, women with fibroadenomas are at a 2.17 times increased risk for breast cancer. The incidence of malignancy ranges from 0.002% to 0.125%. (Lee M et al.,). Treatment for these tumors have not been found till now where some herbal plants such as Zingiber officinale, Piper nigrum, Curcuma longa, Piper longum, Terminalia chebula, Terminalia bellerica, Embelica officinalis, Crataeva nurvala, Cinnamomum tamala, Elletaria cardamomum, Cinnamomum zeylanicum, Mimosa pudica, Caesalpinia bonducella, Evening primrose oil, Chimapila umbellate, Ocimum canum. Conium maculatum, Lachesis mutusm, Phytolacca decandra,

Calcarea fluor and castor oil are effective in prevention of growth and helps in pain reduction.

Fibroadenoma

They are painless solid lump occurs due to stromal and epithelial proliferation of breast. "Fibro" means stromal tissue, "adenoma" means the glandular structural in epithelial tissue and "oma" means tumor.(Gupta et al., 2019). They are often referred to as a breast mouse/breast mice due to their high mobility. They are the abnormalities of the breast development, hence they are not considered under neoplasms.

Etiological Factors

Exact causes for fibroadenoma are idiopathic. Though it probably occurs due to

- Hormonal imbalances (Increased estrogen level)
- Hormonal replacement therapy
- Pregnancy
- Oligomenorrhea
- Oral contraceptives
- High fat diet
- Irregular exercise
- Mutation of MED 12 gene (Mediator Complex Subunit 12)

Some gene mutations are acquired during a person's lifetime and are present only in certain cells. These changes, which are known as somatic mutations, are not inherited. Somatic mutations in the MED12 gene have been found in several types of tumors, both noncancerous and cancerous. (medlineplus).

Clinical Identification

- ✓ Painless
- ✓ Movable lumps
- ✓ Palpable
- Rubbery mass
- ✓ The fibroadenoma usually slips easily under examining fingers.
- √ Nipple discharge may or may not depending upon individuals
- ✓ It can be found in any quadrant, but it is more common in the upper, outer quadrants.

Types Of Fibroadenoma Simple fibroadenoma

Measures 1-3 cm in size. These do not pose any risk of developing breast cancer. They look the same all over when you view them under a microscope. Seventy to ninety percent of fibroadenomas are simple fibroadenomas, which are the most common type of fibroadenoma. (Fig 2)

Complex fibroadenoma

They are bigger than 3 cm and tend to affect older women. Their cells grow rapidly and pose a slight risk of developing breast cancer in the future. A complex fibroadenoma will not look organized and uniform like a simple one and may contain a collection of small cysts, calcifications, enlarged breast lobules, papilloma's and different kinds of hyperplasia. (Fig 3)

Juvenile fibroadenoma

These are the most common type of breast lump found in girls and adolescents between the ages of 10 and 18. In rare cases, a fibroadenoma may grow up to more than 5 cm. They grow larger and may shrink over time. Some may disappear. (Fig 4)

Giant fibroadenoma

The incidence of giant fibroadenomas is approximately 0.5%–2% of all fibroadenomas. They can grow to larger than 2 inches. They may need to be removed if they press on or replace other breast tissue. (Fig 5)

Risk Factors

- Hormonal imbalance
- Pregnancy
- Adolescent
- Irregular periods
- PCOD

Assosiated Conditions

Fibroadenomas can also be associated with syndromes such as

- ▲ Beckwith-Tiedemann syndrome
- ▲ Maffucci syndrome
- ▲ Cowden syndrome

Histological Findings

Well-circumscribed, non-encapsulated lesion with pushing borders that does not infiltrate the adjacent breast parenchyma. Calcifications can also be in the glands. In pregnancy, the epithelium may show lactation changes. There are two histological growth patterns in fibroadenomas, the intracanalicular pattern and the pericanalicular pattern. (Lee M et al.)

