

## PREVENTION OF BREAST CANCER THROUGH AYURVEDA REGIMEN

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Article Received on  
15 July 2019,

Revised on 05 August 2019,  
Accepted on 25 August 2019,

DOI: 10.20959/wjpr201910-15756

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### ABSTRACT

Breast cancer is the 2<sup>nd</sup> most common after cancer of cervix. Cancer of the breast accounts for approximately 10% of all breast diseases presenting at the clinics. Breast cancer most commonly originates in upper-outer quadrant {38.5%}, central area {29%}, upper-inner quadrant {14.2%}, lower-outer quadrant {8.8%} & lower-inner quadrant {5%}. The incidence of breast cancer is increasing in developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles. Feeling of lump in the breast, bloody discharge from the nipple and changes in the shape or

texture of the nipple or breast, general pain in/on any part of the breast are the symptoms of breast cancer. Female care to be taken to prevent cancer are- till 12 years of age nutritious and healthy diet, proper exercise. After puberty/ menarche- every women should follow *Rajaswalacharya*. At the time of planning child- Every women should perform *Panchkarma* body purification procedures for healthy progeny. During pregnancy follow 9 month *Garbhini paricharya*. After delivery *Sutika paricharya*- following the diet and routine after child birth to regain healthy, medicines to purify breast milk (Use of *stanya shodhana mahakashaya*), proper obeying of breast feeding rules and breast feeding through both breasts. After menopause- Every women should follow procedure for mental health. -*basti & vaman chikitsa* -light & nutritious diet, activity regimen like- *yoga, shavasana, pranayama*. This Ayurveda regimen helps in prevention from breast cancer which reduces the risk of mutation of BRCA1 & BRCA2 gene. Thus it also helps in improving quality of life.

**KEYWORDS:** *Yava, Ghrita, Free radicals, Vidarigandhadi varg.*

## 1. INTRODUCTION

Breast cancer is the commonest (30%) of all the cancers and is the 2<sup>nd</sup> (next to lung cancer) common cause of cancer deaths in women. Breast is one of the target organs for various hormones, of particular estrogen, progesterone and prolactin.<sup>[1]</sup> As such, many a breast related complaint is associated with endocrine dysfunction and disturbed HPO axis. *Pragyaapradh*<sup>[2]</sup> is cause of 50% of diseases. Intake of *mithya ahara-vihara*<sup>[3]</sup> causes 20 types of *yoni vyapada*. Vitiating of *dosa* disturbs the tumor suppressor genes i.e. BRCA1 & BRCA2 which result in breast diseases. That's why to maintain the *dosa* in normal state *acharya* mentioned the concept of *Rajaswalacharya*, *Garbhini-paricharya* and *Sutika paricharya*, in accordance to various phases of female. Thus, these concepts of *paricharya* are gifts to every woman to nurture herself with love and care and maintain the true essence of real beauty and powerful mind. These help her in live a healthy life.<sup>[4]</sup>

The American Cancer Society is committed to a world free from the pain and suffering of breast cancer. The American Cancer Society is doing everything in our power to help prevent breast cancer, promote healthy lifestyles by issuing cancer guidelines for prevention, reducing barriers to healthy eating and exercise.<sup>[5]</sup> This can be done by following concepts by *paricharya*.

2. **AIM-** Prevention of breast cancer through *paricharya* mentioned in classics.

## OBJECTIVES

- (1) To establish *Rajaswalacharya*, *Garbhini paricharya*, *Sutika paricharya* as preventive measures in breast cancer.
- (2) Conceptual study regarding *Ayurveda* regimen and breast cancer.

## 3. METHODOLOGY

Literary references collected from *Ayurveda* i.e classics, commentaries, modern literatures, research journals available in institute library, online portals like Pubmed central, Ayush research portal, Google scholar and analyzed to frame conceptual work.

## 4. DESCRIPTION OF BREAST DISEASE IN CLASSICS

Breasts are seat of all type of *sothas* (inflammation), *vranas* (ulcer), *granthi* and *arbuda*. In *Susruta samhita*<sup>[6]</sup>, *Madhava nidana*<sup>[7]</sup>, *Bhavprakash*<sup>[8]</sup>, a disease with name of “*Stana roga*” is described. *Acharya Susruta* described *vata*, *pitta*, *kapha*, *sannipata* and *abhigata* (trauma)

are responsible for breast disorders. *Acharya Vagbhata*<sup>[9]</sup> mentioned short description of “*Stana Vidradhi*”. *Acharya Kasyapa*<sup>[10]</sup> mentioned “*Stanavajra* or *Stanakilaka*”.

