



A Comprehensive Analysis Of *Kolakulaththadi Upanaha Sweda* In *Sandhigatavata* Along With Its Mode Of Action

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Abstract: Ayurveda system of medicine has emphasised on various modalities of treatments in *Sandhigatavata*. *Upanaha sweda* is one among the modality of *Swedana* used widely in the management of *Sandhigatavata*, which is found to be helpful clinically. According to the Authentic, *Upanaha* is sub type of *Swedana*. *Upanaha* (Application of poultice) is a mode of fomentation where in a combination of *Churnas* (powdered herbs) are made into paste using *Sneha Dravya* (unctuous materials-oil/ghee/muscle fat/marrow), *kinva* (fermented liquid), made hot and applied over the affected part followed by bandaging. The objective of this study is to find out the Concept of *Kolakulaththadi Upanaha Sweda* and its mode of action with clinical utility which have listed in Authentic. The data was collected from Authentic Ayurvedic texts, scientific journals, Research articles and through the electronic media. According to the findings, it is revealed that the action of the *Upanaha* depends on the materials used for the application, temperature of the paste, duration of retaining on the skin surface and thickness of the paste applied. It is explained that *Upanaha Sweda* reduced *Vata dosha*, *Sheetha* (coldness), *Shoola* (pain), *Sthambha* (stiffness), *Gowravata* (heaviness) in clinical. Hence the present study supports the opinion that the Concept of *Kolakulaththadi Upanaha Sweda* and its clinical utility improve the administration of different treatment modalities based upon the classical references with low cost and minimum side effects.

Index Terms - *Kolakulaththadi*, *Sandhigatavata*, *Swedana*, *Upanaha*.

I. INTRODUCTION

Sandhigatavata, a *Vata vyadhi*¹, is characterized by vitiation of the *Vata dosha*, primarily affecting the joints. As described in Ayurvedic literature, *Sandhivata* is first described by Acharya Charaka as *Sandhigata Anila* with symptoms of *Shotha* which on palpation feels like a bag filled with air (swelling) and *Shula* on *Prasarana* and *Akunchana* movements on *sandhi* (pain in flexion and extension of the joints)². Acharya Susrutha also mentioned *Shula* and *Shotha* in this disease leading to the diminution (*Hanthi*) of the movement at joint involved³. Madhavakara adds *Atopa* (Crepitus in joint) as additional feature of it⁴. *Sandhigatavata* is one of *Vata vyadhi* that occurs in *Madhyama Rogamarga*⁵.

Acharya Sushruta has explained *Vayu* entrapped in *Snayu*, *Sandhi* & *Asthi* which should be treated with *Snehana*, *Swedana*, *Upanaha*, *Agni karma*, *Bandhana* and *Mardana*⁶. *Upanaha*, application of medicated poultice is one among four major categories of *Swedana* therapies⁷ which relieves pain, restricted movement, and stiffness. *Upanaha* is a mode of fomentation given by applying warm herbal paste over the affected part of the body followed by bandaging. It is an ideal topical treatment and well known Ayurvedic topical application to get evolved and adapt with changing time and easy practice, without changing its efficacy. *Pradeha*, *Sankara/Pinda sweda*, *Bandhana* are three varieties of *Upanaha*⁸. It helps in reducing *Vata dosha*, *Sheetha* (coldness), *Shula* (pain), *Sthambha* (stiffness), and *Gowravata* (heaviness). It induces sweating and brings *Dosha vilayana*. *Sweda* helps in *Gatra Vinnamana* (increase the flexibility). It is a local treatment

where in a combination of powdered herbs are made into paste using Sneha materials such as oil/ghee/muscle fat/marrow and fermented liquid, made hot and applied over the required site and then bandaging is done with thick material.