- **1. Intracanalicular** Glands are compressed into linear branching structures by proliferating stroma. (Fig 6)
- **2. Pericanalicular** Glands retain open lumens but are separated by expanded stroma. (Fig 7)

Histological variants - Myxoid fibroadenoma

Similar structure but with prominent myxoid stromal change composed of abundant pale, blue extracellular matrix material.

Treatment

There are no standard treatment for treating fibroadenoma. Surgery may be adopted in severe cases or patient discomfort.

Lumpectomy

Excision of a breast lump with a surrounding rim of normal breast tissue.

Cryoablation

Insertion of thin, wand-like device (cryoprobe) through your skin to the fibroadenoma then the gas is pumped to freeze and destroy the tissue.

Control Measures

Hormonal foods

Avoid eating livestock including cows, chicken, goats which are pumped with hormones. They may increase excess levels of oestrogen which affects breast tissues.

Vegetables

Certain vegetables like parsley, cucumber, or cabbage act as diuretics which help in flushing the excess fluid from the body and hence help in breast swelling reduction.

Caffeinated drinks

Beverages like coffee, tea, wine or soft drinks contain a harmful substance called methyl xanthines which stimulate the production of stress hormones. These hormones are strongly associated with breast lumps and breast tenderness. It has been studied that around 80 per cent of women found significant relief in their symptoms after reducing the intake.

Ice compression

Ice compression can provide great ease to inflammation and tenderness.

Fish

Fish that as omega-3 fatty acids, such as salmon and mackerel are really good for hormonal health. They are rich in iodine. Deficiency of iodine leads to the development of breast lumps.

Raspberry leaf

The herbal supplement red raspberry leaf is also reported to help with fibrocystic breasts. Red raspberry leaf can be taken as a tea or tincture and helps balance hormones, which can relieve breast pain.

Iodine

Breast lumps or tenderness is mostly due to iodine deficiency. Iodine acts as a natural supplement and helps in the removal of excess oestrogen and also reduce

the responsiveness of the body to oestrogen. The most common source of iodine is common salt. (vaidam.com)

Vitamins

Vitamin E may help in reliving from symptoms associated with fibrocystic changes.

Primrose oil

Oil of primrose contains essential fatty acids that have helped reduce breast pain. (karenthrelkelnd.com)

Treatment Modalities

Sidhha Medicines

- 1. **Mimosa pudica (Fig 8)** Leaf of Mimosa pudica is indicated for katti (lumps) in the body, which can be correlated with the benign and metastatic tumors in the body. (**Materia medica**)
- 2. **Castor oil (Fig 9)** Castor oil encourages lymphatic circulation and detoxify breast tissue, supports shrinking and healing of benign masses and swellings, including cysts, growth, tumors, and fibroadenomas. (www.hermetanoia.com)
- **3.** Caesalpinia bonducella (Fig 10) Seeds of Caesalpinia bonducella are used in treating hormone related problems and also helps in dissolving breast lump

Ayurvedic Formulations

Fibroadenoma can be correlated with Saumyarbuda in Ayurveda. As per Acharya Sushruta's definition of Shotha, Arbuda, Granthi etc are the developed various phases of Shotha according to involvement of Dosha, Dushya and other factors. The herbal medicines like ChandraprabhaVati, Kanchanar Guggul, and AampachakVati can help treat all the symptoms of the condition. (kama ayurveda hospital). The size of the lump can be effectively reduced with it. Some ayurvedic formulations which helps in relieving fibrocystic breast are also effective in treating fibroadenoma.

- ✓ DashangaLepa
- ✓ Vridhivahikavati
- ✓ Stanyashodhanamaha kashya
- ✓ Punarnava mandur
- ✓ Rajah pravartini vati
- ✓ Medohar guggulu
- ✓ Kanchnar kashya
- ✓ Aampachak vati

Homeopathic Medicine

Fibroadenoma is a curable condition in Homeopathic medicines. They prevent women from the surgical excision of tumor from the breast. Homeopathic treatment for Fibroadenoma of breast comes with a double benefit. The first is that Homeopathic medicines

dissolve the tumors in the breast and the second is they help to reduce the body's tendency to form such abnormal tumor growths by raising immunity. The entire dissipation of Fibroadenoma of breast takes a few months with the use of Homeopathic medicines. The selection of Homeopathic medicines varies for every individual.

