ISSN: 2456-9909 (Online)

International Journal of Research in AYUSH and Pharmaceutical Sciences

Review Article

A CRITICAL REVIEW OF *SHODHANA SNEHAPANA*

Akhilanath Parida[1]*, Satyasmita Jena[2], Varun Sawant[3]

*[1]Professor, Department of Panchakarma, V.Y.D.S Ayurveda College, Khurja, India

[2]Assistance Professor, [3]Assistance Professor, Department of Samhita and Siddhanta, V.Y.D.S Ayurveda College, Khurja, India.

Keywords: *Koshtha, Snehapana, Samyak snigdhalakshana.*

ABSTRACT

Shodhanartha Snehapana is very significant procedure among the *Panchakarma*. The *Snehapana* therapy aims to prepare the body for *Shodhanakarma* and helps to bring the *Doshas* situated in peripheral tissues to the *Koshtha* a (bowel) so that they can be easily expelled out. This is achieved by *Vriddhi* (increase) and *Vishyandana* (dissolution or diffusion) *karma* of *Snehapana* therapy. *Snehana* decides the whole outcome of *Shodhana* therapy. If *Snehana* is not done properly, it affects the *Shodhanakarma* performed afterward. Without the proper digestion and absorption of *Sneha* in *Koshtha*, it cannot produce *Samyak snigdha lakshana* (the symptoms appear in proper oleation) in the body. Hence the mode of action of *Sneha* in *Koshtha* during *Snehapana* should be thoroughly studied for the success of *Snehapana* therapy.

INTRODUCTION

Snehapana is one of the unique treatment principles of Ayurveda. *Snehapana* or internal Oleation is the most important *Purva karma* to be performed before *Shodhana* treatment because the whole outcome of *Shodhana* procedure depends upon the proper mobilization of *Dosha* from the *Shakha* (peripheral tissues) to *Koshtha* which is to be achieved with the help of *Snehana* and *Swedana* (sudation therapy). *Snehapana* is the process of administering *Sneha* (fat) to achieve the desired effect in a precise duration before *Vamana* (therapeutic emesis) and *Virechanakarma* (therapeutic purgation). *Sneha* undergoes various digestive processes in *Koshtha* as a result, it creates *Doshotklesha* which is the prerequisite for *Shodhana* therapy. *Koshtha* is considered as the seat of all *Doshas*. During the *Samprapti* (pathogenesis) of a disease *Dosha* spread from their principal seat i.e. *Koshtha* in upward, downward, and transverse direction.[1] To eliminate the disease, two types of treatment are advised in Ayurveda, i.e., *Shodhana* and *Samana* (pacificator procedure). The diseases eliminated by *Shodhana* will not recur. *Snehana* and *Svedana* aim to bring out vitiated *Doshas* from the *Sakhas* back to the *Koshtha* and to remove them from the body by *Shodhana* treatment. After these *Purva Karma*, consequently, the *Dosha* in the *Shakha* are brought to *Koshtha*; *Doshas* in the *Linavastha* (the deep-seated *Doshas*) change to *Prachala* or *Pravahanaavastha*[2] (displacement) due to which they could be removed easily. The *Dosha* are moistened by the *Snehana*, and liquefied by *Swedana* and can be easily expelled out by *Shodhana* treatment.

KOSHTHA

There are three types of *Koshtha* based on the predominance of *Dosha* such as1) *Krurakoshtha*, 2) *Mrudukoshtha*, 3) *Madhyakoshtha*. In *Krura koshtha* predominance or increase of *Vata* produces hard feces with difficulty of elimination or even no elimination. In *Mrudukoshtha* predominance or increase of *Pitta dosha* causes watery or semisolid feces, expelled out more than once or twice in a day. In *Madhya koshtha* predominance or increase of *Kaphadosha* causes soft, solid feces moving out smoothly. According to *Ashtanga hrudaya Madhyakoshtha* is of two types 1) due to the predominance of *Kapha dosha* and 2) due to the *Samavastha* of three *Dosha*. [3] In *Krurakoshtha* as the predominant *Dosha* being *Vata*, *Koshtha* is

