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THE ROLE OF METHI MODAK YOGA IN STANYAJANANA ACTIVITY W.S.R. TO PROLACTINE HORMONE

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ABSTRACT

Every aspect of breastfeeding—hormonal, emotional, physical, and dietary—certainly has an impact. The ideal approach to care for a newborn is to give them milk, since it provides a full and unique nutritional supply for the mammal neonate and imparts immunological safety and developmental signals. It is not only the ideal food for them, but it also fosters an intense affinity between them. Various Acharyas have detailed various aspects of Ayurvedic scriptures, such as the creation of Stanya (breast milk), the reasons of Stanya pravriti (or milk ejection), Dhatri (wet nurse), Dhatri-pariksha (examination of wet nurse), Stanapan-vidhi (breast feeding), Stanyasampat (merits of Breasts), Therefore efforts should be taken to avoid it with appropriate foresight using a multifaceted strategy that includes physical techniques. Ayurvedic literature extensively references the use of herbal galactagogues and the administration of a good lactogenic diet. Modern science has linked synthetic galactogogues to increased risk of harmful health effects, whereas Ayurvedic medicine manages internal balances and external factors that contribute to issues. Charaka also wrote about Stanyajanana Mahakasaya, while Susruta Vagabhatta wrote about Gana, including a description of Methi Modak. Thus, with special reference to Methi Modak, this study provides an integrated overview of the physiology of lactation with an emphasis on the physiology of milk production and secretion in relation to Ayurvedic and contemporary concepts.

KEYWORDS: - Methi Modak, Stanya Janana, Breast feeding, etc.

INTRODUCTION

It has long been known that breast milk is the greatest nourishment for newborns. In Ayurvedic manuscripts, the relationship between breast milk and newborn growth and development has been documented. Stanya was especially suggested by Charaka for newborns due to its anti-infective properties in cases of eye problems. [1] Breast milk is often recommended as the best source of nourishment for children, in part because it contains more nutrients than other formulas and also contains physiologically active substances including protein, hormones, and immunoglobulins. Breastfeeding offers special chances for mother-infant interaction, which may have a significant impact on the development and growth of the child. In many respects, breastfeeding is preferable to formula feeding and has a very specific function in the feeding of infants. Being the initial stage of natural feeding, it is the most crucial nutritional period of infancy. It has several nutritional benefits in addition to defense against infections due to the presence of both specific non-specific immune components. and Additionally, some studies demonstrate breastfeeding shields the infant from Crohn's disease, diabetes, and malignant lymphoma. [2] Eight different

varieties of milk from various mammals are listed in Ayurvedic literature along with their corresponding prescriptions for various ailments. Human milk, also known as breast milk (Stanya) in Ayurveda, is made from Rasa Dhatu, or Updhatu. It is derived from Dhatus as auxiliary tissue. The vital component of "Rasa Dhatu," referred to as "Stanya," enters the breasts from the body as a whole. [3]

FORMATION OF STANYA (BREAST MILK)

According to Acharya Charak, for the Garbha poshana the Ahara devoured on through Garvini performes three functions.

- 1. Matru pusti for nourishment of Mother
- 2. Garbha pusti for development of Foetus
- 3. Stanya pusti- for Breast milk

According to charak rasa dhatu nourishes, stanya^[4]

Sushruta Acharya also accepts it. According to Sushruta Samhita, rasa is generated after food has been digested. Sweet essence, a portion of this rasa that travels throughout the body (due to Vyana-vayu) is called Stanya (Breast milk), and according to Sushrut, Stanya is created by Rasa Dhatu. [5]

www.wjpmr.com Vol 10, Issue 8, 2024. ISO 9001:2015 Certified Journal 272

Stanya is updhatu of rasa dhatu according to $sarangadhar^{[6]}$

According to Harita, Ahara is consumed with the assistance of the lady being exploited; the same route via Kshiravaha sira and acquiring coupled with Pitta reaches Jathara. There, Agni breaks it down, it travels to the Siras of Breast, and finally it is expelled. The substance associated with Agni and Soma is known as milk. Pitta movement causes the blood to become suppurated and sometimes becomes white. In younger girls, this is because they lack Dhatu power; in Vandhya females, it is because of blockage of Srotas that the milk does not develop.

Dalhana, Vagbhata, and Kashyapa agree that Stanya should be formed from Rasa.

However, while discussing the creation of the placenta or Rakta gulma, it is necessary to explain that one portion of Rakta, or the Rakta leftover after the placenta reaches the breast, is colored by Kapha and forms Stanya; after birth, it is enhanced or molded by Rasa. [7] It may be inferred from the many Acharyas' points of view above that Stanya uttpatti is described as follows.

- 1. From Rasa and Ahara rasa
- 2. From Rakta
- 3. From Raja

Flow chart No. 1 of stanyavaha srotas

Healthy Ahara Sevana



[Ref- Balaji Thakur, Mahendra Prasad, C.R. Yadav, Bhanu Pratap Singh. A Literary Review of Trunapanchamula W.S.R To Role In Stanya Janana. AYUSHDHARA, 2021; 8(6): 3676-3679.]