The action of the *Upanaha* depends on the materials used for the application, temperature of the paste, duration of retaining on the skin surface and thickness of the paste applied. According to Acharya Charaka, for better mode of action, the *Upanaha* should be left undisturbed for duration of twelve hours⁹. As well as according to Kashyapa Samhitha the *Upanaha* should be left when it became cool and dry. Hence the present study is an attempt to evaluate the effect of *Upanaha sweda* with the duration of retaining on the skin which are mentioned in our classics. In this study *Upanaha* with *Kolakulaththadi*¹⁰ which have listed in Charaka Samhitha and Bhaisajya Rathnavali have been selected. This study supports the opinion that the administration of *Upanaha sweda* increases the quality of life in patients of Sandhigatavata based upon the classical references with low cost and minimum side effects.

2. AIMS AND OBJECTIVES

- To analyse the concepts of *Upanaha Sweda* in classic.
- To analyse the mode of action of *Kolakulaththadi Upanaha Sweda*.

3. METHODOLOGY

Study Type: Review Study

Material & Methods: The available literature like Authentic Ayurvedic texts, scientific journals, Research articles and through the electronic media are searched for the Concept of *Upanaha Sweda* and its clinical utility. All the relevant content is considered and analyzed to get a comprehensive concept of *Upanaha Sweda*.

4. RESULTS & DISCUSSION

4.1 Etymology

उप – is a prefix to noun/verb and denotes nearby/ together.¹¹

नह् – is a verb and denotes to bind/ to tie.¹²

Upanaha means - To tie or to cover or to wrap.

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

4.2 Types of *Upanaha*¹³

- 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.

4.3 *Upanaha Sweda* can be performed in 3 ways

1. *Bandhana*¹⁴ - *Vatahara* drugs combined with *Amla Dravya* (*Kanji*), *Saindava Lavana*, *Sneha Dravya* and made hot preparation, applied over the affected part and tied with *Vatahara Patras* or *Charma Patta*.
2. *Pinda*¹⁵ - *Krushara*, *Payasa*, *Utkarika*, *Veshavara* are prepared and made into a bolus form and sudation is performed. It can be used as *Ekanga* or *Sarvanga*.
3. *Pradeha*¹⁶ - *Vatahara* drugs combined with *Amla*, *Lavana* and *Sneha Dravya* should be made hot and applied in the form of a thick paste (*Pradeha*) without *Bandhana*.

Table 01 - Action of Upanaha sweda on doshas

Acharya	Dosha	Drugs
Charaka ¹⁷	<i>Kevala Vata Pittanugata Vata Kapahanugata Vata</i>	<i>Godhuma, Yava with Sneha and Kinva Sugandhi Dravya like Chandana, Agaru, Patra etc. added with Surakitta, Shatapushpa and Jeevanthi Kushta, Taila, Atasi</i>
Sushruta ¹⁸	<i>Kevala Vata Pittanugata Vata Kapahanugata Vata</i>	<i>Vatahara Dravya made paste with Kanji and Lavana Krishara Payasa, Utkarika, Veshavara and Salvana Upanaha. Kakolyadi, Eladi and Surasadi Gana Dravya, Tila, Atasi, Sarshapa Kalka</i>
Laghu Vagbhata ¹⁹	<i>Kevala Vata Pittanugata Vata Kapahanugata Vata</i>	<i>Vacha, Kinva, Satahva, Devadaru, Dhanyas, Gandha Dravya, Mamsa, Sneha Dravya, Lavana, Takra, Ksheera. Padmakadi Gana Dravya Surasadi Gana Dravya</i>

Table 02 – Ingredients and Properties of Kolakulaththadi Upanaha^{20,21}

Herb	Rasa	Guna	Veerya	Vipaka	Dosha Karma
Kola	Katu	Ushna Theekshna	Ushna	Katu	KaphaVatahara
Kulaththa	Kashaya	Laghu Ruksha Theekshna	Ushna	Katu	VataKaphahara
Suradaru	Tiktha Katu Kashaya	Snigdha Laghu	Ushna	Katu	VataKaphahara
Rasna	Tiktha Katu	Laghu Ruksha Theekshna	Ushna	Katu	VataKaphahara
Masha	Madhura	Guru Snigdha	Ushna	Madhura	Vatahara
Athasi	Madhura Tiktha	Guru Snigdha	Ushna	Katu	Vatahara
Kushta	Tiktha Katu Madhura	Laghu Ruksha Theekshna	Ushna	Katu	KaphaVatahara
Vacha	Tiktha Katu	Laghu Theekshna	Ushna	Katu	KaphaVatahara
Shatahva	Tiktha Katu	Laghu Theekshna	Ushna	Katu	KaphaVatahara
Yawa	Kashaya Madhura	Guru Ruksha	Sheeta	Katu	VataPittahara
Thail Phala	Madhura Katu Kashaya	Snigdha Theekshna	Ushna	Madhura	VataKaphahara