dominated mainly by *Ruksha* and *Kharaguna* (qualities) of *Vatadosha*. Hence *Krurakoshtha* will be poorly secretive and absorptive. *Mrudukoshtha* is characterized by *Sara* (laxative), *Drava* (fluid property), *Snigdha* (unctuousness), and *Laghu* (lightness) *Guna* of *Pitta dosha*. Hence the *Koshtha* will be smooth, lubricated and slippery. Secretions will be more but it will be poor in absorption. In *Madhya koshtha* which is dominated by *Kapha dosha*, there will be a predominance of *Snigdha*, *Guru* (heaviness) and *Sthira* (stable) *Guna*. *Koshtha* will have more lubrication but less slippery due to *Guru* and *Sthiraguna*. This *Koshtha* will be secretive but movements will be less due to *Guruguna* of *Kaphadosha*. *Madhyakoshtha* which is due to the *Samavastha* of three *Dosha*, there will be optimum secretion and absorption. Before the fixation of *Matra* (dosage) in *Snehapana* treatment, one should be well aware of *Koshtha* a of the subject. In the case of *Mrudu Koshtha*, *Uttamamatra* (larger dose) *Sneha* should not be administered, if so, it causes *Agnimandya* (decrease in digestive capacity), *Drava-malapravritti* (loose stools), etc. Also, in *Krura-koshtha*, *Madhyama* (medium dose) or *hrasvamatra Sneha* (smaller dose) is not beneficial because it does not bring the required therapeutic effects. So, while deciding dose, one should thoroughly investigate the *Koshtha* and of the subject.

Accha-Snehapana

Accha Snehapana is the intake of a large quantity of *Sneha* without mixing with any other materials after the digestion of the previous night meal especially for *Shodhana*.[4] It is considered as the best *Snehana* therapy. *Snehana* therapy aims to prepare the body for *Shodhanakarma* i.e. to bring the *Dosha* situated in the peripheral tissues to the *Koshtha* so that they can be easily expelled out. This is achieved by *Vriddhi* and *Vishyandanakarma* of *Snehana* treatment.

Action of *Sneha* in *Koshtha*

The administered *Sneha* undergoes various digestive phases in *Koshtha*. The digestion and absorption of administered *Sneha* in *Snehapana* creates certain physiological changes in the body. These changes create *Doshotklesha* and prepare the body for the *Shodhanakarma*. *Sneha* fulfils this function through the property of *Sneha*, *Vishyan-dana*, *Mardava* (softness) and *Kledakarakatva*. The action of *Sneha* in *Koshtha* can be accessed through the following parameters:

- Changes in the movement of *Vayu* in *Koshtha* or *Vatanulomata*
- Changes in *Agni* (digestive fire)
- Consistency and *Snigddhata* (unctuousness) of *Purisha* (stool)
- Touch, lustre, and texture of the skin
- Physical and mental orientation like *Sada* (weakness), *Klama* (fatigue), etc.

Vatanulaomatha

The normal *Gati* of *Vata* in *Koshtha* is *Anulomagati* (downward direction). *Dravya* (drugs) which can mitigate *Vata* by promoting its normal *Gati* should have the cardinal property '*Snigdhata* '(unctuousness). By the *Snigdhaguna*, *Sneha* acts against its exact opposite quality i.e. *Rukshata* (dryness). Due to clearance of way and clean channels, *Vata* can move in its passage without any disturbance. *Rukshata* in *Koshtha* obstructs the normal course of *Vata* and leads to *Pratilomagati* (opposite direction) of *Vata*. By proper *Snehana* therapy, the fecal matter becomes *Snigdha* and can be easily evacuated leading to proper *Gati* of *Vata*.

Vatanulomana (making the direction of *Vata* in the right way) is the very first *Samyak snigdha* symptom that appears in sequence after the *Snehana*. If the quantity of *Sneha* given will not be sufficient, *Vatanulomata* does not happen. *Rukshata* (dryness) in *Koshtha* remains the same. In *Krurakoshtha*, *Rukshaguna* will be predominant. Obstruction to the normal course of *Vata* occurs by hard fecal matter. A large quantity of *Sneha* will be required to overcome the *Rukshata* of *Koshtha*. Then only *Sneha* can produce *Samyak Snigdha Lakshana* in *Krurakoshtha*. In *Mrudukoshtha* and *Madhyakoshtha* due to the *Snigdhaguna* of *Pitta* and *Kaphadosha*, the amount of *Sneha* required to overcome *Rukshata* and to produce *Koshtha-snigdhata* will be less as compared to *Krurakoshtha*. That's why *Acharya* suggested 7days of *Snehapana* for *Krurakoshtha*, 5 and 3 days for *Madhyama* and *Mrudukoshtha* respectively. The word *Vatanulo-mata* not only means moving *Vata* in the right direction, but it also emphasizes all biological reactions, transportations, and movements of the gastrointestinal tract.