According to Sushruta, just as semen is expelled by the woman's mind, sight, touch, or coitus, so too is milk expelled through the child's thought, sight, touch, and physical contact (sucking). On the third- or fourth-day following birth, the Dhamanis or Shiras in the heart area expand and start to expel milk. [8]

Harita claims that the parturient woman's Srotas are cleared by force during her bearing down attempts,

resulting in an abrupt ejection of milk; nonetheless, this milk is thick because It is reasonable to suppose that the Standard of Aahar Rasa, which is dependent on each appropriate diet and their proper metabolism as well, determines the development of an acceptable volume and quality of breast milk. This might be a plausible explanation for why breast milk (Stanya) is regarded as a subsidiary tissue (Updhatu) of the blood plasma (Rash Dhatu). It is believed that two Anjali of breast milk (Stanya) are produced per day. [9]

ACCORDING TO MODERN ASPECTS

When an infant breastfeeds, sensory impulses from the nipples go via somatic nerves to the spinal cord and ultimately the hypothalamus. This results in the release of prolactin and oxytocin simultaneously. The blood then carries oxytocin to the breasts, where it induces the myoepithelial cells that encircle the alveolar outer walls to contract, allowing the alveoli to release milk into the ducts. Thus, once a baby starts to nurse, the breast milk starts to flow within 30 to 60 seconds. [10]

Flow chart No. 2 of reflex action of human female breast

A conditioned reflex is built during suckling



Impulses ascending from the nipple and areola



The hypothalamus's paraventricular and supraoptic nuclei



The posterior pituitary squirts oxytocin, which induces the myoepithelial cells of the alveoli and milk ducts to contract. (Milk ejection or milk let down reflex)



Milk is forced down into the ampulla of lactiferous ducts, where from it can be expressed by the mother or sucked by the baby

[Ref- Balaji Thakur, Mahendra Prasad, C.R. Yadav, Bhanu Pratap Singh. A Literary Review of Trunapanchamula W.S.R To Role In Stanya Janana. AYUSHDHARA, 2021; 8(6): 3676-3679.]

ACCORDING TO AYURVEDIC CONCEPT

Ayurveda states that the food's nutritional value (Aahar Rasa), which is produced following a typical digestive process, is carried throughout the body by Vyana Vata, a Vata Dosha type, and ultimately reaches the breast, where it is transformed into breast milk (Stanya). [11]

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DRUG REVIEW
Table No. 1 Ingredient Of Methi Modaka. [12]

S.NO.	INGREDIENT	EACH PARTS
		CONTAINED
1.	Sunthi,	1 Part
2.	Marich	1 Part
3.	Haritaki,	1 Part
4.	Vibhitaki,	1 Part
5.	Amalaki,	1 Part
6.	Nagarmotha,	1 Part
7.	Shweta jeera,	1 Part
8.	Pippali,	1 Part
9.	Krishna jeera,	1 Part
10.	Dhanya,	1 Part
11.	Kay phal,	1 Part
12.	Pokharmul,	1 Part
13.	Kakdasingi,	1 Part
14.	Ajwain,	1 Part
15.	Sendhanamak,	1 Part
16.	Vid namak,	1 Part
17.	Talis patra,	1 Part
18.	Nagkesar,	1 Part
19.	Tejpat,	1 Part
20.	Dalchini,	1 Part
21.	Elaechi,	1 Part
22.	Jayphala,	1 Part
23.	Javitri,	1 Part
24.	Loung,	1 Part
25.	Muramasi,	1 Part
26.	Karpura,	1 Part
27.	Safed Chandan	1 Part
28.	Methi Churna	27 Part
29.	Guda (Jaggery)	As per requirement
30.	Ghrita (Ghee)	As per requirement
31.	Sahad (Honey)	As per requirement

Mode of Action of Methi Modak

Methi Modak is made up of thirty different medications, the majority of which having the qualities of Katu-Tikta-Kashaya Rasa, Laghu-Ruksha-Tikshna Guna, Ushna Virya, and Kapha-Vata Shamaka. In contrast to Snigdha, Guru, Sheeta, and Picchila Guna for Shodhana, the dominant Rasas in Methi Modak are Katu and Tikta, which have the qualities of Ruksha, Laghu, Ushna, and Vishad. In Ushna Virya and Kapha Vata Doshaghnata, the drug is predominant. Whereas Tikta Rasa has Shodhana Karma and Kashava Rasa has Vishad and Ruksha Guna, Katu Rasa has Sneha-Kleda Shoshana Karma. Deepana, Lekhana, Pachana, Anulomana, Aampachana, Kaphaghna, Stanyajanana, and Shodhana karma are all present in every constituent of Methi Modak. Thus, they can enhance Jatharagni Deepana Pachana Karma in addition to Stanyajanana and Shodhana Properties. [13] There is Sanga type Srotodusti in Stanyajanana properties, which is generated by vitiate Vata - Kapha and Rasa Dhatu. Methi Modak's contents control Stanya vaha Srotasa function and cleanse this Sanga by their Srotovishodhana Karma. Additionally, it helps protect nursing newborns from several neonatal

illnesses and improves their IQ and memory. This formulation's potent galactagogue effect aids in encouraging the production of breast milk. It also has a strong detoxifying effect on the milk, which improves the quality of the breast milk and makes it easier for the nursing infant to digest. Additionally, it strengthens the immunity of the nursing child as well as the nursing mother.

