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MYTHS AND FACTS RELATED TO YONI SWEDANA- (VAGINAL STEAMING OR FOMENTATION) IN AYURVEDA

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ABSTRACT

Swedana (Fomentation and Sudation) is one the important Poorvakarma of Panchkarma procedures. In Ayurveda, in case of female reproductive health is of great importance as it is indicated in many Gynecological and Obstertrical cases. A lot of misleading information is prevalent regarding Swedana proving it ineffective and risky in western world. The vagina still remains a very underutilized and underrated route of drug delivery. This is due to lack of proven efficacy and standardization of the procedure. In Ayurveda, various Acharyas have described this procedure in detail. Besides its types, detailed method, requirements, signs and symptoms of completion of Swedana, indications and contra-indications etc. are mentioned. But in

case of females, when done locally as vaginal steaming or fomentation; clearcut instructions are lacking. But by Yukti (logical reasoning), this procedure can be performed effectively and safely. The present article is an effort to prove its efficacy, probable mode of action and safety scientifically; quoting the authentic references from various Ayurvedic treatises.

KEYWORDS: Swedana, Fomentation, Sudation, Ayurveda, Gynecological procedures.

INTRODUCTION

Therapeutic sweating, fomentation & Sudation are the synonyms for Swedana. Those processes which relieve stiffness, heaviness and coldness of the body and produces sweat, comes under "Swedana".^[1] In the treatment of all the gynecological diseases, Panchkarma procedures are indicated only after proper Snehan (Oleation) and Swedana (Sudation).^[2]

Sweat is mentioned as the waste product (mala) produced in the process of metabolism of "Meda dhatu" in the body. Hence, all the processes that results in swedana, help in excretion of toxins out of the body. It is mentioned as a pre therapeutic procedure in all Panchakarma procedures because it liquefies and softens the deeply embedded doshas and brings them to their main sites, making them easy for removal.

TYPES OF SWEDANA^[3]

According to the area to be fomented	Ekanga Sweda- Regional
	Sarvanga Sweda- Whole body steaming
According to nature of Swedana	Snigdha Sweda-
	Fomentation done after oil application
	Ruksha Sweda -
	Fomentation done without oil application and
	Oleation therapy
According to the intensity of fomentation	Mridu Sweda (Gentle Fomentation)
	Madhyam Sweda (Moderate Fomentation
	Maha Sweda (Strong Fomentation)
According to the use of fire	Agni Sweda
	Anagni Sweda

THIRTEEN TYPES OF SUDATION METHODS WITH THE USE OF AGNI(AGNI SWEDA)

Thirteen varieties of fomentation are Sankara, Prastara, Nadi, Parisheka, Avagahana, Jentaka, Ashmaghna, Karshu, kuti, Bhoo, Kumbhika, Kupa, and Holaka.^[4]

- 1. Sankara sweda (bolus fomentation)
- 2. Prastara sweda (lying on a medicinal mattress)
- 3. Nadi sweda (tubular steam sudation)
- 4. Parisheka sweda (shower technique for fomentation)
- 5. Avagaha sweda (tub fomentation)
- 6. Jentaka sweda (sudation therapy in room)
- 7. Ashmaghana sweda (sudation on heated slab of stone)
- 8. Karshu sweda (sudation by using heat in a trench under bed)
- 9. Kuti sweda (sudation in a cottage) and bhu sweda (sudation on floor)
- 10. Bhusweda is done on floor with the same methods as asmaghna sweda and is administered in well chosen, leveled sites free from excessive wind
- 11. Kumbhi sweda (sudation with a pitcher)
- 12. Kupa sweda (sudation in a pit)
- 13. Holaka sweda (sudation using a heap of dung)

Out of these Sankar, Prastar, Nadi, parisheka, Avgah, Karshu, Kumbhi and Kupa Swedas are of much importance in case of female Gynecological conditions.

