

UPANAHA SWEDA THERAPY IN AYURVEDA AND ITS EFFECTIVENESS IN JOINT DISORDERS

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ABSTRACT

The procedure of applying warm herbal paste to the effected part of the body followed by bandaging is referred to *upanaha sweda*. It is a type of *ekanga sweda* which can be done with or without heating the medicine. *Upanaha Sweda* is one among four types of *Sweda* described by *Acharya Vagbhata*. Moreover, both *Charaka* and *Sushruta* have accepted it as a therapy of choice in case of *Sandhigata Vata*. *Upanaha sweda* is one among the modality of *swedana* used widely in the management of *sandhigatavata*, which is found to be helpful clinically. This therapy has *vatahara*, *shothahara* (anti-inflammatory), *shoolaghna* (analgesic) action. It can be used with *Agni Samskara* or even without use of *Agni*. Mode of action of *Upanaha Sweda* having multiple factors and their combine effects that includes, prevention of heat loss from body, increasing the absorption of medicinal contents through skin, increasing or removing *Kleda* from affected joint depending upon the type of drug utilized and by supporting and limiting the movement of the affected joint. Ayurvedic texts opines that *Upanaha Sweda* acts by trapping the heat inside the body by preventing the heat loss through *Romakupa*.

Keywords: *Upanaha, Sweda, Sandhigata Vata*

INTRODUCTION

Ayurveda is a science based on the theory of *Panchamahabhuta* where these elements are used wisely to cure the diseases. *Swedana* is one such therapy that uses primarily the *Agni Mahabhuta*. However, *Ayurveda* has described 13 *Sagni Sweda* and 10 *Niragni Sweda*¹ and beside these classical types there are various other clinically useful *Swedana* practices are used. The purpose of *Swedana* therapy is not just providing the heat to the body but the amount of the heat, dura-

tion and drugs also matters a lot. *Upanaha Sweda* is one such important *Swedana* practice which is mentioned in *Sagni* and in *Niragni* type of the *Swedana* by *Charaka*.² *Upanaha Sweda* is indicated in *Chikitsa* of *Sandhigata Vata*,³ this therapy gains prime importance with respect to joint disorders.

The word '*Upanaha*' is split as *upa+ nah*, in which *upa* is *upasarga* (prefix) which means near, '*nah bandhane*' means to tie or bind.⁴ The other meanings

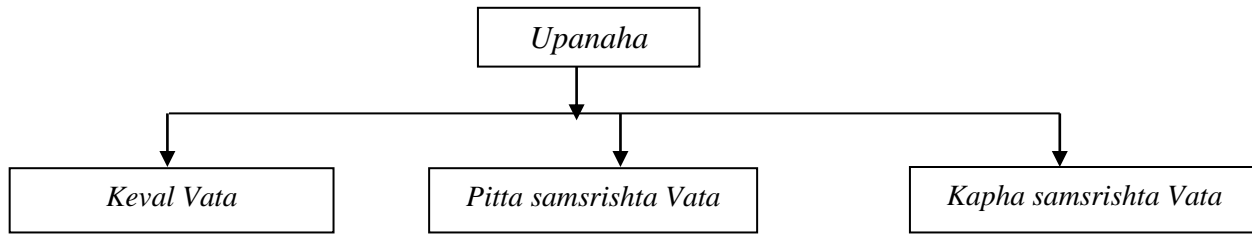
of *upanaha* are bandage, bandage with warm paste of medicaments, bandage using *Charma* (leather) or *Pata* (cloth), bandage applied for *Vranapaka* (suppuration of wound).⁵ Most of the classical texts have considered *Upanaha* as *bandhana* (tying) and *lepa* (application).

Types of Upanaha:

- 1) *Sagni Upanaha*, where the drugs are heated first and then applied.
- 2) *Niragni Upanaha*, where *Ushna Veerya Dravya* (drugs with hot potency) are applied without heating.

Clinical spectrum of Upanaha:

Upanaha is used in various disease conditions for specific reasons. The classical indications of *Upanaha Sweda* are as follows⁶.