According to Ayurveda, nursing, or "Stanyada," is an essential procedure that creates a valuable emotional tie between the mother and the infant. In addition to providing the infant with indispensible advantages through immune fortification, brain nourishment, and improved digestion, nursing lowers the mother's chance of developing breast cancer. However, in recent times, due to a variety of physiological and environmental factors, as well as the extreme physical exhaustion experienced during childbirth and the unpredictable nature of hormones, it has become increasingly difficult for the new mother to concentrate on maintaining her happiness while nursing, which typically results in an inadequate milk supply.

Ayurvedic Pathophysiological Reflex Action of Breast Milk

The real evidence (Aptopadesha) presented in classical excerpts on galactagogue activity may be interpreted by considering the pharmacological and pathophysiological principles of Ayurveda to comprehend the mechanism of action. Ayurvedic scriptures mentioned using Laghu guna, Madhura, Kashaya Anurasa, Sheeta, and Kapha vardhaka medicine to increase breast milk production. Since the primary cause of the increase in breast milk is Kapha Dosha, an explanation of the pharmacological principles that increase Kapha, such as Guna (biophysical property), Virya (active principle/potency), and Vipaka (product of biotransformation/drug-receptor complex) of medicinal plants, can be helpful in the study of those medications' modes of action.

Several characteristics that dominate the pharmacodynamic profile, such as Snigdha and Guru Guna, Madhura rasa and Vipaka, and Sheeta Virya, are said to have a Kapha vardhaka action, which raises Kapha dosha. This is a considerate interpretation. According to Ayurvedic principles, the growth, development, or augmentation of various body elements can be attributed to medications with physical qualities and medical specialties that are the same as body components or tissues. [14]

DISCUSSION

According to Acharya Sushruta, the development of breast milk is greatly influenced by the type of diet, or Ahara rasa yoni. Breast milk and diet are tightly related. According to Ayurveda, food substances are made up of five primordial elements and are classified into four types. They also contain six Rasas and have two to eight different types of potencies. When food is consumed and

properly digested under the influence of Jatharagni, a beautiful, healthful essence known as Rasa is produced. Stanya is nourished by Ahara since she is the offspring of Rasa dhatu, the first Dhatu, which is fed by this rasa. A wide range of agent meals and beverages are mentioned by ancient authors in classical writings. [15]

Acharya Sushruta has advised using items from the Kapha Vardhak. It is best to utilize foods and drinks that are mostly sweet, bitter, salty, or watery. While in Nidana Sthana Gulma, Charaka Maharshi In reference to Shonita Gulma Laxana, Nidana Adhyayan stated that the only reason Stanya exist is because of "Avarodha of raja." Anatomically, male Shukra vahana is associated with two Urdhwagami dhamani and four Adhogami dhamani. In contrast to four Adhogami dhamanis, which are homologous with Artava vahi dhamani in female, two Urdhwagami dhamanis are homologous with Stanyavaha dhamani in female. Since Stana is the mula sthana of Shukra, blockage of Artava results in Vimarga gamana of that which eventually reaches Stana. Therefore, there is only one pathway for the conveyance of both Stree Shukra and Artava in females. It is physically transformed into Stanya by Pitta's activity, which is connected to the function that reproductive hormones including oxytocin, progesterone, prolactin, and estrogen have in the production of Stanya. $^{[16]}$

CONCLUSION

Charaka described Stanyajanana Mahakasya in which he described 30 drugs out of which in Methi Modak. Numerous initiatives are being implemented both domestically and internationally to support breastfeeding considering the benefits of it. Additionally, actions are done to improve the amount and quality of breast milk. Avurvedic literature mentions a variety of these techniques. After a comprehensive analysis, it was determined that the medications in Sthanyajanana Dashemani have pharmacological qualities and activities that make them efficient galactogogues that function by controlling rasadhathukshaya. Breastfeeding moms can utilize the medications without risk. Additionally, it aids the mother in achieving dhathus stability, which is typically impacted during pregnancy and childbirth. To medications' demonstrate these effectiveness, comprehensive preclinical and clinical research must be carried out. If the formulation and dose have been successfully established, these techniques can be quite beneficial currently of contemporary living, when breast milk supply has been impacted both qualitatively and quantitatively. Keeping these aspects in mind, this study has been undertaken. It is an attempt to verify the claim that Methi Modak are Galactagogue.

Conflict Of Interest -Nil.

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