

## PHARMACEUTICAL AND THERAPEUTIC REVIEW ON SNEHA KALPANA

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## ABSTRACT

Ayurvedic dosage forms are very exclusive in its pharmaceuticals and therapeutics. In the field of ayurveda pharmacy is divided into two branches that is Rasashastra and Bhaishajya kalpana. Bhaishajya kalpana is branch of ayurveda dealing with herbal formulations. It includes panchavidha kashaya kalpana, Asava and arista, varti, vati preparation ect. SNEHA KALPANA is a unique contribution to ayurvedic science and it ensures the transformation of the active therapeutic properties of the ingredients to the solvents. Sneha Kalpana is a group of products of medicated taila and ghrita. This class of formulations is reported to treat a very wide range of diseases among patients of all age groups. Sneha Kalpas manufactured in Ayurvedic pharmaceuticals are used extensively for medicinal as well as cosmetic purposes. It is one of the widely used techniques in Ayurvedic drug industry to achieve solubility of both fat-soluble and water-soluble extractives into the oil medium. It is the only Kalpana which is used through all four modes of administration of such formulations, i.e. pana, abhyanga, nasya, and basti. Sneha kalpana done in three phases ie murchana of sneha dravya, followed by second phase sneha paka and finally third phase paka sidhi. so this topic discuss about process of sneha kalpana and process of absorbing active principle from drug and its therapeutic effect.

**KEYWORDS:** Sneha kalpana, Process of Sneha kalpana, Therapeutic effect.

## INTRODUCTION

Sneha Kalpana is one of the commonly prescribed ayurvedic dosage form in day to day practice. It is one of the widely used dosage forms of ayurvedic system of medicine. Although lot of varieties of snehas are described in classical ayurvedic text, the most common among them is Taila and Ghrita.

The word "Sneha Kalpana" consists of two words 'Sneha' and 'kalpana', Where *sneha* means fats or fatty materials and *Kalpana* stands for Pharmaceutical process. Sneha Kalpana may be defined as a pharmaceutical process to prepare oleaginous medicaments from substances like Kwatha, Kalka, and Drava Dravyas, taken in specific proportions by subjecting it to a unique heating pattern and to a specific duration to fulfill certain pharmaceutical parameters, according to the need of the therapeutics. By this process, one can ensure transformation of the active therapeutic properties of the ingredients to the solvents, and hence, one can recover fat-soluble as well as water-soluble chemical constituents.<sup>[1]</sup> Sneha Kalpana can be done in two method ie AgniPaka method And Athapa Paka Method.<sup>[2]</sup> And procedure will undergo different stages.

## Pharmaceutical aspect of sneha kalpana

Sneha kalpana done in 3 phases<sup>[3]</sup> i.e.

1. Murchana of sneha
2. Sneha Paka
3. Paka Sidhi

## • Sneha Murchana

Before subjecting the drugs to Sneha paka, Sneha is supposed to undergo one particular procedure called as Sneha Murchhana. It is applied for both Taila and Ghrita. It is considered as one of the Samskaras of Sneha and helps the Sneha to acquire specific pharmaceutical as well as therapeutic property. In Brihatrayee, no reference can be traced regarding Sneha Murchana. Bhaishajya Ratnavali is the first text, which described the importance and method of Murchana process. Murchana alters the solubility pattern and absorbability, which is desired to get maximum medicinal properties.<sup>[4]</sup>

Main aim of sneha murchana<sup>[5]</sup>

- a. Amadoshaharatwa - removal of "Ama" which can be correlated to the "moisture content" which can be directly related to rancidity problems.
- b. Removal of bad odour of crude Taila or Ghrita
- c. Sneha will acquire the capability to receive more active principles.
- d. Stability of the Sneha will increase.

- e. Murchana will give good odour and colour to the sneha.
- f. May alter the solubility and absorption of the finished product.

