



Manufacture of Oleaginous Medications in Ayurved

Pallabi Mahanta¹ and Abhaya Kumar Mishra²

¹Assistant Professor, ²Professor and Head, Dept. of Rasashastra and Bhaishajya kalpana,

Sri Sri College of Ayurvedic science and Research hospital, Sri Sri University, cuttack, Odisha, India

Received: 15 Jan 2024 / Accepted: 6 March 2024/ Published online: 01 April 2024

*Corresponding Author Email: drpallabimahanta@gmail.com

Abstract

In Ayurveda, the process of making medicinal oils is called as Sneha Kalpana, and they are used to treat a number of diseases. Medicated oils are created by cooking coconut oil, sesame oil, various crude oils such as castor oil, mustard oil, ghee, and substances such as Kalka (herbal paste made from various plant parts), Kwatha (specifically prepared decoction based on Ayurvedic principles), or Drava Dravya (any other liquid such as milk, self-expressed juices, and so on). Medicated oil/ghee is one of the most popular dosage forms in Ayurvedic medicine. The Ayurvedic literature specifies four types of snehas (fatty mixtures). These are Ghrita, Taila, Vasa (fat), and Majja (bone marrow). The most common medical applications are Taila (medicated oil) and Ghrita (medicated ghee). Taila Murchhana refers to the early phase of tail planning. This process was devised to increase oil efficacy while also eliminating undesirable odors and amadosa. Analysis reveals that the Murchhana cycle reduces acid while increasing the role of saponification. Reduced acid content indicates a lower proportion of free fatty acids, whereas increased saponification content indicates a larger concentration of low molecular fatty acids. Medicated oils include low molecular fatty acids. This process converts the active ingredients of fat- or water-soluble medicines into medicinal oils. Medicated Taila has more medical benefits and a longer shelf life than synthetic Taila. Tail-prepared medicines promote overall health, beauty, strength, and anabolism.

Keywords

Ayurvedic oil, Taila Murchhana, Medicated oil, Saponification.

INTRODUCTION:

Ayurvedic and traditional medicine prescribe a variety of therapeutic oils for different conditions. Within Ayurveda, the creation of medicated oils is called Sneha kalpana, and patients of all ages use them for cosmetic purposes as well as a wide range of ailments. Medicated oils are made by slow boiling various crude oils, such as castor, mustard, and ghee, as well as coconut, sesame oil, and sometimes both. To further enhance the medicinal properties, substances such as Kalka (paste made from various parts of herbals), Kwatha (specially prepared

decoction according to Ayurvedic principles), or Drava Dravya (any other liquid, such as milk, self-expressed juices, meat juice, etc.) are also added. In the taila preparation procedure, the taila is boiled with specified kashayas (decoction) and kalkas according to the reference. This method represents that the active medicinal properties of the products are consumed.¹In the Grita preparation percedure, the Ghrita is boiled with recommended kashayas (decoction) and kalkas according to the reference.²

General method of preparation²

SnehaPaka procedure can be separated into three phases:

1.Sneha Murchhana 2. Sneha Paka 3. Pakashiddhi.

Snehamurchhana:

Sneha Paka undergoes a procedure known as SnehaMurchhana prior to drug administration. It applies to both Taila and Ghrita. This is one of Sneha's Samskaras, which aids in acquiring medicinal and therapeutic properties. There are no references to Sneha Murchhana in Brihattarayee. Bhaishajya Ratnavali was the first work to explain the Murchhana procedure.

Murchhana alters solubility and absorbability, resulting in optimal therapeutic qualities.

The goals of the murchhana process are as follows:

- Amadosaharatwa - elimination of "Ama" that is linked to "moisture content" that is directly linked to rancidity issues.
- Elimination of foul-smelling crude Taila or Ghrita;
- Sneha will be able to absorb more active principles.
- Stability of the Sneha is also expected to increase.
- change the solubility and absorption of the final product.

