



A REVIEW ON NASYA KARMA

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ABSTRACT

In Ayurveda, many therapies are used for the maintenance of health and eradication of diseases and *Nasya Karma* is one among them. It is the *Shodhana* process, which eliminates the vitiated *Doshas* of the *Urdhvanga* ensuring the smooth functioning of the brain and ultimately whole body. In this procedure, the route of drug administration is nose and the medicines are given either in the form of ghee, oil, powder, liquid or smoke. *Acharya Charaka* has mentioned that *Nasa* is the main doorway to *Shiras* and *Nasya* therapy helps in pacifying all the diseases affecting the *Shiras* or *Urdhvajatra Pradesh* (supraclavicular region). So here a review is presented on *Nasya* - types, dosage, indications, contraindications and pharmacodynamics according to Ayurveda and modern science.

KEYWORDS: *Nasya, Navana, Avapeeda, Pratimarsha*

INTRODUCTION

Nasya is one among the *Panchakarma* procedures enumerated in Ayurveda. It is the chief procedure to pacify the vitiated *Doshas* in *Shiras* as it is quoted that "*Nasa hi Shiraso Dwaram*".^[1] Therefore any medicine which is administered through nose can influence the head directly. It may be due to the anatomical and physiological relations of nose and paranasal sinuses with the cranium and brain. Nose is related to cranial cavity through its roof i.e. cribriform plate and venous drainage of nose is directly in the cavernous sinus. Moreover there are numerous references of medicines administered through nose in condition of unconsciousness, *Sanyasa*, *Sarpadansha* etc. Therefore *Nasya* is the natural alternative for the treatment of local nasal disorders as well as other supraclavicular diseases.

Definition: When drug (*Churna*, *Swarasa*, *Kwatha* etc.) or medicated *Sneha* is administered through nostrils, the

procedure is called *Nasya*. As stated by *Acharya Sushruta*, medicines or medicated oil administered through the nose is known as *Nasya*.^[2] According to *Bhava Prakash* also, all drugs and measures that are administered through the nasal passage are called *Nasya*.^[3] *Nasya* is also known as *Shirovirechana*, which means the elimination of toxins from the area of the brain.

Etymology: The word *Nasya* comes from '*Nasa*' *Dhatu*, which conveys the meaning of '*Gati*.' Here the *Gati* is towards the head through the nose. According to *Vachaspathyam* the word '*Nastah*' means beneficial for the nose. According to *Monier Williams*, *Nasya* means belonging to nose or being in the nose. Therefore the things beneficial to nose or conducive things administered through nose is termed as *Nasya*.

Table no. 1 Classification of *Nasya*.

According to <i>Acharya Charaka</i> ^[4]	According to <i>Acharya Sushruta</i> ^[2]	According to <i>Acharya Vagbhatta</i> ^[5]
1. <i>Navana</i> : <i>Snehana</i> , <i>Shodhana</i> 2. <i>Avapeeda</i> : <i>Shodhana</i> , <i>Stambhana</i> 3. <i>Dhmapana</i> 4. <i>Dhooma</i> : <i>Prayogika</i> , <i>Snaihika</i> , <i>Vairechanika</i> 5. <i>Pratimarsha</i> : <i>Snehana</i> , <i>Virechana</i>	Mainly 2 types, <i>Shirovirechana</i> and <i>Snehana</i> which are further divided into 5 types: 1. <i>Nasya</i> 2. <i>Shirovirechana</i> 3. <i>Pratimarsha</i> 4. <i>Avapeeda</i> 5. <i>Pradhmana</i>	1. <i>Virechana</i> 2. <i>Brimhana</i> 3. <i>Shamana</i>
According to <i>Karma</i> , further 3 types: 1. <i>Rechana</i> : <i>Kaphaja Vikara</i> 2. <i>Tarpana</i> : <i>Vataja Vikara</i> 3. <i>Shamana</i> : <i>Pittaja/Raktaja Vikara</i>		According to <i>Sneha Matra</i> , 2 types ^[6] 1. <i>Marsha</i> 2. <i>Pratimarsha</i>
According to Plant part used, 7 types: <i>Phala</i> , <i>Patra</i> , <i>Mula</i> , <i>Kanda</i> , <i>Pushpa</i> , <i>Twaka</i> , <i>Niryasa</i>		