INDICATIONS OF SWEDANA

It is said that swedana is useful in many conditions especially in females if it is done locally then helps to alleviates pain, stiffness, heaviness and numbness, and such disorders anywhere in the body.

In Ayurveda, there are lots of references of Swedan karma in females in the form of fomentation or steaming. These procedures are indicated a wide range of diseased conditions like itching, stiffness, dryness and pain etc. The references are -

VARIOUS REFERENCES OF SWEDAN KARMA IN GYNECOLOGICAL DISEASES

- **DUSTHIT** /**STHAN-CHYUT YONI** (Genital Prolapse)-The displaced or prolapsed Yoni should be replaced after giving oleation and sudation.^[5]
- VATAJ YONI VYAPAD-In the treatment of vataj yoni vyapad, detailed description of Swedan karma is mentioned. [6]
- 1. Nadi Sweda (steam with the help of a long hollow tube attatched to a pot filled with medicinal decoction)
- 2. Kumbhi Sweda (steam coming out of a pot or a ewer filled with medicinal decoction)
- 3. Ashma Sweda (with heated stones)
- 4. Prastar Sweda (with heated rock)
- 5. Sankar Sweda (mixed sweda with either ball of drugs either wrapped with unwrapped with cloth)

For the Kumbhi and Nadi Sweda the steam is generated by boiling various liquids. For example-

- a) Meat soup of aquatic animals or animals living in marshy land.
- b) Milk mixed with Taila (oil) and Tandula (Rice)
- c) Decoction of the drugs pacifying the Vata dosha like Dashmoola, Rasna etc.

Prior to this sudation the Yoni has to be anointed with oil mixed with salt.

- UDAVARTA YONI VYAPAD (SPASMODIC DYSMENORRHOEA)- In the treatment of Udavarta Yonivyapad, sudation with the meat soup of Gramya (wild), Anoop (those living in marshy land) and Anudak (aqatic) animals is indicated after proper oleation with Traivrita- Sneha. [7]
- PRASATA AND PRASRANSINI YONI (Displaced Yoni) In the treatment of Prasasta Yonivyapad, steaming with boiling milk is indicated before reducing it inside the vaginal canal. Repeated use of Sudation is indicated because it is especially effective in reducing pain, roughness and stiffness etc.^[8]
- In the treatment of **PRAKACHARNA YONI VYAPAD**, sudation with Vata pacifying drugs is indicated. [9]

SYMPTOMS OF PROPER FOMENTATION

The symptoms of proper Swedana are- Sweat production, relief of pain and coldness, decrease in stiffness, heaviness, appearance of softness, feeling of lightness and warmth.^[10]

SIGNS OF OVER-SUDATION AND ITS TREATMENT

The symptoms of oversudation include aggravation of pitta, fainting, generalized fatigue, thirst, burning sensation, low or weak voice, and weakness of limbs. In oversudation the entire regimen explained for summer season in and consuming food articles that are sweet, unctuous and cool is to be followed.^[11]

CONTRA-INDICATIONS OF SWEDANA

The physician should be aware that sudation is contraindicated in those who regularly consume astringents and alcohol, in pregnant women, persons with bleeding disorders, individuals with pitta predominance, those who are suffering from diarrhea, patients with diabetes mellitus, inflamed colon, prolapsed rectum, in toxic conditions, fatigued, unconscious, obese, pitta-predominant diabetics, individuals having thirst, hunger, anger, depression, jaundice, ascitis, injured, rheumatoid diseases, weakness, extremely emaciated, highly immune compromised and those who often suffer from blackouts.^[12]

SPECIAL PRECAUTIONS

 There are significant hemodynamic changes during Swedana especially Sarvanga Swedana like significant cardiovascular stress which may cause an increase in blood pressure (systolic and diastolic) and pulse rate. Whole body fomentation is therefore

