



REVIEW ON NIRGNI SNEHAPAKA

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ABSTRACT

Samskara (processes) is a special procedure where the inherent properties of substance are transformed, which involves cleansing, churning, storing in a specific place, and application of heat. Different samskara (processes) are followed based on nature of dravya. In sneha Kalpana (oleaginous preparations) water soluble and lipid soluble active principles are extracted. Preparation of sneha paka is done by niragni (without application of heat) and sagnipaka (with application of heat) method. In sagni paka method source of heat used is fire. The niragni paka is also called as Aditya paka, suryapaka or bhanupaka where sunlight is used as media of heat. It is a method of preparation mentioned for the drugs which are thermolabile in nature, hence needs less intensity of heat. Understanding the importance of this kalpana the science of ayurveda pharmaceuticals has mentioned many formulations which are prepared using sunlight as source of heat in different texts of Ayurveda.

Keywords: Samskara, Sneha kalpana, Niragni, Sagni, Aditya paka

INTRODUCTION

Samskara is one of the important concepts of ayurveda. The main samskara applied during processing of sneha are agni (heat), toya (water) and kala samyoga (time). Niragni sneha paka is one such samskara performed by using sunlight as fuel, the first reference regarding niragni sneha paka i.e., Darvyadhi aditya paka taila [1] is available in Gada nigraha 12th century AD and Chakradatta 12th century AD has mentioned manjishtadya aditya paka taila in the context of kushta chikitsa [2] (diseases of the skin).

Transformation of the inherent properties as well imbining different properties in a substance is the aim of processing. This specificity in selecting ideal samskara for dravya was the key factor behind formulating an effective dosage form to obtain good pharmacological actions from drug. Hence ancient scholars have planned many samskara and processed accordingly. Sneha kalpana (lipid preparations) is one such samskara, where the fat and water soluble active constituents of the drugs are transferred into sneha (lipid media) by sneha paka vidhi. The sneha paka vidhi involves

two methods according to application of heat, niragni paka (without fire) and sagni paka (with fire). In sagni, the kalka (paste), sneha (lipid media) and drava dravya (liquid media) are heated by means of fire where it is specific paka of sneha kalpana mentioned by some of the ancient ayurvedic scholars, where sneha is exposed to sunlight for specific time period preferably preparation requires summer season and it requires prolonged duration of preparation. This method is very commonly practiced to prepare sneha from the drugs which are volatile in nature and sensitive to high temperature.

The references of Adityapaka are available in various classics like Gada nigraha, Chakradatta, Vangasena, Bharata Bhaishajya Ratnakara, Sahasrayoga, Sharangdhara samhita, Bhaishajya Ratnavali.

The sneha (lipids) which is used as base for preparation are Tila taila (gingely oil), sarshapa taila (sesame oil), ghrita (ghee) and karanja taila (oil of *Pongamia pinnata*) and narikela taila (coconut oil).

Table1: The formulations having Sarshapa taila as base

S. No.	Name of formulation	Ingredients	Indication
1.	Gugguladya surya paka taila- Gada nigraha [3]	Sneha- Sarshapa taila (oil of <i>Brassica campestris</i>) Kalka-Guggulu (<i>Commiphora mukul</i>), Maricha (<i>Piper nigrum</i>), Vidanga (<i>Embelia ribes</i>), Sarshapa (<i>Brassica campestris</i>), Kasisa (Green virtiol), Musta (<i>Cyperus rotundus</i>), Sarjarasa (gum resin of <i>Vateria indica</i>), Shreeveshta, Haratala (Orpiment), Gandhaka (Sulphur), Manashila (Realgar), Kushta (<i>Saussurea lappa</i>), Kampillaka (<i>Mallotus phillipenensis</i>), Haridra (<i>Curcuma longum</i>), Daruharidra (<i>Berberis aristata</i>)	Kushta (skin diseases)
2.	Manjishtadya surya paka taila- Gada nigraha [4]	Sneha- Sarshapa taila (oil of <i>Brassica campestris</i>) Kalka- Manjishta (<i>Rubia cordifolia</i>), Triphala (<i>Terminalia chebula</i> , <i>Terminalia bellerica</i> and <i>Emblca officinalis</i>), Laksha (<i>Laccifer lacca</i>), Nisha (<i>Curcuma longum</i>), Manashila (Realgar), Haratala (Orpiment), Gandhaka churna (Sulphur powder)	Pama (Psoriasis)