Changes in *Agni* (digestive fire)

Due to *Sneha* intake, *Anulomana* of *Apana Vayu* (comes under types of *Vata*) occurs, which results in the good functioning of *Samana Vayu* and *Pachakapitta* (comes under the type of *Vata* and *pitta*). Hence *Agni Dipti* (increase in a digestive fire) will be observed during the period of *Snehapana*. The *Ghrita* (ghee) induces production and secretion of several digestive juices or enzymes necessary for excess lipid molecules to get digested there by eliminate unwanted molecules away from the body. When fatty food reaches the duodenum, about 30

minutes after a meal the gallbladder begins to empty. Cholecystokin in which is the potent stimulus for gall bladder contractions is secreted by the presence of fatty food that enters the duodenum. Bile helps to maintain a suitable pH of the duodenal contents and thus helps the action of all enzymes.

Changes about *purisha* (stool)

Due to the *Snigdhaguna* of *Sneha*, *Purisha* becomes *Snigdha* and by *Drava* (fluid property) and *Sara* (laxative) *Guna* (property), *Purisha* gets softened. *Purishasnigdhata*, (unctuousness of stool) *Asamhatvarchas* (loose stool) and *Adhastat-sneha darshana* (presence of fat in the stool) - these three symptoms indicate that *Koṣṭha snigdhata* (unctuousness of GIT) has occurred. By administration of *Sneha* in large quantities, the large intestine fails to absorb it completely, hence the excretion of *Sneha* through the anal route is observed. *Adhastatsnehadarshanam* denotes that, *Sneha* has reached up to *Majjadhatu* (6th *Dhatu* or tissue) as told in the classics, "*Majjasneho akshivittvacham*". So, examination of *Purisha* (stool) is to be done regularly.[5] The lipid molecules entering the intestinal tissues through bile, as well as through diffusion, make them too unctuous and smooth. There will be more production of water molecules during the final stage of lipid metabolism. Bile salts increase the peristaltic movements and gastric motility. It has laxative property. In *Krura*, *Mrudu*, *Madhyakoshtha* amount of secretion of bile juice may be different. In *Krurakoshtha* more water is absorbed compared to *Mrudu* and *Madhya-koshtha* and this will lead to dryness of faecal matter. Hence *Purishasnigdhata* (unctuousness of stool) will be different in each type of *Koshtha*.

Touch, texture, and luster of skin

Snehadravyas constitute *Snigdha*, *mrudu* (softness), and *Shita* (coldness) *Guna*, which enhances the same qualities in the body according to the *Samanya sidhantha*. Thus, produces *Gatram-ardavata* (softness of body) and *Twaksnigdhata* (unctuousness of skin). These *Lakshana* denote that *Sneha* has reached up to *Mansa* - *majjadhatu* (comes under tissues of the body). The cell membrane of all animals contains fatty acids. In high temperature, their bonding can rotate causing chain shortening and this makes the cell membrane thinner enabling a rapid exchange of substances between the cells. In *Snehapana*, the whole qualities of *Grihta* will enter into each cell due to *Samana Guna* (equal qualities) of *Ghrita* and cell membrane, making the body soft, smooth and unctuous to touch.[6]

Physical and mental symptoms

Klama, *Glani* (lassitude), *Gaurava* (heaviness), *Jadya*, *Angalaghava* (lightness of body) are the symptoms produced by *Snehapana*. *Klama* and *Glani* develop due to *Guruguna* of *Sneha*. This symptom occurs due to the excess physical exertions of musculoskeletal cells as well as due to mental exertions during the period of *Snehapana* therapy. As the *Snehapana* process goes on, *Samyak Snigdha Lakshana* appears one by one. First of all, *Annavahasrotas* becomes *Snigdha*, so that *Vatanulomana* and *Agnidipti* are observed in initial days. When *Purishasnigdhata* and *Aamhatavarchas* appear, it indicates that *Snehana* of *Annavaha* and *Purishavahasrotas* has achieved. When *Gatramardavata*, *Twaksnigdhata*, and *Angalaghava* appears, it indicates that *Snigdhata* has reached upto *Dhatu* level. *Snehodvega* (aversion towards *Sneha*) and *Adhastad Snehadarsana* suggest that there is no need for further *Snehana*.