Commonly used drugs in Upanaha:

Vacha, Shunthi, Devdaru, Shatapushpa, Rasna, Eran-da, Masha, Punarnava, Sarshapa, Godhum, Ya-vachurna, Tagaradi Gandhadravys, Jivanti, Atasi, Kushtha, Kanji, Kinva, Nimbu swarasa, Gomutra, Arka, Eranda, Nirgundi, Dhattura, Snuhi, Kolakulat-thadi churna, Kakolyadi gana, Surasadi gana, Eladi gana etc.

Classical references of Upanaha Yoga in joint disorders:

“*Godhumashakali ----- upanaha Prashasyate*”
Ch.Su.14/35⁷

“*Kolamkulattha ----- Pradeha*” Ch.Su.3/18-22⁸

“*Anupamatsyamisha ----- Ch. Su3/19*”⁹

“*Takrenayuktam yavachurnamushnam ----- Ch.Su.3/20*”¹⁰

“*Satila Satasi beeja ----- Shasta Syadupana-hane Ch.Chi.25/51*”¹¹

“*Upanahaswedastu vataharamula ----- Su.Chi. 32/12*”¹²

practically *Upanaha Sweda* have been utilized by various clinicians and researchers in following conditions and was found to be effective.

Table 1: Disease and Type of *Upanaha*

Disease	Type/ drugs of <i>Upanaha</i>
Osteoarthritis	<i>Nirgundipatra Upanaha</i> ¹³
Gouty arthritis	<i>Jadamayadi Upanaha Sweda</i> ¹⁴
<i>Manyastambha</i>	<i>Kukkutanda Upanaha Sweda</i> ¹⁵
<i>Katigraha</i>	<i>Godhumadi Upanaha Sweda</i> ¹⁶
Rheumatoid arthritis	<i>Kottamchukadi Upanaha</i> ¹⁷

Purva karma: In *purvakarma* the patient with calm and quiet mind who have followed *dinacharya*, is allowed to sit in a suitable position according to the part in which the *sweda* should be performed.

- Then prior to the *swedana* therapy *snehana* is done (external) with suitable medicated or non-medicated *snehas*.
- *Nivata griha* should be selected for the procedure in order to avoid wind and discomfort.

- All the instruments for the *pradhana* and *paschat* karmas should be collected.
- **Pradhana karma:** After proper *oleation* of the diseased part, *pradhanakarma* is performed. It includes the following steps.
- Powder form of the drugs used should be prepared.
- *Nirasthi Pishita Mamsa* prepared and taken in a clean vessel.
- Vehicles for mixing the powder i.e. *Taila*, *Paya*, *Takra*, *Kinwa* etc are taken in the quantity required.
- Fresh leaves which pacify *Vata* Dosha are taken and washed very well (most commonly the leaves of *arka*). The leather skin of animals with *Snigdha Guna* and *Ushna Veerya* is specified in classics.
- If the *Upanaha* desired is of *Sagni* type, then the powder along with its vehicles and *Saindhava* salt in a suitable amount is heated after proper mixing. If it is of *Anagni* type, the powdered form of drugs is mixed with the vehicles without heating and made into a thick paste. *Nirasthi Pishita Mamsa* is added in enough quantity in both procedures.
- The paste is then applied over the diseased body part in a proper thickness.
- *Vatahara Patra* like *Arka* should be slightly warmed in oil and *Saindhava*. Then these *Patras* should be applied over the paste.
- Then *Bandhana* is applied over it by cotton bandage.

Figure 1. Steps involved in *Upanaha* Therapy



Time of application: *Upanaha* tied in night should be removed in morning and that tied in day should be removed in night. This duration may be extended in *Sheeta Ritu*.

Mode of action of *Upanaha*:

Principles on which *Upanaha Sweda* acts can be summarised as follows;

1. Continuous sudation due to Prevention of heat loss
2. Providing oleation/ absorption of excess moisture from affected part
3. Immobilisation of affected joint

Continuous sudation due to Prevention of heat loss: Ayurvedic texts opines that *Upanaha Sweda* acts by trapping the heat inside the body by preventing the heat loss through *Romakupa*. If skin temperature is greater than that of the surroundings, the body can

lose heat by radiation and conduction. But, if the temperature of the surroundings is greater than that of the skin, the body gains heat by radiation and conduction. In such conditions, the only means by which the body can rid itself of heat is by evaporation. So, when the surrounding temperature is higher than the skin temperature, anything that prevents adequate evaporation will cause the internal body temperature to rise.¹⁸ In *Upanaha Sweda* if it is *Sagni* Type, the warm paste of herbs is applied on affected part that increases the local skin temperature and further it prevents heat loss a thick layer of herbal paste works as a bad conductor of heat. It also maintains the humidity and moisture of the skin to optimal level hence also prevents loss by evaporation as Humidity affects thermoregulation by limiting sweat evaporation and thus heat loss.¹⁹ Thus application of *Upanaha* maintains temperature of af-

affected area to be slightly higher than the others and that too for minimum of 12 hours.

