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## Critical review of *Sneha Kalpana*

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### ABSTRACT

*Sneha Kalpana* is a unique contribution of Ayurvedic science. It is a group of products containing mainly medicated *Taila* and *Ghrita*; along with *Vasa* and *Majja*, which can be used internally as well as externally. It is one of the widely used dosage forms in Ayurvedic drug industry and is said to achieve solubility of both fat soluble and water soluble extractives. It is absorbed easily, and is said to cross blood-brain-barrier. *Acharyas* have opined to carry out *Sneha Murchhana* to remove '*Gandha*' and '*Ama*' *Doshas* from the *Sneha*. *Acharya Sharangdhara* mentioned the shelf life (*Saviryatavadhi*) of various dosage forms. Amendments in Drugs and Cosmetics' Act 1940 and Rules 1945, have redefined the shelf life, which is elaborated in this article.

**Key words:** *Sneha, Kalpana, Paka, Murchhana, Shelf life, HPTLC.*

### INTRODUCTION

*Sneha Kalpana* is widely used in Ayurvedic system of medicine. *Sneha* means fatty substance and *Kalpana* stands for pharmaceutical process of medicaments. *Sneha Kalpana* is a manufacturing technique where fat soluble and water soluble active principles are said to be extracted in suitable fat media from the substances such as *Kalka, Kwatha, Drava-Dravya* in specific proportions of ingredients, mixed and heated under specific temperature to meet the desired therapeutic requirements. The shelf life of *Sneha Kalpana* is sixteen months as mentioned in *Sharangdhara*.<sup>[1]</sup> According to amendments in Drugs and Cosmetics' Act, 1940, the shelf life of *Taila Kalpana* is three years and *Ghrita Kalpana* is two

years.<sup>[2]</sup> *Sharangdhara* describes the dose of *Sneha Kalpana* as one *Pala* (48 g).<sup>[3]</sup>

#### Basic requirements of *Sneha Kalpana*

1. *Kalka Dravya*: paste of herbal and/ mineral drugs.
2. *Drava Dravya*: liquid media such as water, *Swaras, Kwatha, Kanji, Ksheer, Dadhi, Takra*, etc.
3. *Sneha Dravya*: oleaginous drugs e.g. *Taila, Grita, Vasa, Majja*.<sup>[4]</sup>

#### Properties of *Sneha*

*Drava, Sukshma, Sara, Snigdha, Pichhila, Guru, Sheeta, Manda, Mridu*.<sup>[5]</sup>

#### General method of preparation

##### *Snehamurchana*<sup>[6]</sup>

Ancient texts of Ayurveda (*Brihat-trayee* and *Laghu-trayee*) have not mentioned the preliminary treatment or *Samskara* of *Sneha* viz. *Sneha Murchhana*. It was introduced some later times in *Bhaishajyaratnavali* in 19<sup>th</sup> Cen. A.D. In the current era, Ayurveda experts differ in opinion whether *Sneha Murchana* is necessary or not before the preparation of *Sneha Paka*. According to *Bhaishajyaratnavali*, *Sneha Murchhana* removes '*Gandha Dosh*' of *Taila* and '*Ama Dosh*' of *Ghrita*.

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**Sneha Paka<sup>[7]</sup>**

*Sneha Paka* is carried out with *Kalka*, *Drava Dravya* and *Sneha* in specified amount. The mixture is subjected to uniform mild heating till the chief desired characteristics of *Sneha Paka* are obtained. If the quantity of *Kalka* or *Drava Dravya* is not specified, then the quantity is formulated<sup>[8]</sup> as shown in table 1. Usual proportion of *Kalka*: *Sneha*: *Drava* is 1:4:16.<sup>[9]</sup>

**Table 1: Ratio of *Kalka*, *Sneha* and *Drava Dravya* according to nature of *Drava Dravya*<sup>[10]</sup>**

<i>Kalka</i>	<i>Sneha</i>	<i>Drava Dravya</i>
1	4	16 (water)
1	6	24 ( <i>Kwatha</i> )
1	8	32 ( <i>Swaras</i> , <i>Mansarasa</i> , <i>Dhadhi</i> , <i>Ksheer</i> , <i>Takra</i> )
1	4	<i>Drava Dravya</i> upto 4 in quantity then each <i>Dravya</i> should be taken 4 times that of <i>Sneha</i>
1	4	<i>Drava Dravya</i> more than 4 then all <i>Dravya</i> are to be taken equal in quantity to <i>Sneha</i>
1 ( <i>Pushpa</i> )	8	32