**• Sneha Paka**

**General method of preparation of Sneha kalpana<sup>[6]</sup>**

Murchitha Sneha is taken in a clean wide stainless steel vessel. The vessel is placed over mild fire and cooked. When fumes starts appearing in Sneha the specific drava dravya is added carefully to it. Followed by kalka of drug.

Boiling is continued with frequent stirring until Sneha siddhi lakshana are attained. Later the Sneha is filtered through clean cloth.

Kwatha Preparation in sneha Kalpana.<sup>[7]</sup>

**Depending on the hardness of drugs taken the ratio of water for kwatha preparation differs as below;**

Drugs of different Nature	Water Ratio
Soft Drugs	4times of water
Medium and hard drugs	8times of water
Very Hard Drugs	16 times of water

**Types of Sneha Paka<sup>[9]</sup>**

Sneha Paka are of 5types as shown in the table below.(Sa.Ma.9/14-17).

Sneha Paka	Lakshana
Ama Paka	This is a stage before mridu Paka. In this stage sneha will be guru in nature with no potency generated in it. Its use causes agnimandhya and is therapeutically not used.
Mridu Paka	In this stage the kalka is very soft to touch and has little moisture left out in it. It will be possible to prepare varties in this stage but they will not be of perfect shape and hardness.
Madhyama Paka	In this stage kalka is soft and is devoid of moisture. Perfect varties of suitable consistency can be prepared.
Khara Paka	In this stage kalka will be rough to touch with no moisture. It is possible to prepare varti here but they break soon after rolling
Dagdha Paka	This stage can be seen after khara paka. Here sneha will be over cooked. Its use causes Daha and therapeutically unfit.

**Sneha Paka method<sup>[10]</sup>**

As per the general rule for Sneha preparation, the ratio of kalka, Sneha and Drava dravya is 1:4:16 and paka can be done in two methods

1. Agni Paka (with fire)
2. Aditya Paka/Surya paka/Bhanu paka (with sun rays)

**Agni Paka (with fire)<sup>[11]</sup>**

In this the paka method is done using fire as a heat source. It is a commonly followed method as usually all the sneha preparations are manufactured by using Agni. Here the sidhi lakshanas (test of perfectness) is obtained as the sneha is getting prepared, such as kalka attains wick shape when rolled between fingers, no sound is produced when put into fire, foam disappears in Ghruta paka and appears in Taila paka and colour taste & odour of ingredients used is appreciated in the final product.

Harder the Drug, more the time required for water molecules to act upon drug molecules and facilitate the transfer of active principles from drug to the liquid media. So to last the boiling process for more time one needs to add more ratio of water in Harder drugs.

Time duration to cook sneha<sup>[8]</sup>

As per the opinion of some experts the Duration of sneha paka varies with the nature of the ingredients used. i.e.

Drava Dravya	Time Required
Milk	2days
Swarasa	2days
Takra, Dadhi, Kanji, gomutra	5days
Roots, Creepers, Climbers	12days
Dhanya, Mamsa Rasa	1day

In Any Pharmaceutical Process different plant materials of varied hardness and fibre content are used, the time taken to extract the active principles also greatly differ.

**Aditya Paka<sup>[11]</sup>**

In this the paka method is done using sun rays. In this the sneha along with kalka dravyas are kept in the sun rays for certain duration of time. Sometimes drava dravyas may also be added along with kalka dravyas. As such there are no specific siddhi lakshanas are mentioned, but few opine that the patra's (vessel) colour should change after the proper paka. Drugs having more volatile principles and rasa dravyas are commonly used in this method of paka. Snehas which are used for skin disorders can be prepared by this method. Aditya Paka Sneha is used especially in skin disorders as this sneha absorbs the UV rays from sun. The sun's Ultraviolet rays are made up of UVA and UVB rays. UVB rays are more effective at treating skin disorders because they penetrate more and helps for rapid skin shedding and growth. It helps to reduce the inflammation of skin.