It is clear from the above table that mainly two types of classification of *Nasya Karma* are available in *Ayurvedic* literature. One is like *Rechana*, *Tarpana* etc. based on pharmacological action and other is based on the preparation of drug and its method of application like *Avapeeda* (extracted juice is used), *Dhuma* (medicated smoking), *Dhmapana* (blowing of powder). Details of various types of *Nasya* are following -

Navana Nasya: In this *Nasya* drops of a medicated oil or *Ghrta* are instilled in the nose. *Navana* is generally the *Sneha Nasya* and is known as *Nasya* in general. Its two types viz. *Snehana* and *Shodhana* as per *Acharya Charaka*, are described due to difference in disease indication and contents properties. The oil or *Ghrta* used in *Snehana Nasya* should be prepared from *Brihana*, *Madhura* and *Dhatuphoshaka Dravyas* whereas in *Shodhana*, drugs like *Pippali*, *Maricha*, *Shigru* etc. used for oil or *Ghrta* have *Tikhsna* and *Shirovirechana* properties.

Avapeeda Nasya: In this type, expressed juice of leaves or *Kalka* (paste) of required medicine is used for *Nasya*. *Acharya Sushruta* described *Avapeeda Nasya* under *Shirovirechana*. But in two varieties of *Avapeeda* as per *Acharya Charaka*, *Shodhana Nasya* having properties of *Shirovirechana* whereas *Stambhana Nasya* is given in disease like *Raktapitta* with milk, *Sarkara*, *Ikshurasa* etc.

Dhmapana/Pradhamana Nasya: In this *Nasya*, *Churna* (powder of drugs) is administered (inhaled) by nasal passage with the help of *Nadi Yantra* and its length should be 6 *Angula* with both side open ended. The fine powder of the drug is kept at one end and air is blown

from the other end so that medicine gets entered into the nostrils.

Dhuma Nasya: In this type of *Nasya*, fumes of the medicated *Dhoom Varti* are inhaled by nasal route and eliminated by oral route. *Acharya Sushruta* has not included it among the 5 types of *Nasya* but *Acharya Charaka* has described it with its three subtypes also. The reason behind its separate description may be that medicated smoking per mouth is called as *Dhmapana* and is not included in *Nasya*.

Pratimarsha and Marsha Nasya: In these both types, medicated *Sneha* (Oil/*Ghrta*) is administered through nostrils but the main difference between them is of dose. In *Pratimarsha Nasya* 1-2 drops are given while in *Marsha Nasya* the dose is 6-10 drops. *Marsha Nasya* can be called as the *Snehana* or *Navana Nasya*. Moreover *Pratimarsha Nasya* can be given daily in all seasons at morning and evening.

Time for Nasya Karma: According to *Acharya Charaka*, generally *Nasya* should be given in *Pravrita*, *Sharada* and *Vasant Ritu*. It should not be given on *Durdina* (cloudy or rainy day) and in *Anritu* (*Viparita Kala*). However in emergency it can be given in any season by providing the suitable environmental conditions. *Sharandhara* has described some conditions in which *nasya* can be given in night such as- *Lalasrava*, *Supti*, *Pralapa*, *Putimukha*, *Ardita*, *Karnanadi*, *Trishna*, *Shiroroga*, and in excessive vitiation of *Doshas*. According to *Astanga Sangraha*, *Nasya* should be given after *Bastikarma* if complete *Panchkarma* treatment is to be applied.

Table no. 2: Time of Nasya Karma.