When *Snehapaka* is advised to carry out with only *Kalka Dravya*, water should be added four times as that of *Sneha*. When *Snehapaka* is advised to carry out with only *Kwatha*, *Kalka* of the *Kwathya Dravyas* should be added to the *Sneha*.<sup>[11]</sup>

*Acharyas* opine that *Sneha Paka* should not be completed in one day, to increase the qualities of the *Sneha*. The duration of *Snehapaka* changes according to media used. Table 2 shows the nature of liquid media and the time duration of *Snehapaka*.<sup>[12-14]</sup>

**Table 2: Nature of liquid media and the time duration of *Snehapaka*.**

Liquid media	Time duration (days)
<i>Vrihi Dhanya</i> , <i>Mamsarasa</i>	1

<i>Dugdha</i>	2
<i>Swarasa</i>	3
<i>Arnala</i> , <i>Takra</i> , etc.	5
<i>Valli</i> , <i>Mula</i>	12

In certain *Sneha* preparations, *Acharyas* have mentioned specific procedures and utensils (*Patras*) made up of specific materials.<sup>[15-22]</sup> These are outlined in table 3.

**Table 3: Specification of *Patra* Used In *Sneha Kalpana*.**

Name of <i>Sneha Kalpa</i>	Procedure	<i>Patra</i> (utensils) advised
<i>Chintamani Taila</i>	<i>Lepana</i>	<i>Kansya Patra</i>
<i>Kanak Kshira Taila</i>	<i>Sandharana</i>	<i>Kastha Patra</i>
<i>Kasisadi Taila</i>	<i>Pachan</i> In Sunlight ( <i>Suryatapi Vidhi</i> )	<i>Tamra Patra</i>
<i>Kashmaryadi Taila</i>	<i>Pachana</i>	<i>Ayasa Patra</i>
<i>Bala Taila (Mahat)</i>	<i>Sandharana</i>	<i>Mruttika Patra</i>
<i>Mahamarkkar Ghrita</i>	<i>Pachana</i>	<i>Vangaliptra Patra</i>
<i>Malatyadi Ghrita</i>	<i>Pachana</i>	<i>Vangaliptra Patra</i>
<i>Narsimha Ghrita</i>	<i>Pachana</i>	<i>Ayasa Patra</i>
<i>Vyaghri Taila</i>	<i>Pachana</i>	<i>Mruttika Patra</i>

***Sneha-Siddhi Lakshanas* (chief desired characteristics)<sup>[23-25]</sup>**

1. Formation of *Varti* when *Kalka* is rolled between thumb and index finger.
2. No any sound should be produced when some part of *Kalka* is put on the fire.
3. *Phenodgma* (appearance of froth) in *Taila Paka* and *Phena Shanti* (cessation of froth) in *Ghrita Paka* at the time of completion of preparation.

4. Desired colour, odour and taste of ingredients should be appreciable.

#### Stages of Sneha Paka

Preparation of *Sneha Paka* is mainly divided in to 3 stages viz. *Mridu Paka*, *Madhyama Paka* and *Khara Paka*.<sup>[26,27]</sup> *Harita* describes one more *Paka* viz. *Vishoshi Paka*, which exceeds *Khara Paka*. *Acharya Vagbhata (Ashtanga Hridaya)*,<sup>[28]</sup> *Acharya Sharangdhara (Sharangdhara Samhita)*, *Acharya Shodhala (Gadanigraha)* have mentioned two more stages viz. *Ama Paka* and *Dagdha Paka*. Of these five *Pakas*, *Mridu*, *Madhyama* and *Khara Pakas* are recommended for therapeutic purpose. Assessment of *Sneha Paka*<sup>[29,30]</sup> is done as shown in table 4.

**Table 4: Assessment of Sneha Paka.**

Sneha Paka	Assessment		
	Presence of water in		Characteristics of Kalka
	Sneha	Kalka	
<i>Ama Paka</i>	+	+	Contains a lot of water
<i>Mridu Paka</i>	-	+	Contains a traces of water, hence cracking sound on fire
<i>Madhyama Paka</i>	-	-	Contains a no water, but is soft and non-sticky, hence Varti can be formed; produces no sound on fire
<i>Khara Paka</i>	-	-	Hard and rough due to slight overheating
<i>Dagdha Paka</i>	-	-	Burnt due to excessive overheating

Note: + = Present; - = Absent

#### Therapeutic uses of Sneha Paka

*Acharyas* have mentioned therapeutic uses of *Sneha Kalpana* according to its *Paka*. Some of them are consized in table 5. *Madhyama Paka* is *Tridoshaghna* and can be used internally as well as externally. *Ama Paka* is *Guru* and will cause loss of appetite and gastric discomfort and will get early rancidity. *Dagdha Paka* is