• **Paka Sidhi**<sup>[12]</sup>

Test for completion of sneha paka are as below:

- a. Sneha Kalka attains perfect wick shape when rolled between thumb and index finger.
- b. If a Part of sneha kalka is put into the fire, no sounds is produced indicating the loss of moisture in it.
- c. Foam continuously appears in taila paka and it disappears in ghritha paka during the completion of preparation.  
Desired colour, odor and taste of the ingredients become appreciable as the preparation is properly boiled and completed.

**Therapeutic utility of sneha Kalpana**<sup>[13]</sup>

Sneha kalpana, this is medicated oils/ghee of Ayurvedic dosage forms, are used in therapeutics both topically and systemically. Thus, we can see a wide variety of uses of Sneha Kalpana, some of which are under mentioned.

1. Nasya Kalpana (e.g., Shadabindu Taila, Anu Taila)
2. Mukha Kalpana (e.g., Irimedadi Taila)-Two types- Gandusha and Kawala
3. Netra Kalpana-(e.g., Triphala Ghrita)
4. Abhyanga-(e.g., Dashamula Taila)

5. Anuvasana Basti-(e.g., Saindhavadi Anuvasana Taila)
6. Uttarbasti, Pichu-(e.g., Mushakadya Taila)
7. Snehana in Panchakarma therapy-(e.g., Pancha Prasritiki Peya)
8. Internal administration-(e.g., Panchatikta Ghrita, Kshira Bala Taila) for shodhana/nourishment
9. In nonhealing ulcer-(e.g., Jatyadi Ghrita)

❖ **Depends on sneha paka**<sup>[14]</sup> and Agnipaka method  
All the acharyas have mentioned therapeutic use of sneha paka. Mrudu paka sneha used in Nasya karma (ca.ka 12/104, As.Hr.Kal 16/19, Sa.Sa.M 9/17), But Sushrutha recommends it for internal administration(Su Ci 31/16).

Madhyama Paka is considered worth for both external as well as internal administration purposes. But, Sushrutha school of thought advice it for Nasya and Abhyanga. Khara Paka, According to Charaka and other scholars, is used for external application, Where as Sushrutha recommends this for Basti And Karna purana, In this regard charaka school of thought is found more practically applicable.

S.No	Name of pakas	Charaka samhita	Sushrutha samhita	Ashtanga Hridhaya	Sharangadhara samhita/B.R	Harita Samhita
1.	Ama	-	-	-	-	-
2.	Mridu or Manda	Nasya	Pana	Nasya, Pana	Nasya	Not mentioned
3.	Madhya/chikkana	Pana and Basti	Pana and Nasya	Pana and Basti	Both external and internal	Pana and Basti
4.	Khara/Katina	Abhyanga	Nasya and basti	Abhyanga	Abhyanga	Abhyanga
5.	Dagdha	Not mentioned	Not mentioned	Notherapeutic use	No therapeutic use	Not mentioned

Rationality we can find out here is that Mrudu Paka Taila which contain even a little amount of water may act as ‘Saumya’ and it may not produce irritation to nasal mucosa. Secondly, it may allow only required quantity of oil to absorb in the mucosal membrane of the nose. Though it may appear vague, the role of water-oil emulsion in the submucosal absorption cannot be excluded, unless and until researches in this regard are carried out. As the studies reveal that active chemical constituents are in its optimum in Madhyama paka, if administered orally. Simultaneously, chances of reduction in appetite or burning sensation in stomach are less possible if Madyama Paka Taila is administered. Khara paka taila, as it is absolutely free of moisture, quickly absorbed from the skin surface. It was also found true that sesamin and sesamol contents go to its peak in Khara paka of Tila Taila which ultimately provides a better anti oxidative property, which is desired during external application. It is quite natural that Ama paka, may not give any therapeutic effect as it contain much water content and also having less medicinal properties. Dagdha Paka may not be beneficial for either external or internal purposes as it possesses least chemical constituents and the chance of producing burning