Sneha paka:

In Tailamurchhana, the desired medication is used for Snehapaka. After adding the prescribed amount

of kalka and dravadavyas, the mixture is heated to a moderate temperature until the watery part evaporates entirely. Regarding the timing and method of adding kalka and sneha during Snehapaka, there are differing views available. Susruta Samhita and Astanga Samgraha recommend combining drava dravyas and kalkas with Sneha and processing them together. It is not stated by Acharya Sharangadhara in what order the drava, sneha, and kalka should be combined. The Kalkadravya and Dravadavya are combined first, and then this combination is put into the gently heated Sneha, according to the Keralaia vaidyas, this will make it easier to distribute active principles consistently throughout the Sneha.

Sneha Siddhi Lakshyana³:

- Stopping the bubbling sounds (Sneha).
- Bubbles disappear in ghrita but appear in taila.
- The appearance of clarity in taila.
- Kalka does not adhere to the fingertips.
- Rolling Kalka between thumb and index results in a wick form.
- Kalka is neither extremely hard nor exceedingly soft.

The preparation of sneha involves three phases (paka)⁴

- Mridupaka, Madhyampaka, and Kharapaka.

Sl.No	According to Sarangadhara	According to Harita	According to Vagbhatta
01	3 type- Mridupaka, Madhyam Paka, Khara paka 5 type-Ama paka, Mridu Paka, Madhyama Paka, Khara Paka, Dagdha paka	Mridu paka, Madhyam Paka, Kathina Paka	Manda Paka, Cikkana Paka, Khara paka, Avisosi Paka

Table:1: Types of Sneha paka according to different acharya⁴:

Stage of paka	Kalka	Sneha
Amapaka	Water content (+), Cracking sound	Water content (+), Cracking sound
Mridupaka	Sticky, Traces of Water (+), Cracking sound	Traces of Water (+), Cracking sound
Madhyamapaka	Non-sticky, Free from water content, no cracking sound, varti can be made.	Water content (-), Crackining Sound, Froth appearance (in taila), Subsiding of Froth (In Ghrit), Desired color, odor and Taste
Kharapaka	Kalka become hard, rough, darkened, water -free, dry	Color, odor, taste may change
Dagdhapaka	Rough, dry and black often chareed brunt	Essential content of Sneha particularly loss of taste, color and odor

Table 2: Characters of various Snehapakas (Paka Sidhhi lakshana).

Modern Approach to Sneha Kalpana:

Today, the various dosage forms utilized by consumers can be transformed into innovative drug delivery systems (NDDS) for the sneha kalpana. They might be oleaginous, non-oleaginous, or fatty/wax

emulsions. Ointments are composed of fluid hydrocarbons embedded in a matrix of high melting solid hydrocarbons, or they are preparations with the therapeutic component spread on a fatty base. Creams are semisolid preparations composed of two

phases, one watery and the other oily/fatty basis^{5,6}. Gels are semisolid preparations that exhibit a high degree of physical cross-linking between liquid phases enclosed inside a three-dimensional polymer matrix⁶. Ethosomes are nanovesicles composed of phospholipids that contain a high concentration of ethanol (20-45%)⁷. Phytosomes can be classified as bioactive. The component is attached to a lipid or a combination of natural substances and phospholipids.⁸

Discussion:

Sesame oil has great for improving iron level, controlling Cholesterol, managing heart disease, and improving strength. Sesame oil is beneficial for skin. Sneha Kalpana is a powerful and efficient Kalpana that include both fat-soluble and water-soluble active ingredients. Several medicinal applications of Sneha Kalpana are methodically addressed in classical Ayurvedic literature. It is recommended to do sneha kalpas for both abhyantar (internal application) and bahya prayoga (external application). Ghrita and Taila offer additional nutritional benefits and prolong the shelf life of medications. Because mamsa rasa, vasa, vrihi, and dhanya readily become fetid and give unpleasant odor within a day due to biodegradation. The Acharyas determined the Snehapaka era. Dugdha spoils within a day or two as well. Swarasa is a thicker media than the other two liquid media. Because of the daily paka process, it may breakdown slowly and take longer to release the solute active components into the oleaginous media, which is why a three-day Snehapaka time is advised. When Kwatha, Aranala, or Takra are used as liquid mediums for Snehapaka, it takes five days as advised due to their delayed transmission of chemical contents. The dried, hard materials known as mula (roots) and vili (climbers) can take up to 12 days to release their medicinally active components into oleaginous medium.