Properties of Sarshapa taila

Sarshapa taila (mustard oil) has katu (pungent), tikta rasa (bitter) and ushna virya (hot potency). It does kapha-vata shaman (alleviates kapha and vata). In classics it is considered as Kushtaghna (alleviate skin disorders), kandughna (anti- pruritic) and krimihara (anti- microbial), according to

modern concept mustered oil has the chemical composition such as; Sinalbin, Sulphocyanide, Lecithine, and Myrocine. It contains Folic acid, Vitamin B1, B2, B6, Vit C and Vit E, protein, potassium, magnesium, and calcium phosphate. It acts as stimulant, irritant, anti-bacterial and anti-fungal, which helps in treating various skin disorders.

Table 2: Formulations containing Tila taila as base

S. No.	Name of formulation	Ingredients	Indication
1.	Vachadi surya paka taila [5]	Sneha- Tila taila (Gingelly oil) Kalka (paste) - Vacha (<i>Acorus calamus</i>), Balamula (root of <i>Sida cordifolia</i>)	Sakalamayahara (useful in all diseases) in Shishu pushtikara- Abhyanga (external oleation)
2.	Marichyadi taila [6]	Sneha- Tila taila (Gingelly oil) Kalka-Maricha (<i>Piper Nigrum</i>), Kushta (<i>Saussurea lappa</i>), Tamala patra (<i>Cinnamomum tamala</i>), Manashila, Kasisa (Green vitriol)	Sidma (type of psoriasis)
3.	Kushta Rakshasa taila [7]	Sneha- Tila taila (Gingelly oil) Kalka- Parada (Mercury), gandhaka (Sulphur), kushta (<i>Saussurea lappa</i>), saptaparna (<i>Alstonia scholaris</i>), chitraka (<i>Plumbago zeylanica</i>), sindhura, lashuna (<i>Allium Sativum</i>), haratala (Orpiment), bakuchi (<i>Psoralea corylifolia</i>), araghvada beeja (seeds of <i>Cassia fistula</i>), jeerna tamra (calyx of copper), manashila (realgar)	Udumbara, kacchu (pruritis),mamsavrudhi, bhagandara (fistula),pama, vatarakta (gout)
4.	Adityapaka guduchi tailam [8]	Sneha- tila taila (Gingelly oil) Kalka- vatavarohaka (<i>Ficus benghalensis</i>), Bhuta keshi churna Drava- guduchi swarasa (juice of <i>Tinospora cordifolia</i>)	Kesha ropanam (useful in hair care)
5.	Aditya pakva taila [9]	Taila-Tila taila (Sesame oil)-1 prastha (768 ml) Kalka dravya- Bala (<i>Sida cordifolia</i>), rasna (<i>Pluchea lanceolata</i>), jayanti (<i>Sesbania sesban</i>), madhuka (<i>Madhuca longifolia</i>), Musali (<i>Chlorophytum tuberosum</i>), nishotha (<i>Operculina turpethum</i>), chandana dwaya (<i>Santalum album</i> and <i>Pterocarpus santalinus</i>), lavana (rock salt), etc.	Khalityadi roga (alopecia)
6.	Aditya paka taila [10]	Taila- Tila taila (Sesame oil)- 1/2 prastha (384 ml) Kalka dravya-manjistha (<i>Rubia cordifolia</i>), triphala (<i>Terminalia chebula</i> , <i>Terminalia bellerica</i> and <i>Emblica officinalis</i>), laksha (<i>Laccifer lacca</i>), haridra (<i>Curcuma longum</i>), manashila (realgar), Haratala (orpiment), gandhaka (sulphur)	Pama (type of psoriasis)

Properties of Tila taila

Properties of tila taila are madhura rasa, ushna veerya and vatahara¹¹. It is also Tvak prasadana (beneficial to skin) and Krimighna (antimicrobial) [12]. According to modern concepts the Flavonoids and phenols give it antioxidant properties also saponins which are anti-oxidant, anti-cancer and immunity

booster. Tannin present in oil makes it antibacterial, antiviral, and astringent. Sesame oil also contains minerals viz. zinc, iron, potassium, sodium, copper, lead and manganese. The concentration of iron is highest among the various mineral present in oil which helps in healing of wounds and in skin disorders [13].