sensation in the stomach is high if administered orally.<sup>[15]</sup>

❖ **Depends on method of sneha kalpana**<sup>[16]</sup>  
**Aditya paka** sneha is widely indicated in skin disorders. Sneha is a best media which can pass easily through the lipid membrane present in the skin. During Aditya paka, sneha absorbs the ultra violet rays which facilitates the penetrating property of Sneha. As UV rays helps for rapid shedding and growth of skin it can be applied on wounds for quick healing. Many clinical studies proves that application of Surya tapi Kutaja patra taila cures Kitiba Kushta, Vicharchika.

**Some of the example for adhithya paka sneha which is mentioned in classics with its therapeutic use.**

SI No	Name of Yoga	Ingredients	Indications	Ref
1	Manjishtadya surya paka taila	Sneha- Sarshapa taila Kalka-Manjishta, Triphala, Laksha, Nisha, Manashila, Haratala, Gandhaka churna	Pama	Gadanigraha
2	Gugguladya surya paka taila	Sneha- Sarshapa taila Kalka-Guggulu, Maricha, Vidanga, Sarshapa, Kasisa, Musta, Sarjarasa, Shreeveshta, Haratala, Gandhaka, Manashila, Kushta, Kampillaka, Haridra.	Kushta	Gadanigraha
3	Srivasaka ghruta	Sneha-Ghruta-1 Prastha Kalka-Shrivasaka, Sarjarasa, Lodhra, Kampillaka, Manashila, Gandhapashana-each 1 pala	Kushta	Vangasena
4	Adityapakva Ghruta(Kuranda nasana Yoga)	Sneha-Go ghruta Kalka-Saidhava lavana, Kept under sun in Sambhuka bhanda(snail cell) for 7 days	Kuranda	Chakradatta
5	Kutaja patra taila	Taila-Narikela taila Kalka-Kutaja patra	Kushta	Vangasena
6	Pruthvi sara taila	Taila-Karanja taila-8 PalaDrava dravya-Kanji-Pala Chitrakamula, Nirgundi, Karavira, Nadicha beeja each 1pala pounded with Kanji	Kushta, Vrana, Rakta vikruti	Chakradatta
7	Kasisadhyaghrutam	Sneha-Ghruta 30 pala Kalka-Kasisa, dwe haridra, Musta, Haratala, Manashila, Kampillaka, Gandhaka, Vidanga, Guggulu, Siktaka, Maricha, Kushta, Tuttha, Goura sarshapa, Rasanjana, Shrivasa etc each 1 karsha Kept under sun in tamra patra for 7 days	Dadru, Pama, Shiraspota di, visarpa, shukadosha, Vatarakta Does Shodhana. Ropana and varna karana	Sharangadhara Samhita

**CONCLUSION**

Sneha Kalpana is an effective and potent Kalpana which may contain water as well as fat-soluble active principles. Sneha Kalpana has different therapeutic uses described systematically in Ayurvedic classical literature. From the Review sneha is a pharmaceutical preparation through which Water soluble and fat soluble active principles can be extracted from herbs. Sneha paka can be done by Agni paka or Aditya paka. Aditya paka sneha is widely indicated in skin disorders. Sneha is a best media which can pass easily through the lipid membrane present in the skin.,it can be conclude that sneha kalpana is a very effective process and has various advantages. It is the only Kalpana which is used through all four modes of administration, i.e. pana, abhyanga, nasaya, and basti. In each stage of sneha paka indicated in it. It is used to extract the active principles from the raw material, enhance and absorption of drugs. It also has extra benefits of specific thaila/ghritha which is used to preserve the drug for longer time as it increases the bioavailability of drug due to its sukshma, Vyavayee Gunas. Finally sneha kalpana are the only dosage form which can be used internally as well externally based on sneha paka and method of sneha kalpana.

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