- contraindicated in elderly and those with cardiomyopathy, congestive heart disease, bundle branch block, anemia, MI, hyperthyroidism etc.^[13]
- Health indicators such as serum electrolytes, blood urea, creatinine, mean acid base balance, serum and urine osmolarity, hemoglobin, hematocrit and vital signs should also be assessed before and after swedana.^[14]
- Intensity of Swedan should always be decided according to Bala of the patient. Bala of the individual has to be assessed through vyayama shakti (exercise capacity). Exercise intolerance has a significant impact on heat intolerance. People who exhibit exercise intolerance especially females leading a sedentary lifestyle may have autonomic dysfunction including vascular autonomia characterized by tachycardia, dizziness, changes in heart rate and blood pressure, heat intolerance and unusual sweating pattern. [14]

HIGH RISK CONDITIONS are

Athletes exercising strenuously in hot climates

Elderly patients (because of decreased efficacy of thermoregulation, co-morbid illness or medications

Lack of fans or air conditioning, inappropriate dress

Patients with cardiac ailments or those taking beta-blockers

Patients who are dehydrated because of poor fluid intake, gastroenteritis, or diuretic use (dehydration increases demand on ATPase pumps, which contribute 25-45% of basal metabolic rate.)

patients taking medications that inhibit sweat production or increase heat production (eg, anticholinergics, antidepressants, antihistamines, neuroleptics, zonisamide, sympathomimetics, lithium, alpha- and beta-blockers)

Patients taking medications that cause dehydration (eg, diuretics, alcohol)

These coincide with most of the contraindications mentioned in Charak Samhita.

LIMITATIONS OF VAGINAL FOMENTATION

- 1. Some drugs may lead to local irritation. The chances increase in case of lack of personal hygiene and vaginitis etc.
- Absorption of some drugs depends upon the pH of vagina. In the proliferative phase, pH
 is usually more alkaline as compared to secretory phase in which ph is likely to be more
 acidic. Hence the effect of Swedana may vary according to the phase of menstrual cycle
 in which it is performed.
- 3. The cyclic changes during the menstrual cycle like thickness of vaginal epithelium, cervical secretions and composition along with the transudation of fluid from vaginal mucosa could potentially affect the response of Swedana.

PROBABLE MODE OF ACTION OF SWEDANA

A) IMPROVES EFFICACY OF DRUGS

Some properties of Swedana dravyas that are responsible for its action are summarized below-

Ushna (**Hotness**) - **Due** to this guna or property, there is reduction in stiffness and spasm of local muscles.

Tikshana and Suksham - It is responsible for deep penetration of the swedan dravyas. Hence they are capable of performing their actions at target areas and rendering the easy removal of vitiated doshas.

Sara- Due to this, there is movement of liquefied doshas out of the minute cavities towards their main sites.

The procedure of swedana promotes the transdermal absorption of the sneha by inducing peripheral vasodilatation. Application of oily or unctuous substances like ghee or taila etc. forms an intervening viscous layer on skin. When heat is applied during swedan, medicinal drugs are absorbed through transdermal route. Also the heatloss through conduction and convection does not happen too rapidly.^[15]

B) ALLEVIATES PAIN

Heat has a beneficial effect on pain relief. Effect of heat on pain is mediated by heat-sensitive channels. These channels respond to heat by increasing intracellular calcium (Ca). An increase in intracellular Ca generates action potentials that increase the stimulation of sensory nerves. These channels are a part of a family of receptors called TRPV receptors. TRPV1 and TRPV2 channels are sensitive to noxious heat, while TRPV4 channels are sensitive to normal physiological heat. However when pain is originating from deeper tissues, heat stimulates peripheral pain receptors that can alter what can be termed as "gating" in the spinal cord and reduce the sensation of deep pain.

C) IMPROVE CIRCULATION BY VASODILATION

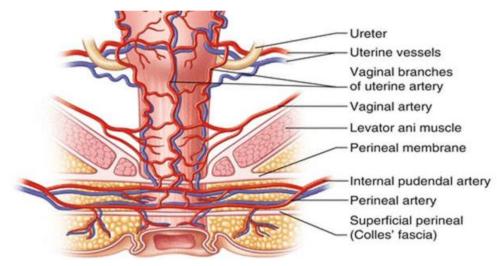
i. Another effect of heat is its ability to increase circulation. These same TRPV1 and TRPV4 receptors, along with nociceptor, increase blood flow in response to heat.