PHYSIOLOGY OF SNEHAPANA

For primary energy requirements, our body utilizes carbohydrate metabolism, not fat metabolism. Our body has got two reservoirs for the storage of nutrients to keep the cells of the body nourished when the gut is empty. One the short-term reservoir, which stores carbohydrates in the liver and the other, the long-term reservoir which stores fats in the adipose tissues. Liver cells, under the influence of insulin, convert the soluble glucose into insoluble glycogen and store it, till it is again converted into glucose by the influence of glucagon when the gut is empty. The carbohydrate reservoir of the liver is primarily meant for the Central nervous system. If the system is not replenished by the glucose, the CNS has to find out alternative energy sources from the products of the long-term reservoir of fats. This consists of triglycerides, stearic acid, oleic acid, and palmitic acid. In the fasting phase, aided by the sympathetic system, glucose converted from stored up glycogen of liver provides energy for the CNS whereas energy demands for other cells are met with by fatty acids. By doing *Snehapana*, the body is being resorted to fat metabolism temporarily as the carbohydrate intake is too low during that period to which the body is not adapted. Presumably, there are two sets of receptors, one in the brain at the blood-brain barrier level sensitive to glucoprivation and another in the liver sensitive to both glucoprivation and lipoprivation that monitor the level of metabolic fuels. Through the *Snehapana* body repairs the damaged pathways. [7] The triglycerides are used in the body mainly to provide energy for different metabolic processes. In humans, pancreatic lipase

plays a major role in fat digestion. It acts on triglycerides and hydrolyzes the molecule to fatty acid and glycerol. Bile plays an important role in the digestion and absorption of fat. Bile salts have two important functions in the intestinal tract. First, emulsification which helps to break the fat globules into minute sizes. Second, bile salts help in the absorption of lipids from the intestinal tract by forming small physical complexes (micelles) with these lipids. Bile serves as a means of the excretion of several important waste products from the blood. Consumption of a large amount of fat during *Snehapana* causes excess production of bile which is necessary for fat digestion. Bile excretes some metals like copper, Zn, Hg, and Pb. The precursor of bile salts is cholesterol. In humans, about 500mg of cholesterol is converted to bile acids and eliminated in bile every day. This route for elimination of excess cholesterol is important particularly in situations of massive cholesterol ingestion. Without the presence of bile salts in the intestinal tract up to 40% of the ingested fats are lost into the feces. [8] Cholecystokinin, which is secreted mainly by the presence of fatty food in the duodenum causes the contraction of the gall bladder. Increased levels of CCK causes nausea, anxiety during the digestion of fat and decreases the desire to eat. As the *Snehana* procedure continues, CCK gets excessively secreted and which may be the reason for *Snehodvega* (aversion towards *Sneha*). Hydrolysis of triglycerides into fatty acid and glycerol is the first step in fat metabolism. The glycerol is converted into glycerolphosphate which can merge with the stream of glycolysis or it canform glucose. Most of the fatty acids are metabolized by βoxidation in the cytosol. Fatty acids reach the cytosol where itis converted into fatty acyl Co-A. Fatty acyl Co-A reacts with carnitine to form fatty acid- carnitine complex and enters the mitochondrial matrix. Inside the mitochondria, carnitine is released and the fatty acid combines with another molecule of Co-A to become fatty acid Co-A. Carnitine crosses the mitochondrial membrane and returns to carry again another molecule of fatty acid. Inside the mitochondrial matrix, fatty acylCo-A is converted to acetyl Co-A. Acetyl Co-A can have many fates as it is involved in many biochemical reactions in the body. The active acetate molecule normally combines with oxaloacetic acid to form citric acid which enters the Kreb's cycle to yield ATP molecules. Some of the active acetate molecules are utilized for the resynthesizing of fatty acids. Some molecules are utilized to form ketone bodies which can cross the blood-brain barrier and can be used for energy when glucose metabolism is severely deficient. Acetyl Co-A is involved in melatonin synthesis. Acetyl Co-A affects cell growth andmitosis. [9] Acetyl Co-A is also involved in the synthesis of a neurotransmitter called acetylcholine. Active acetate is also utilized for the synthesis of an amino acid glycine. [10] According to *Sushruta*, the disease is produced due to the dislodgement of vitiated *doshas* in the channels during their circulation in the body. During *Snehapana* treatment qualities of *Ghrita* reaches into each cell of the body and the toxins from the cells diffuse back into the *Ghrita* medium through active and passive transportation. *Swedanakarma* increases the exchange process between the cells. *Sneha* reaches to *Srotas* (micro channels or nano channels) and acts as a solvent to remove the obstruction by dissolving those vitiated *Doshas* in it, resulting in the removal of *Srotorodha* (blockage in channels), which is one of the important steps in *Sampraptivighatana* (reversal of pathogenesis). By the combined effect of *Snehana* and *Swedana*, *Doshas* will come to the *Koshtha* by *Anupravana bhava* and after that, they will be expelled out through the nearest route by proper *Shodhanakarma*.