Conium maculatum

It helps in treating glandular affections and stony hard Fibroadenomas.

Phytolacca berry (Fig 11)

In sensitive and painful fibroadenoma with enlarged glands in armpits, Phytolacca helps in reducing the inflammation and pain in breast initially, followed by the complete disappearance of hardness.

Graphite's

Table 1: Breast Cancer Vs Fibroadenoma

They are effective in treating tumors in the breast that arise from some old scars in the breast. Old scars may have remained after healing of abscess in the breast. Graphite's work very efficiently in the dissipation of these tumors.

Scrophularia nodosa

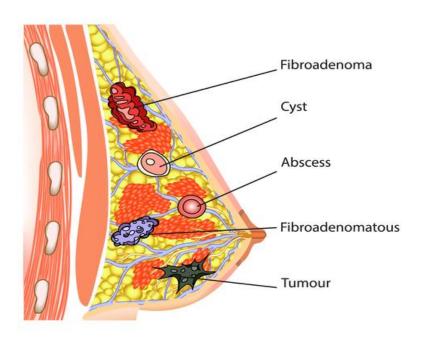
They are the Powerful Homeopathic medicine for tumor in breast. Scrophularianodosa is a rare but very significant medicine that can be used for dissolving the tumors, lumps, nodes or indurations in breasts. This medicine is mainly used in tincture form.

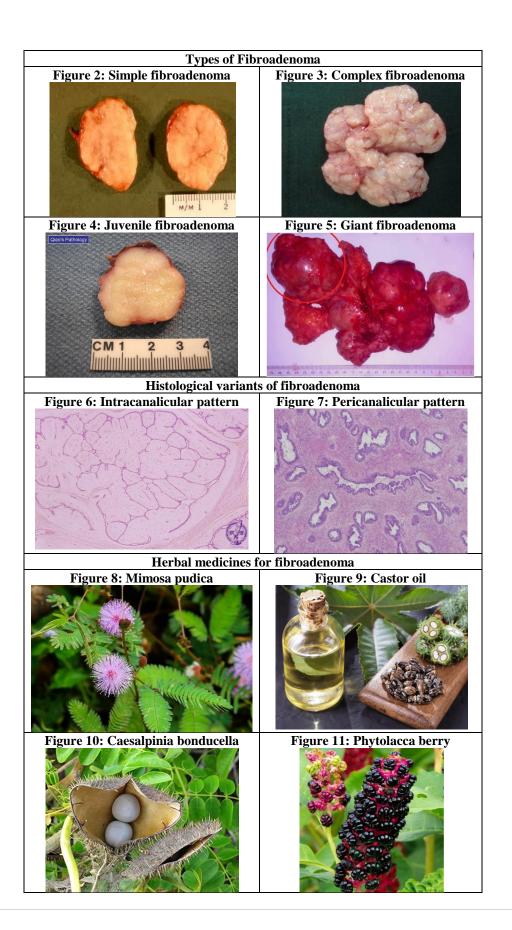
Pulsatilla nigricans

They are mainly taken when nodes in breast are accompanied by menstrual irregularities. (www.drhomeo.com)

Features	Breast cancer	Fibroadenoma
Symptoms	Painful mass	Mostly asymptomatic
Shape	Irregular, sometimes round or oval	Oval or round
Margin	Non circumscribed, indistinct, micro lobulated, spiculated	Circumscribed, well delineated
Movements	Non-movable but may spreads	Easily movable
Growth	Grows fast	No growth or slow growth
Orientation	Taller than wide i.e. not parallel to skin	Wider than tall
Echo pattern	Hypo echoic	Hypo echoic or isochoric
Calcification	Small calcification in or outside the tumor	May be present

Figure 1: Breast disorders





CONCLUSION

We conclude hereby that treatment for fibroadenoma using herbal medicines have been manuscripted and have been followed in ancient times,

despite lack of scientific validation, they devalue from their effects. These herbal medicines need proper research which may lead to proper treatment for such benign disorder.

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