*Vata Vardhaka* and should not be used for therapeutic purpose.<sup>[29-33]</sup>

**Table 5: Therapeutic uses of Sneha Paka.**

S N	Sneha Paka	CH	SU	AH	SH & BR	GN & VS
1.	<i>Ama</i>	Not mentioned	Not mentioned	No therapeutic use	No therapeutic use	No therapeutic use
2.	<i>Mridu</i>	<i>Nasya</i>	<i>Pana</i>	<i>Nasya</i>	<i>Nasya</i>	<i>Nasya</i>
3.	<i>Madhyama</i>	<i>Pana, Basti</i>	<i>Nasya, Abhyanga</i>	<i>Pana, Basti</i>	<i>Pana, Abhyanga</i>	<i>Pana, Basti</i>
4.	<i>Khara</i>	<i>Abhyanga</i>	<i>Basti</i>	<i>Abhyanga</i>	<i>Abhyanga</i>	<i>Abhyanga</i>
5.	<i>Dagdha</i>	No therapeutic use				

CH = Charaka, SU = Sushruta, AH = Ashtanga Hridaya, SH = Sharangdhara, BR = Bhaishajyaratnavali, GN = Gadanigraha, VS = Vangasena.

**Note:** *Nasya*: Nasal route of drug administration; *Pana*: Oral route of drug administration; *Basti*: enemata.

*Gandha Paka*<sup>(34)</sup> is a special method of preparation of oil from aromatic drugs. Powdered drugs are taken in equal quantity and paked in cotton cloth (*Pottali*). Oil is to be taken about sixteen times to that of powdered drug. Mild heat is given to the oil. When oil is boiled, the *Pottali* is immersed in the oil and vessel is closed for ten days. After ten days, the *Pottali* is to be squeezed properly to obtain *Gandha Paka*.

#### Precautions to be taken during Sneha Paka

Following precautions should be taken to maintain adequate quality of finished product;

##### 1. Before processing

- Sneha* must be authentic, pure, clear and without slurry.
- The raw materials required should be of standard quality and kept ready.

##### 2. During process

- Sneha Paka* should be carried out on *Madhyamagni* (mild to moderate heat depending on the quantity) throughout the process.

- b. The mixture is stirred constantly and carefully especially in later stage to avoid sticking of *Kalka* to the vessel resulting in carbonization.
- c. Adequate testing should be done to confirm the *Snehapaka* (*Snehasiddhi Lakshanas*/chief desired characteristics).

### 3. After process

- a. *Sneha* should be filtered gently and carefully in a lukewarm condition.
- b. If *Saindhava Lavana* or *Kshara Dravya* is to be added to *Sneha*, it should be added in the *Siddha Sneha* and then filtered.
- c. If *Sharkara* is mentioned in the formula, then it should be added in to the final product after cooling of *Sneha*.
- d. Aromatic drugs (*Sugandhi Dravyas*) are to be added to the *Sneha* in lukewarm condition.
- e. The container should be free from moisture.

### Standard parameters to determine quality of *Sneha Kalpana*

Along with the classical parameters, analytical parameters<sup>[35]</sup> depicted in table 6, may also be applied to standardize the *Sneha Kalpana*;

**Table 6: Analytical parameters for *Sneha Kalpana*.**

SN	Parameter
1.	Loss on drying at 40°C
2.	Colour and odour
3.	Rancidification
4.	Refractive index
5.	Viscosity
6.	Saponification
7.	Iodine value
8.	Acid value
9.	Free fatty acids

10.	Peroxide value
11.	Unsaponifiable matter
12.	Thin layer chromatography (TLC)
13.	High performance thin layer chromatography (HPTLC)

### Discussion

*Sneha Kalpana* is a unique dosage form which is widely used in Ayurveda, both internally as well as externally. The principle of the preparation is the protracted boiling of *Sneha* with prescribed *Kalka* and *Drava Dravya*. *Sneha Kalpana* not only contains fat soluble but is also said to contain water soluble active principles of the medicaments used in the process. However, presence of water soluble components, both qualitatively and quantitatively, is a subject of future research. *Toya-Agni Sannikarsha* (Presence of liquid, and heat) and *Kala Samskara* (Time duration) play vital role in the extraction of active principles.