According to <i>Doshaadhikya</i> ^[7]	According to <i>Ritu</i> (Seasons) ^[8]	According to Age
<ul style="list-style-type: none"> <i>Kaphaja roga - Poorvahna</i> (Morning) <i>Pittaja Roga - Madhyahna</i> (Noon) <i>Vataja Roga - Apraahna</i> (Evening) 	<ul style="list-style-type: none"> <i>Sharada</i> and <i>Vasanta</i> - Morning <i>Sheeta Kala</i> - Noon <i>Grishma</i> - Evening <i>Varsha</i> - During Sunlight 	<ul style="list-style-type: none"> According to <i>Acharya Vagbhatta</i> - 7 to 80 years⁹ According to <i>Sharandhara Samhita</i> - 8 to 80 years <i>Pratimarsha Nasya</i> can be administered from birth to death.

Course of *Nasya Karma*

- According to *Ashtanga Hridaya*, *Nasya* may be given for seven consecutive days
- *Nasya* should be given for 5, 7 or 9 days or till the patient shows the symptoms of *Samyaka Nasya* as stated in *Ashtanga Samgraha*^[10]
- According to *Acharya Sushruta*, *Nasya* may be given repeatedly at the interval of 1, 2, 7 and 21 days depending upon the condition of the patient and the diseases he suffer.^[11]
- *Acharya Charaka* has not mentioned specific duration of the *Nasya* therapy, but suggested to give according to the severity of disease.

Table no. 3: Dose of various types of Nasya.

Type of Nasya	Reference	Hrisya Matra	Madhyama Matra	Uttama Matra
Snehana	Sushruta Samhita	8 Bindu	Shukti (32 Bindu)	Panishukti (64 Bindu)
Shirovirechana	Sushruta Samhita	4 Bindu	6 Bindu	8 Bindu
Pradhmana	Charak Samhita	1 Kola (Churna Matra/powder dose)		
Avapeeda	Ashtanga Hridaya	4 Bindu	6 Bindu	8 Bindu
Marsha	Ashtanga Hridaya	6 Bindu	8 Bindu	10 Bindu
Pratimarsha	1-2 drops (Ashtanga Samgraha), 2 drops (Ashtanga Hridaya)			

Indications^[12]

Shirah and *Manya stambha* (Stiffness of head and neck), *Hanugraha* (rigidity of mandibular joint), *Peenasa* (rhinosinusitis), *Dantashula* (toothache), *Galashundika* (elongated uvula), *Galashaluka* (Adenoids), *Netra Roga* (eye diseases), *Vyanga* (pigmented spots on face), *Upjihvika* (Ranula or Salivary cyst), *Ardhavybedaka* (migraine), *Griva Roga* (neck disorders), *Mukha Roga* (oral cavity diseases), *Karnashula* (earache), *Ardita* (facial paralysis), *Shiro Roga* (various headaches), *Aptantraka* (convulsive disorders), *Galganda* (goitre), *Danta Roga* (dental diseases), *Arbuda* (malignancies), *Swarabheda* (hoarseness of voice), *Vakgraha* (Dysarthria), *Gadgadatva* (stammering), *Danta-Kesha-Samshru Pata* (falling of teeth, hair and moustache), *Nasa Roga* (nasal disorders), *Mukha Shosha* (dryness of mouth), *Avabahuka* (frozen shoulder), *Akala Vali* (premature wrinkling of skin) *Palita* (premature greying of hairs), *Darun Prabodha* (difficulty in awakening) etc.