Table 3: Formulations containing Narikela taila as base

Sl No.	Name of formulation	Ingredients	Indication
1.	Kutaja patra taila [14]	Taila- Narikela taila (Coconut oil) Kalka- Kutaja patra (leaves of <i>Holarrhena antidysenterica</i>)	Kushta (psoriasis)

Properties of Narikela taila

The properties of narikela taila (Coconut oil) are madhura (sweet), guru-snigdha guna (heavy and unctuous), shita virya (cold in potency), vat-pittahara vaatrog nashak (alleviates vata, pitta and kapha), Rakta vikar (blood disorders), keshya (hair tonic), kandughna (anti-pruritic) and shulahara (analgesic), daha (alleviates burning sensation), khalitya- palitya (loss of

hair and greying of hair) [15]. In external applications, the formulations are indicated for charma roga (diseases of skin), vaat vyadhi (diseases of joints), malavarodh (constipation), Udavart (upward moment of gas), shiroroga (diseases of head), netra roga (diseases of eye), arsha (piles) [16]. The researches have shown the antibacterial activity [17], anti dermatophytic activity [18] Antifungal effect¹⁹ of coconut oil.

Table 4: Formulations containing Go-ghrita (Cow's ghee) as base

S. No.	Name of formulation	Ingredients	Indication
1.	Aditya pakva ghrita ²⁰	Sneha- go ghrita (Cow's ghee) Kalka- saidhava lavana (rock salt) kept under sun in Sambhukabhandu (snail shell) for 7 days	Kuranda roga
2.	Aditya pakva ghrita ²¹	Sneha- go ghrita (Cow's ghee) kalka- saidhava lavana (rock salt), kept under sun in tamra patra (copper vessel) for 7 days	Kuranda roga

Properties of Ghrita (Ghee)

As per the API, Part-1 Vol-IV) the properties of the ghrita are madhura rasa (sweet in taste), guru (heavy), snigdha (unctuous),

mrudu guna (soft in property), shita veerya (cold potency), madhura vipaka, agni deepana (increases digestive fire), anabhisyyandi, balya (strengthening),

chakshushya (beneficial to eyes), hridya (beneficial to heart), tvachya (beneficial to skin), kaanti prada (improves the glow), medhya, ojo vardhaka, rasayana (rejuvenative), shleshma vardhana (increases kapha), snehana (oleating), tejobalakara, vata-pitta prashamana, vishahara (anti-poisonous) and vyaasthapna(longevity).

It is a good carrier of fat-soluble vitamins (A, D, E and K) along with essential fatty acids (linolenic and arachidonic acid) which are responsible for wellbeing. Cow's ghee used for recovery from wounds. It can be applied on broken bones & bruises & effective against skin rashes.

Importance of Aaditya paka

Sunlight has got beneficial effect on skin and skin disorders as sunrays penetrate deep into the skin which cleanses the blood and blood vessels. The sun light kills the bacteria and it increases the oxygen content in the human blood by enhancing the body's capacity to deliver oxygen to the tissues, thus helps in proper healing of the tissues. Ultra violet rays helps in production of the vitamin D in the body which is essential for many functions such as loosing excess fat. It indicates sunlight has a property which will help in curing the skin disorders, the same therapeutic effect can be expected from taila (oil) or ghrita (ghee) by bhanupaka (sunrays

as heat media) as it is prepared under sunlight.

DISCUSSION:

Sneha paka is a pharmaceutical preparation through which water soluble and fat soluble active principles are extracted. Sneha paka can be done by two methods, agnipaka or adityapaka. Aditya paka, where sunlight is used as a source of heat and is widely indicated in skin disorders as properties of sunlight such as UV rays are absorbed into the sneha during the process. Based on involvement of dosha and lakshana different types of sneha dravya such as go ghrita, tila taila, narikela taila and sarshapa taila are used as a base in the preparation of aditya paka method. As the contact period between the kalka dravya and sneha dravya is more in adityapaka method of preparation the extraction of active principles could be expected more which makes it more effective in treating skin diseases.

CONCLUSION

Sneha kalpana are the unique procedure where both oil soluble and water soluble active principles are extracted initially later water soluble active principles are transferred into oil through gradual evaporation of water by the application of mild temperature. In classical text we get ghrita, tila taila, sarshapa taila, narikela taila

and karanja taila as base in the preparation of niragni sneha paka. The formulation contains thermo labile ingredients to prepare by niragni paka method and are mainly indicated in twak vikara because of their antimicrobial and antifungal properties.

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