*Ghrita* contain saturated fatty acids (no double bonds between carbon atoms of a fatty acid chain) while *Taila* contain unsaturated fatty acids (one or more double bonds in a fatty acid chain, either *cis* or *trans* form). A mixture of *Ghrita* (saturated fatty acids) and water, when heated, is said to undergo hydrolysis to form mixture of saturated fatty acids and glycerol. Further heating evaporates water, transforming glycerol back into saturated fatty acids, without producing froth. On the other side, *Taila* (unsaturated fatty acids) and water, when heated, is said to undergo oxidation which releases froth containing water vapour, oxygen, carbon-di-oxide and acids. However this theorem needs to be proven.

*Sneha Murchana* is said to decrease the saturated fatty acids and increase unsaturated fatty acids. This might help in reducing the total and LDL cholesterol, decreasing the risk for atherosclerosis, hypertension, and ischemic heart disease. However, it remains to be proven.

*Sneha Murchana* removes '*Gandha Dosha*' of *Taila* and '*Ama Dosha*' of *Ghrita*; increases the potency and shelf life of the *Sneha Kalpana*. It also gives a

characteristic odour and colour to the *Sneha*. *Chakrapanidatta*, in his commentary '*Ayurvedadipika*' on *Charaka Samhita*, states that repeated *Sneha Paka* increases the '*Anu/ Sukshma*' *Guna* of *Sneha*, which increases the potency of *Sneha*.<sup>[36]</sup>

## REFERENCES

1. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Purva Khanda 1/56.
2. The Drugs and Cosmetics' Act, 1940, Professional book publisher, Delhi, 2020, Drugs and Cosmetics Rules 1945, R-161B, pg. no. 210, 211.
3. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/1.
4. Charaka Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Sutrasthana 13/ 9-13, Pg No. 263-4.
5. Charaka Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Sutrasthana 22/15.
6. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Jwara Chikitsa 5/1266-1268.
7. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Jwara Chikitsa 5/1289-1291.
8. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/6-11.
9. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/4-5.
10. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Jwara Chikitsa 5/1276-1277.
11. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/10.
12. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Jwara Chikitsa 5, Pg.no.209.
13. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/18.
14. Vaidyak Paribhasha Pradipa, Shri Govindas Sen, khand 3/26-27.
15. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/51-57.
16. Charak Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Ckitsasthan 7/111-116.
17. Chikitsa Sar Sangraha, Vangasen, Kshudrarogadhikar 169-171, Pg no.665.
18. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Vatvyadhirogadhikar 26/267-276, Pg.no.455-456.
19. Bharat Bhaishajya Ratnakar, Nagindas Chaganlal Shaha Sangruhit, B. Jain Publishar, New Delhi, Reprint 2012, Part (iv), Kalpa no. 5245, Pg no.81-82.
20. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Mukharogadhikar 61/122-125, Pg.no.963-964.
21. Ashtang Hridaya, Dr. Bramhananda Tripathi, Chaukhamba Sanskrita Sansthan, Varanasi, Reprint 2013, Uttartantra 39/169-173, Pg No.1203-1204.
22. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Balrogadhikar 71/152-155, Pg.no.1092.
23. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/12-13.
24. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2012, Jwara Chikitsa 5/1289-1291.
25. Sushruta Samhita, Dr. Ambikadatta Shastri, Chaukhamba Sanskrita Sansthan, Varanasi, Reprint 2013, Chikitsasthan 31/13.
26. Sharandhara Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Madhyama Khanda 9/14-16.
27. Charak Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Kalpasthan 12/ 98.

28. Ashtang Hridaya, Dr. Bramhananda Tripathi, Chaukhamba Sanskrita Sansthan, Varanasi, Reprint 2013, Kalpasidhisthan 6/17-18, Pg No.871.
29. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2012, Jwara Chikitsa 5/1292-1295.
30. Sharandhar Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2016, Madhyama Khanda 9/17.
31. Ashtang Hridaya, Dr. Bramhananda Tripathi, Chaukhamba Sanskrita Sansthan, Varanasi, Reprint 2013, Kalpasidhisthana 6/21, Pg No.872.
32. Sushruta Samhita, Dr. Ambikadatta Shastri, Chaukhamba Sanskrita Sansthan, Varanasi, Reprint 2013, Chikitsasthana 31/11.
33. Charak Samhita, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2016, Kalpasthana 12/ 99-100.
34. Bhaishajyaratnavali, Prof. Siddhinandan Mishra, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2012, Jwara Chikitsa 5/1287.
35. The Ayurvedic pharmacopeia of India part 1, vol.1, 1<sup>st</sup> edition, New Delhi 2001.
36. Charak Samhita, Chakradatta, edited by Vaidya Yadavaji Trikamaji Acharya, Chaukhamba Surbharati Prakashan, Varanasi, Reprint 2005, Chikitsasthana 26/ 134-143, Pg.No.606-607.

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