- ii. Nitric Oxide is produced in vasculature endothelial cells and is responsible for sustained response of circulation to heat. This increase in circulation is considered to be essential in tissue protection from heat and repair of damaged tissue.
- iii. The heat produced during Swedana leads to inhibition of the sympathetic centers in hypothalamus thus blocking its vaso constriction effect.

D) ALLEVIATES STIFFNESS AND SPASM

Heat therapy shows best results in increasing extensibility of collagen tissues, decreasing stiffness, relieving muscle spasm, reducing pain, inflammation, and edema. It also helps in post acute phase of healing and increasing blood flow.^[16]

E) VAGINAL ROUTE OF DRUG DELIVERY



VAGINAL VASCULATURE[17]

Vagina is a highly vascular organ. Like any other mucosal route of drug administration, the drugs are absorbed via-^[18]

- 1. Transcellular Route i.e. diffusion through the cells
- 2. Paracellular Route i.e. transfer of substances across the epithelium by passing through the intercellular space.

There are two main steps involved in the absorption of drugs from vagina –

- a) Drug dissolution in vaginal lumen
- b) Membrane penetration

As Swedana karma is responsible for both of these actions, hence is very effective in transport of drugs into systemic circulation via the vaginal route.

CONTRAINDICATIONS / PRECAUTIONS AFTER SWEDANA

A well oleated person should be subjected to sudation and on proper sweating, should take a wholesome diet. After fomentation, the patient should abstain from exercise that day.^[19] The probable reason is that after proper swedana person is exhausted and even after doing moderate exercise; patient may feel excessive fatigue and discomfort etc). Hence if a person indulges in vyayama after swedana it results in atiswedana or ativyayama.

CONCLUSION

Swedana is a wonder Ayurvedic procedure that can be conducted in a wide range of Gynecological conditions. The procedure is greatly misunderstood in the western world because of certain misconceptions and lack of scientific guidelines. But if performed according to the textual references and taking consideration of the risk factors; it is beneficial. The lina doshas liquefies due to the gunas of Swedana dravyas like Sara, Suksham and Teekshan etc. Whereas the heat produced leads to increase circulation and vasodilatation; helping easy excretion of these doshas out of the body. Hence it can be inferenced that Swedana (Sudation or Fomentation) is helpful in many diseased conditions like Genital prolapse, Endometriosis, Pelvic Inflammatory Disease, Oigomenorrohea and Hypomenorrhea etc.

SCOPE OF STUDY

- 1. There are many limitations in the classical methods of Swedana and Dhoopan. A very clear description is available for sarvanga swedana but in case of Sthanik (local) procedures in females; there are many ambiguities related to the designing of Swedana apparatuses, conduction and duration of Fomentation etc.
- 2. The intervention protocols must be standardized empirically on the basis of conventional practices of Swedana. There must be clear standard protocols to rule out errors related to observation, intervention protocol (duration of therapy). Due consideration must be taken regarding the distance of source of heat/steam or fumes. As the procedure will be ineffective if it is far away; and burns or heat injury can occur if it is too close.
- 3. Methods must be standardized regarding the position of the patient especially weather to spread or widen the labial folds or not while Fomentation and fumigation. It is likely that after widening the folds, the fumes or steam will penetrate the introitus easily and desired results will be better. For that lying position should be avoided and sitting or squatting position must be adopted.

- 4. The Swedana temperature is a must factor to be monitored. Temperature of the room (which may vary according to climatic conditions) and temperature of the media should be kept in mind as there is a possibility of variable responses according to variation in temperature.
- 5. Extensive study is needed to observe the differential effects of Yoni Swedana in reference to various influencing factors such as prakriti, parity and age etc of the female.

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