Many research investigations have been conducted by scholars to produce dosage forms for Ayurvedic therapeutic oil in the form of ointment, cream, gel, and so on. All Sneha kalpas display better preservation and quality, as well as an improved therapeutic impact, as evidenced by higher customer satisfaction and compliance.

The conversion and development of various Sneha kalpas into dosage forms also aids in the resolution of issues related to handling, packaging, and so on. NDDS and transdermal drug delivery systems open up a new avenue for the development of numerous therapeutic compositions referenced in Ayurvedic classical texts. Liposomes, ethosomes, phytosomes, invasomes, and microemulsions are examples of

innovative approaches that use liposomal material and have both lipid and water-soluble qualities, similar to the Sneha kalpa. This review aims to compile some fundamental facts that will help academics and researchers who work with such dosage forms increase their understanding.

CONCLUSION:

Sesame oil is digesting, hot (Virya: ushna), bitter (Rasa: tikta), thick, greasy, and easily piercing (Guna: guru, snigdha, sookshma). Sesame oil is containing Omega-3 and omega-6 fatty acids, which are polyunsaturated fats that help prevent heart disease and the buildup of plaque in the arteries. It lowers the chance of developing heart disease by raising levels of high-density lipoprotein, or good cholesterol, and lowering triglyceride levels. Sesame oil possesses antioxidant, antimicrobial, and anti-inflammatory qualities that aid in the removal of harmful germs from the skin and the restoration of damaged skin cells. It protects the skin from the sun's damaging rays and helps to avoid tanning. Among all Oil, Sesame oil is best for therapeutic uses and more potent for preparing medicated oil.

Taila kalpana is the process of preparing oleaginous remedies from various materials such as Taila, Kalka, Kwatha Ksheera, and Gandha dravyas. Taila contains the active components of drugs that are soluble in fat or water. Medicated Taila has higher efficacy and a longer shelf life than raw Taila. Tail-based medicines promote the body's health, beauty, energy, and anabolism. Water-soluble and fat-soluble active principles can be transformed into oil media, and this material assimilation results in Taila's strength and efficiency. Scientists affiliated with Ayurvedic Pharmaceuticals would be involved in improving the traditional pharmaceutical system without violating the core premise for the manufacturing of therapeutic oil.

REFERENCES:

1. Pt. Kashinath Shastri, Acharya Charaka's Charaka Samhita, Part I, Chaukhamba Sanskrit Samsthana, 8th Edition, 258.
2. Pt. Ambika Dutt Shastri, Kaviraj Govind das Sen's Bhaishjya Ratnavalli, Chaukhamba Prakashan, Reprint, 2014; 185.
3. Siddhi NM. Bhaishjya Ratnavali of Kaviraj Govind. 5th ed. Chaukhamba Sanskrit Pratisthan; 2005. p. 206.
4. Trikamji Y. Charaka Samhita, Sutrasthana 13/133. Varanasi: Chaukhamba Surbharti Prakashan; 2008. p. 82, 738.
5. Seth AK. Pharmaceutics-II (Dispensing and Formulations). Jalandhar, Punjab: S. Vikas & Company (Medical Publishers); 1999.



6. Lachman L, The Theory Practice of Industrial Pharmacy. 3rd edition. Varghese Publishing House Hind, Rajasthan; 1976
7. Verma P, Pathak K, Therapeutic and cosmeceutical potential of ethosomes: An overview. J Adv Pharm Technol Res 2010;3: 274-82.
8. Jain N, Gupta BP, Thakur N, Jain R, Banweer J, Jain DK, Jain S. Phytosome: A novel drug delivery system for herbal medicine. Int J Pharm Sci Drug Res 2010; 2:224-8.