## 5. DESCRIPTION OF BREAST DISEASE ACCORDING TO MODERN TEXT

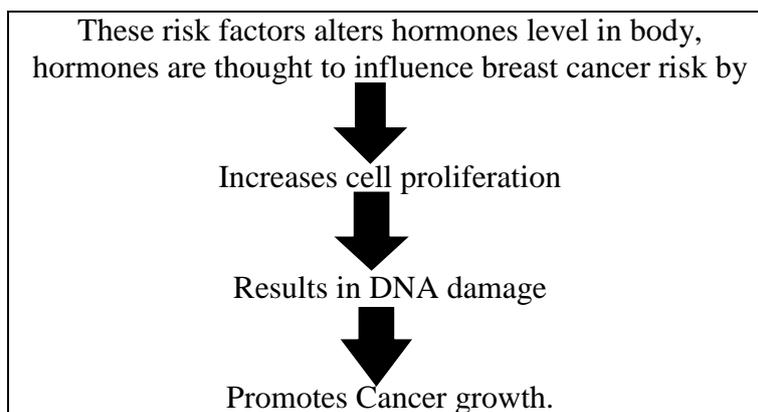
Cancer of the breast accounts for approximately 10% of all breast diseases presenting at the clinics.<sup>[11]</sup> Breast cancer most commonly originates in upper-outer quadrant {38.5%}, central area {29%}, upper-inner quadrant {14.2%}, lower-outer quadrant {8.8%} & lower-inner quadrant {5%}.<sup>[12]</sup> The incidence of breast cancer is increasing in developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles. Feeling of lump in the breast, bloody discharge from the nipple and changes in the shape or texture of the nipple or breast, general pain in/on any part of the breast are the symptoms of breast cancer. Prolonged estrogen exposure increases the risk of breast cancer. In present era breast cancer treatment is Tamoxifen and Raloxifene. These two drugs reduce the risk of breast cancer in high risk women by approximately 50%. But the risk of venous thrombo-embolism is increased approximately threefold with the use of tamoxifen and raloxifene, similar to increase with hormone therapy.<sup>[13]</sup>

## 6. INCIDENCE OF BREAST CANCER

Rate begins to increase after age 40 and is highest in women over age 70. Breast cancer has ranked number one cancer among Indian women with age adjusted rate as high as 25.8 per 1,00,000 women and mortality 12.7 per 1,00,000 women.<sup>[14]</sup>

## 7. RISK FACTORS OF BREAST CANCER<sup>[15]</sup>

- Delayed child-bearing
- Having fewer children
- Rising rates of obesity
- Use of menopausal hormones
- Physical inactivity
- Not breast feeding
- Family history of first degree relative
- Early menarche (<12yrs)
- High socio-economic status
- Personal history of endometrium and ovarian cancer
- Oral contraceptives use.



## 8. ETIOLOGY OF BREAST DISORDERS

*Acharya Vagbhata*<sup>[16]</sup> mentioned use of stale, *atiushna*, *ruksha*, *suska*, *vidahi bhojan*, sleeping over uneven bed, abnormal acts and other factors which aggravate *rakta*, the inflammation is produced. These etiological factors disturbs hypothalamus pituitary ovarian axis. The hypothalamus has inhibiting factor for prolactin responsible for milk secretion and releasing factors to all other anterior pituitary hormones. If hypothalamus becomes hyperactive, then prolactin will not be secreted, while secretion of more amounts of other pituitary hormones may cause menorrhagia.

## 9. SAMPRAPTI

- *Doshas* – *Vata*, *Pitta*, *Kapha*.
- *Dushyas* – *Mamsa*, *Rakta*.
- *Sthana* – *gatra pradesha kvachideva* (at any place in the body either uterus, breast or cervix).
- *Srotas* – *Ksheera vaha dhamani*.<sup>[17]</sup>
- *Sroto vikara* – *Sira - grathi*.

## 10. FEMALE CARE TO BE TAKEN TO PREVENT CANCER<sup>[18]</sup>

(I) **Till 12 years of age**- Nutritious and healthy diet, proper exercise.

(II) **After Puberty/ Menarche**-Every women should follow *Rajaswalacharya*.<sup>[18]</sup>

### AHARA

First 3 days of menstruation every female should take *Ghrita yukta shali* rice or *ksheer* with *yava*.

Priniciples- *Yava* is *karshnartha*, *kosth visodhnartha*<sup>[19]</sup>, *agni vardhak*, *guru*, *bahuvata mala*, *kapha piita rakta vikarahara*.<sup>[20]</sup>

Barley has low glycemic index.

*Ghrita* has HDL. HDL acts as a plasma antioxidant. Fall in HDL causes oxidative stress.<sup>[21]</sup>

*Shali* rice- It is *dhatu vardhak*, *pitta nashaka*. It causes *brimhana*.<sup>[22]</sup>

Milk-It is *vaya stapana*, *sandhi kari*, *rasayana*. It also causes *brimhana*.<sup>[23]</sup>

### VIHARA

Restricted acts of woman during menstruation should be- Day sleeping, bathing and anointing, use of collyrium, oil massage, weeping, paring of nails, fast racing, laughing, over talking, over hearing, combing, and use of *nasya*.