Contraindications^[13]

Bhuktabhakta (person who has just taken meals), *Ajeerni* (person suffering from indigestion), *Pita Sneha* (person on oral snehana treatment), *Pita Madya* (person intoxicated due to alcohol intake), *Pita Toya* (person who has consumed plenty of water), *Shirah Snatah* (person who has taken head bath), *Kshudharta* (very hungry person), *Shramarta* (person exhausted due to excessive physical exercise), *Murcchita* (person suffering from transient loss of consciousness), *Shastra-dandahata* (injured person), *Vyavayaklanta* (tired due to excessive sexual indulgence), *Vyayama klanta* (tired due to excessive physical exercise), *Navajwara Pidita* (acute fever patient) *Shokabhitapta* (person in grief), *Virikta* (person subjected to *Virechana* therapy), *Anuvasita* (person subjected to *Anuvasana Basti*), *Garbhini* (pregnant female), *Navapratishyaya* (Acute Rhinitis, common cold) *Apatarpita* (emaciated), *Trishnarta* (person suffering from excessive thirst), *Gararta* (person suffering from slow poisoning), *Kruddha* (angry person), *Bala* (children), *Vruddha* (aged persons), *Vegavarodhitah* (person who suppresses natural urges), *Sutika* (puerperal female), *Kasa – Shwasa pidita* (person suffering from cough and difficulty in breathing) etc.

Mode of action of Nasya

Nasa is the portal (gateway) of *Shiras*, according to *Acharya Charaka*. The medicine given through the nose as *Nasya* enters the brain and eliminates only the morbid *Doshas* responsible for developing the disease.^[14] An example of *Munja* and *Ishika* is given in the *Chakrapani*

commentary to illustrate how *Nasya* eliminates *Doshas*. According to *Chakrapani*, drug administered as *Nasya* reaches the brain and draws out purely morbid *Doshas* as *Ishika* is stripped out from the fibrous coating of *Munja* adhered to it. Moreover, *Mastulungagam* (passage of brain matter, i.e. CSF through the nose) is a symptom referred in *Atiyoga* (excess activity) of *Virechana Nasya* in *Sushruta Samhita*.^[15] This reveals that *Acharya Sushruta* was already aware of the nose-brain relationship.

It is explained in *Ashtanga Samgraha* that *Nasa* is the gateway to *Shira* (head), the drug administered through the nostrils, enters *Shringataka* by *Nasa srota* and spreads in the *Murdha* (Brain) taking *Netra* (eye), *Shrotra* (ear), *Kantha* (throat), *Siramukhas* (vessel opening), etc. route and scrapes the morbid *Doshas* and extracts them from the *Uttamanga*.^[16] *Shringataka Marma* has been explained by *Acharya Sushruta* as a *Sira Marma* formed by the union of *Siras* (blood vessels) supplying the nose, ear, eye and tongue.^[17] The exact *sthana* of the *Shringataka marma*, according to the commentator *Indu*, is "*Shiraso Antarmadhya Murdha*" which can be considered as the middle cranial fossa. The verse i.e. "*Nasa hi Shirso dwaram*," which represents the intervention of *Nasya* in head and systemic disorders, can be justified on the basis of the above evidences.

Nasal route is easily accessible, convenient, and reliable with a porous endothelial membrane and a highly vascularized epithelium that provides a rapid absorption of compounds into the systemic circulation, avoiding the hepatic first pass elimination. Moreover nasal tissue is highly vascularized making it an attractive site for rapid and efficient systemic absorption. Vascular path transportation is also possible through the pooling of nasal venous blood into the facial vein which occurs naturally. The facial vein has no valves. It communicates freely with the intracranial circulation. It communicates through pterygoid plexus with the cavernous venous sinus.^[18] Olfactory nerve is chemoreceptor in nature. It is known that through olfactory pathway this nerve is connected with limbic system and hypothalamus which are having control over body functions and endocrine secretions.^[19] therefore the drugs administered through nose stimulate the higher centers of brain which shows action on regulation of endocrine and nervous system functions.

CONCLUSION

It can be stated that *Nasya Karma* is a therapeutic measure in which the drug is administered through nose. *Nasya aushadhi* reaches the brain and acts on higher brain centers that regulate various neurological, endocrine and circulatory functions and thus display local as well as systemic effects. In addition, intranasal drug delivery enables dose reduction, rapid attainment of therapeutic blood levels, quicker onset of pharmacological activity, and fewer side effects.

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