Table 03 - Method of Preparation of Kolakulaththadi Upanaha

Se. No.	Sanskrit	Botanical Name	Part Used	Quantity
01	Kola	<i>Zizyphus jujube</i>	Fruit	01 part
02	Kulaththa	<i>Dolichos biflorus</i>	Seed	01 part
03	Suradaru	<i>Cedrus deodara</i>	Bark	01 part
04	Rasna	<i>Pluchea lanceolata</i>	Rhizome	01 part
05	Masha	<i>Phaseolus radiatus</i>	Seed	01 part
06	Uma	<i>Linum ustitissimum</i>	Seed	01 part
07	Kusta	<i>Saussurea lappa</i>	Stem	01 part
08	Vacha	<i>Acorus calamus</i>	Rhizome	01 part
09	Satahva	<i>Anethum sowa</i>	Seed	01 part
10	Yawa	<i>Hordeum vulgare</i>	Seed	01 part
11	Eranda	<i>Ricinus communis</i>	Seed	01 art

4.4 Preparation of Kolakulaththadi Upanaha

**Figure 01 - Preparation of Kolakulaththadi Upanaha**

According to Bhaisajja Rathnavali, took 10g of each ingredient of Kola, Kulaththa, Suradaru, Rasna, Masa, and oil seeds of Uma, Kushta, Vacha, Satahva, Yawa and Taila Phala were in powder form in equal quantity and mixed with 50ml of Kanji (Tamarind juice) and 5g of Saindhava Lavana (Rock salt). Paste heated with light flame. Warmed paste was applied over the affected sandhi. Then covered with Eranda Patra (Castor leaf) and it was firmly bandaged.

4.5 Indications^{22,23}

Vata Vyadhi like Janu Sandhigata Vata, Pakshagata, Twak, Mamsa, Asruk, Sira, Sandhi and Asthigatavata. Akshi Rogas like Alaji, Pooyalasa, Abhishyanda and Arbuda. Guda Rogas like Arshas, Bhagandara.

Other conditions like Vrana, Vidradi, Granti, Vataja Mutrakruchra, Shleepada, Kukshishoola, Visarpa (Granti Visarpa), Visha.

Sushruta opines that Upanaha Sweda is specially indicated in case of Sankuchayamana (Contractures), Rujarta, Stabdha Gatrata.

Indu mentioned Agni Samskara Rahita Upanaha i.e Upanaha prepared without heating to be done in case of vata associated with Pitta.

4.6 Contraindication

Pittavarana condition

Table 04 - Thickness of lepa

Sharangadhara ²⁴	Sushruta ²⁵	Chakrapani ²⁶
Doshagna Lepa-1/4 Angula Vishagna Lepa-1/3 Angula Varnya Lepa -1/2 Angula	Pradeha-thickest form of Lepa Alepa- Medium thickness Pralepa- Thinnest form of Lepa	Pradeha- equal to the thickness of Ardra Mahisha Charma Alepa thinner than that of Buffalo's skin

Table 05 - Duration

Charaka & Vagbhata	Kashyapa	Indu
<i>Lepa</i> applied in the night should be removed next day morning and that applied in day should be removed at night.	Applied <i>lepa</i> to be removed when it becomes cool and Should be applied again. <i>Sweda</i> will occur after many such applications.	<i>Lepa</i> should be changed twice a day or it should be applied repeatedly with due consideration regarding <i>Desha</i> , <i>Kala</i> and <i>Dosha</i> .

4.7 Classically mentioned *Choornas* which are commonly used has *Upanaha Sweda* in clinical practice

Kolakulaththadi churna Upanaha.

Jatamayadi churna Upanaha.

Nagaradi churna Upanaha.