*Acharya Vagbhata* mentioned that the female during menstrual period should be *kalyana dhyani*<sup>[24]</sup>, means she should always concentrate on thinking good or auspicious things. This helps in recovering from stress, which is also main factor for causing breast cancer.

(III) **At the time of planning child**- Every women should perform *Panchkarma* body purification procedures for healthy progeny.<sup>[25]</sup>

(IV) **GARBHINI PARICHARYA**<sup>[26][27]</sup>- During pregnancy follows 9 month *Garbhini paricharya*.

MONTH	DIET	EFFECT
1 <sup>st</sup> month	<i>Anupsanskrit ksheera</i> {Non-medicated milk}	<ul style="list-style-type: none"> <li>Milk prevents from dehydration and supply required nourishment.</li> <li><i>Madhura</i> drug group- is anabolic, helps in maintainance of proper health of mother and fetus.</li> </ul>
2 <sup>nd</sup> month	Milk medicated with <i>madhura rasa</i> drugs	
3 <sup>rd</sup> month	Milk with honey & <i>ghrita</i>	
4 <sup>th</sup> month	Milk with butter	
5 <sup>th</sup> month	<i>Ghrita</i> prepared with butter extracted from milk	
6 <sup>th</sup> month	<ul style="list-style-type: none"> <li><i>Ghrita</i> prepared from milk medicated with <i>madhura</i> drugs</li> <li><i>Gokshur siddha sarpi/yavagu</i>.<sup>[28]</sup></li> </ul>	<ul style="list-style-type: none"> <li><i>Gokshur</i>- Good diuretic prevents retention of water as well as its complications.</li> </ul>
7 <sup>th</sup> month	<ul style="list-style-type: none"> <li><i>Ghrita</i> prepared from milk medicated with <i>madhura</i> drugs</li> <li><i>Prathkparni siddha ghrita (Dalhan- Vidarigandhadi varg)</i>.<sup>[29]</sup></li> </ul>	<ul style="list-style-type: none"> <li><i>Prathkparni</i>-Vitiated <i>tridosha</i>.</li> <li><i>Vidarigandhadi varg</i> - Diuretic, anabolic, relieves emaciation, suppress <i>pitta</i> and <i>kapha</i>.</li> </ul>
8 <sup>th</sup> month	<i>Kheera yavagu</i> mixed with <i>ghrita</i>	
9 <sup>th</sup> month	<i>Anuvasana basti &amp; yoni pichu</i> with <i>madhura</i> group oil.	<ul style="list-style-type: none"> <li>Effect on autonomous nervous system governing myometrium and help in regulating their function during labor.</li> </ul>

*Acharaya Caraka & Acharya Vagbhata* mentioned that by the use of *garbhini paricharya* from first to ninth month her *garbhadharini* (fetal membranes or vaginal canal), *kuksi* (abdomen), sacral region, flanks and back become soft, *Vayu* moves into its right path or direction; feaces, urine and placenta are excreted or expelled easily by their respective passages.<sup>[30]</sup>

**(V) SUTIKA PARICHARYA**- When puerperal woman feels hunger; she should be prescribed powdered *pippali*, *pippalimula*, *chavya*, *citraka* and *srngabera* with *ghrita*<sup>[31]</sup>, in the quantity which she can digest easily. *Pippali* act as anti-oxidant<sup>[32]</sup>, it removes retained blood clots from uterus. *Ghrita* acts as *rasayana*<sup>[33]</sup> in *shunyashareera*<sup>[34]</sup> of *sutika*.

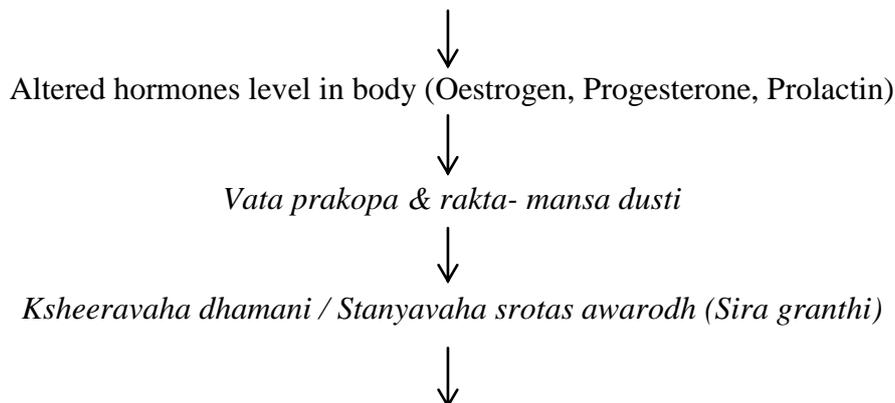
Her abdomen should be massaged with *bala taila*<sup>[35]</sup> and wrapped properly with a big clean cloth. This prevents presence of hallow space, so the *vayu* doesn't get vitiated.