CONCLUSION

Koshtha functions as the main route for *Shodhana* therapy. The action of *Sneha* differs in each type of *Koshtha*. Hence duration to achieve *Samyak-snigdhata* differs according to the type of *Koshtha*. The action of *Sneha* in different *Koshtha* can be understood based on *Samyak snigdha Lakshana*. For *Mrudukoshtha snehapana* treatment requires a short duration and for *Krura*, *Koshtha* it takes a long duration to achieve *Samyaksnigdhata*. The appearance of *Snehajeeryamana Lakshana* (symptoms appeared during the process of digestion) and *Jeerna lakshana* (symptoms appeared after the digestion of *Sneha*) will be different according to the digestion and absorption of *Sneha* in *Koshtha*. Hence *Koshtha* should be given prime consideration during *Snehapana* treatment because it is being the platform for the action of *Sneha*. *Dosha* are present throughout the body. *Sneha*, by its *Sukshmaguna* and *Kledanakarma*, brings the *Dosha* to *Koshtha* from *Shakhas*. *Kledana* (moistness or wetness) *karma* of *Sneha* acts as a solvent of the morbid *Doshas*, by which the fat-soluble impurities in the body will be eliminated. Hence the knowledge of digestion and absorption of *Snehadravya* is very important while doing *Snehana* procedure.

REFERENCES

1. Acharya Charaka. Charaka Samhita Sutrasthana. Dr. RamKaran Sharma, Vaidya Bhagwan Dash. Tisraisaniya. Sutram48 Reprint edition. Varanasi: Chowkhamba Sanskrit series office; 2015. P.228
2. Acharya Charaka. Charaka Samhita sutrasthana. Dr. Ram Karan Sharma, Vaidya Bhagwan Dash. yajjapurushiya. Reprint edition. Varanasi: Chowkhamba Sanskrit series office; 2015. P.25.
3. Vagbhata. Ashtang Hridayam sutrastana. Dr. K.R. Srikkanta Murthy. Ayushkaameeya adhyaya. Sutra 8.10th edition. Varanasi: Chowkhamba Krishna das Academy; 2014. P.7. Sangeetha Lawrence & Ajitha K./Int. J. Res. Ayurveda Pharm. 9 (3), 201824
4. Vagbhata. Ashtang Hridayam sutrastana. Dr. K.R. Srikkanta Murthy. Snehavidhi adhyaya. Sutra 19. 10th edition. Varanasi: Chowkhamba Krishna das Academy; 2014. P.212.
5. Vaidya Vasant C Patil. Snehana therapy in Ayurveda.Pradhana karma of snehana. 1st edition. Varanasi: Chaukhambha publications; 2008. P.111.
6. Dr.Sree Lekshmi. The physiological aspect of snehapana. International Journal of Ayurvedic and Herbal Medicine. 7:6(2017); v7i6.09.
7. Vagbhata. Ashtang Hridayam sutrastana. Dr. T. Sreekumar. Snehavidhi adhyaya. 5th edition. Thrissur: Harisree Hospital;2016.p.2.
8. Arthur c. Guyton, John E. Hall. Medical physiology. Secretory functions of the alimentary canal.11th edition. Philadelphia: Elsevier; 2008. P. 804.
9. Dr.Sree Lekshmi. The physiological aspect of snehapana. International Journal of Ayurvedic and Herbal Medicine. 7:6(2017); v7i6.09.
10. Sujith K. Chaudhuri. Concise medical physiology. Metabolism. 6th edition. Kolkatta: New central book agency(p) Ltd; 2009. P.391.

Cite this article as:
Akhilanath Parida, Satyasmita Jena, Varun Sawant. A Critical Review of Shodhana Snehapana. International Journal of Research in AYUSH and Pharmaceutical Sciences, 2019;3(9):364-368.
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Akhilanath Parida
Professor,
Department of Panchakarma,
V.Y.D.S Ayurveda College, Khurja,
India.
E-mail: tarinitirupati@gmail.com