Grihadhoomadi churna Upanaha.

Kottamchukkadi churna Upanaha.

Marma Gulika lepa Upanaha.

Rasnadi churna Upanaha.

Doshagna Upanaha.

Dashanga lepa Upanaha.

Arka Patra Upanaha.

Datura Patra Upanaha.

Salvana Upanaha.

Nirgundi Patra Upanaha.

4.8 Mode of action:

The skin's absorption of topical substances is a complex process influenced by multiple factors. Key determinants include the concentration of the active ingredient, its solubility properties, duration of contact with the skin, and the physical condition of the skin itself, such as its hydration level and integrity. Understanding these factors is essential for optimizing the efficacy of transdermal drug delivery systems and topical formulations.

The drugs in *Kolakulaththadi Upanaha* were *Kapha-Vata Shamaka* and have *Vedana Sthapana* in action. The homologous paste was made by heating with the combination of *Saindava* and *Kanji*, which are both *Vatahara*. Pain is due to the *Prokopa* of *Vata Dosha*. Heat is effective to provide analgesic. Heating of peripheral nerves elevate pain threshold remarkably reduces muscle spasm. The variation in percentage of relief may be because of the varied chronicity of the patients.

Long duration of drug contact: Duration of drug contact is one among main cause for good absorption of active ingredients. When compared to any other *sweda* procedure the duration drug contact is more in case of *Upanaha*, may help in complete drug absorption.

Solubility: The absorption of active substances is contingent upon their solubility properties. Lipid-based or lipophilic substances exhibit enhanced absorption through the skin due to their compatibility with the lipid bilayer of skin cells. As *Upanaha* formulations incorporate *Sneha Dravya*, which are lipid-based, they facilitate improved absorption of active ingredients, thereby potentially enhancing their therapeutic efficacy.

Permeability: Use of acidic drugs like *Takra* or *kanji* causes decrease in pH of medicine to moderate level. Moderate Decrease in pH increases permeability of drug through skin. *Kanji* (fermented liquid) a *Drava Dravya* used in many *Upanaha* helps in quick and easy absorption of active ingredients.

Minimizing heat loss: *Upanaha sweda* acts by trapping the heat inside the body by preventing the heat loss through *Roma koopa*. As soon as hot paste of medicine is applied over skin there will be local raise in skin temperature because of heat gain through radiation and conduction. This heat will trap by thickness of paste and covering it with fresh leaves of *Arka*, *Eranda* and finally bandaged with thick cotton cloth. These acts as thermoregulation as they are bad conduction of heat.

5. CONCLUSION

Upanaha is the mode of treatment used for *Poorva*, *Pradhan* and *Paschat karma*.

Madhura, *Amla*, *Lavana*, *Snigdha*, *Ushna Upanaha* is beneficial in *Kevala vata vyadhi*, *Ruksha*, *Ushna*, *Gomutra yukta Upanaha* are useful in *Vata Kaphaja vyadhi* and *ama* conditions like *Amavata*. *Salvana Upanaha* in *Pakshagata*, *Ashwagandha* with *Katu Taila lepa* in *Manyasthambha*. *Agara dhuma* with *Lavana Taila Upanaha* in *Supti vata*.

The synergistic effect of ingredients of *Kolakulaththadi Upanaha* were *Vatahara*, *Vedana Sthapana* and *Shothahara*. Most of the ingredients were *Ushna Veerya* possessing *Katu*, *Tiktha* and *Kashaya Rasa*. So, they were pacifying *Vata Dosha*.

The action of the *Upanaha* depends on the materials used for the application, temperature of the paste, duration of retaining on the skin surface and thickness of the paste applied.

Guna and *Prabhava* of drugs act on patients of different *Prakruti*, *Vikruti*, *Desha*, *Kala*, *Vaya* etc.

Godhuma, *Masha*, *Yava* like food articles are used for *Upanaha Sweda*. *Ksheera*, *Dadhi*, *Takra*, *Sauvera* are also used. These ingredients have *Vatahara* or *Kaphahara* property. The sour nature of liquids enables the permeation of the active principles for absorption through the skin.

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