It is known that decreased blood circulation in tissue is associated with the development of pain.²⁰ An association between decreased blood flow and knee pain has been reported.²¹ Long-term local heat treatment using *Upanaha* may improve blood flow in periarticular tissue, resulting in pain relief. Inflammatory mediators are flushed from affected site due to *Upanaha*. In addition, the effects of local heat treatment include an increase in collagen fiber extensibility²², analgesic effects due to an increase in the pain threshold,²³ and effects on muscle metabolism.²⁴ all these benefits can be achieved with application of *Upanaha Sweda*. Commonly *Arkapatra*, *Charma* or *Kshaumavastra* are applied over *Upanaha*. All these are bad conductor of heat thus prevents heat loss through radiation and conduction. *Arkapatra* especially is a xerophytic plant that live in arid conditions and have elaborate structural and physiological modifications that reduce water loss. Desert plants show high stomatal resistance, to reduce water loss.²⁵

Absorption of medicinal contents and Providing oleation/ absorption of excess moisture from affected part: *Ruksha* and *Snigdha* are two types of the *Upanaha*. In *Ruksha Upanaha* no *Sneha* is added, instead *Gomutra*, *Dhanyamla* etc. are used. Thus, in *Ruksha Upanaha* the *Sweda* not only provides the heat but also is able to absorb the excess *Kleda* from affected part as a result *Samata* of the affected joint decreases that reduces the joint inflammation. On opposite side *Snigdha Upanaha* increases the oleation of the joint due to local absorption of fats in circulation. Slight increase of temperature of skin during *Upanaha Sweda* causes better absorption of medicinal contents of the drug and the oil used due to increased permeability. An increase in temperature increases the fluidity of the lipophilic layers between the corneocytes²⁶ which in turn increases the skin permeability. It has also been suggested that an increase in temperature affects the lipid viscosity by causing a transition of the lipid in the stratum corneum from a gel to a liquid-crystalline phase.²⁷ all these factors together makes

possible the absorption of medicinal contents of *Upanaha*.

Supporting and Limiting movement of affected joints: Braces or belts are commonly used in cases of Arthritis. *Upanaha* is the only *Sweda* that uses *Bandhana* thus giving effect of Knee braces along with *Swedana*. Menisci serve as washers to increase stability within the joint and to distribute load so that when the meniscus is intact, focal stress is kept at low levels.²⁸

DISCUSSION

The word *Upanaha* is derived from the Sanskrit word *upanahana*, meaning bandage. The procedure of applying warm herbal paste to the effected part of the body followed by bandaging is referred to *upanaha sweda*. It is a type of *ekanga sweda* which can be done with or without heating the medicine. If *upanaha* is done during day, it should be removed at night and if done during night, it should be removed in the morning. It is usually done in osteoarthritis, Tennis elbow & vathakanta. Application of *Upanaha* prevents excessive movement of joint thus reduces inflammation due to reduction in this focal stress.

Sandhigata vata (Osteoarthritis) is a disease dealing with musculoskeletal system affecting the major joints. *Upanaha sweda* mentioned by Charaka Susruta and Vagbhatta gives the classical reference of its application and efficacy in the treatment of *sandhigata vata*. Meniscal tears due to excessive joint movement and obesity lead to increased focal stress across the joint and subsequently high rates of Osteoarthritis. Also, it helps joint to distribute the weight of the body evenly. However normal static exercises which are indicated in most cases of arthritis can be performed along with *Upanaha* to prevent the loss of muscle bulk around the joint.

CONCLUSION

Upanaha Sweda is a useful *Swedana* method in joint disorders and acts by prevention of heat loss from body, increasing the absorption of medicinal contents through skin, increasing or removing *Kleda* from affected joint depending upon the type of drug utilized

and by supporting and limiting the movement of the affected joint.

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