After digestion of *ghrita*, liquid gruel (*Yavagu*) made with rice, medicated with *panchkola*, mixed with *ghrita* should be given. This regimen should be used for 5-7 nights, in order to expel the *dosas* left over after delivery.<sup>[36]</sup> Following the diet and routine after child birth to regain healthy, medicines to purify breast milk (Use of *stanya shodhana mahakashaya*)<sup>[37]</sup>, proper obeying of breast feeding rules and breast feeding through both breasts. This regimen prevents puerperal woman from puerperal sepsis and future complications.

**(VI) AFTER MENOPAUSE**- Every women should follow procedure for mental health. - *basti & vaman chikitsa* -light & nutritious diet, activity regimen like- *yoga*, *shavasana*, *pranayama*.

## 11. PROBABLE MODE OF ACTION

Use of stale food, *atiushna*, *ruksha*, *suska*, *vidahi bhojan*, sleeping over uneven bed, abnormal acts and other factors which aggravate *rakta*



Formation of *Ama* (Free radicals) – When free radicals are in excess, they try to latch on to

breast tissue.<sup>[38]</sup>



By this, lipids in the blood and cell membranes get oxidized



Oxidized lipids/lipid peroxides injurious to system



Reactive oxygen species cause damage to DNA in breast cells.



Breast disorders/ Breast Cancer

This pathogenesis can be break down by following the concept of *Paricharya*-

During menstrual period 1<sup>st</sup> to 3<sup>rd</sup> day, *Vata* take out menstrual fluid out from the body. If woman take heavy food during this days then *vata* mix with *pitta dosha* & disturbs food digestion, results in *agnimandhya*. That's why every women should eat little quantity of food prepared from *shali* rice with *ghrita*, *yava* cooked with milk.

Intake of *Yava* act as low glycemic index food.

**Ghrita** -contains vitamin A,D,E,K. Vitamin A and E are anti-oxidant and helpful in preventing oxidative injury to the body. *Ghrita* dissolve the *ama* or toxic wastes in the tissues, allowing them to be carried to the digestive tract for elimination.

**Milk**- It is *vata pittahara*. It is useful in burning sensation, especially in inflammatory condition. It act as diuretic. It acts as *agnivardhak*. Even though milk is similar to all the *dhatu* of body, it produces *sukra* immediately. As a result it increases *oja* (*Vyadhikshamatva*).

**Madhu** increases *agni*, removes vitiated *dosa*, cleanses all *srotas*.<sup>[39]</sup>

**Pippali** is *amahar*, *rasyani*, *tridosahara* (*Acharya Dalhana*). It acts as immuno-modulator, anti-tumor.

## 12. DISCUSSION

Change in lifestyle and dietary pattern cause endocrine dysfunction; vitiation of all *dosa* which results in many disorders like breast cancer, cervical cancer, PCOD (Polycystic

ovarian disease), hypertension, diabetes, menstrual disorders. Use of etiological factors which provokes vata, which results in disturbance in normal cell division, causes mutation in normal tumor suppressor genes BRCA1 and BRCA2 results in breast cancer. Thus to prevent from all these factors, all the paricharya should be followed. Rajaswalaparicharya prevents from vitiation of dosa by taking low glycemic index food for first three days of menstrual cycle. Thus it prevents from menstrual disorders and keeps HPO axis function intact. Garbhini paricharya helps in proper maintenance of all dosa and healthy progeny. It also helps in prevention from pregnancy minor ailments, risk of abortion, pregnancy induced complications. Sutika paricharya helps in order to expel the dosa left over after the delivery. This all paricharya helps in balancing all dosa and purification of body, thus prevents in formation of aam (free radicals). This free radicals cause tissue damage and in later stage cause mutation in genes, results in cancer.

Thus, re-establishment<sup>[40]</sup> of all paricharya in today's society is needed to re-stabilize healthy female and as important step in prevention in developing breast cancer.

### 13. CONCLUSION

Scientist now believes that much of occurrence of breast cancer results from interaction between lifestyle factors.<sup>[41]</sup> Hence, these paricharya act as best concept for nidana parivarjana chikitsa i.e. prevention from diseases. If all the paricharya are followed correctly, it helps in preventing many future diseases of female. Thus decreases the mortality and morbidity rates. It improves quality of life. In present era, following Ayurveda concept of paricharya is only key to good health and a healthy female creates a healthy society.

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