

CONCEPT OF NASYA ACCORDING TO AYURVEDIC AND MODERN SCIENCE

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ABSTRACT

Nasya is the shodhan procedure which can perform Uttamanga shudhi. Administration of the medicine through Nasal route is known as Nasya. Nasa is the root for head, the diseases related to head is best treated by this procedure. Nasya is divided into five types according to method of administration i.e. Navana, Avapidana, Dhmapana, Dhuma, Pratimarsha. The procedure of giving Nasya therapy may be classified into the following three headings: Purvakarma (Pre-measures), Pradhanakarma (Nasya therapy) and Paschatkarma (Post measures). Nasa is the gate way to Shirah, the drug administered through nostrils reaches Shringataka, a Siramarma by Nasa Srota and spreads in the Murdha (Brain), taking routes of Netra (Eyes), Shrotra (Ears), Kantha (Throat) and stretches the morbid Doshas from Urdhwajatru and expels them from Uttamanga.

KEYWORDS: Nasya, Nasa, Shirah, Uttamanga.

INTRODUCTION

Administration of the medicine through Nasal route is known as Nasya. As this is the nearest root, the diseases related to head is best treated by this procedure. It is only Shodhana procedure which can perform Utamanga Shuddhi.^[1] Nasya have been classified in various ways by different Acharyas. It is mainly classified according to its pharmacological action i.e. Shodhana, Shamana, Brimhana and on the basis of use of preparation for the Nasya e.g. Churna, Sneha etc. and Depends upon the composition of the herbs used in the medication.

Aims and Objectives: For compilation of the description of nasya in the classics and in depth evaluation in modern perspective.

Materials and Methods: Classical texts of Ayurveda and Indian sciences were scanned for references regarding Nasya. These references were compiled, analysed and discussed for a thorough and in depth understanding of the concept of Nasya.

Conceptual study

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Administration of the medicine through Nasal route is known as Nasya. As this is the nearest root, the diseases related to head is best treated by this procedure.

Urdhvanga Chikitsa is one of the important branch of Ashtanga Ayurveda and Nasya Karma is the main therapeutic measure of Urdhvajatrugata Roga. Acharya Sushruta has specified the word Shirovirechana to describe a particular variety of Nasya Karma.

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Acharya Charaka has used the term "Nastah Prachhardana" for Nasya, which denotes Shodhana done by Nasya.

Synonyms

Shirovirechana, Shirovireka, Murdhavirechana, Nasta Karma, Navana^[4]

Importance of Nasya

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- Best method to eliminate and alleviate the vitiated Doshas of Urdhwanga.
- Only Shodhana procedure which can perform Uttamanga Shuddhi.
- Different therapeutic forms of application like Churna, Kalka etc. according to Rogibala and Rogabala.
- Better chance of absorption through blood vessels.

Classification of Nasya

Nasya have been classified in various ways by different Acharyas. It is mainly classified according to its pharmacological action i.e. *Shodhana*, *Shamana*,

Brimhana and on the basis of use of preparation for the Nasya e.g. *Churna*, *Sneha* etc. and Depends upon the composition of the herbs used in the medication.

Table 1: Classification according to various Acharyas is shown in table.

No.	Name of Acharyas	No.	Reference	Classification
1	<i>Charaka</i>	3	Ch. Si. 9/89,92 Ch. Vi. 8/154	According to mode of action - <i>Rechana</i> , <i>Tarpana</i> , <i>Shamana</i>
		5		According to the method of administration – <i>Navana</i> , <i>Avapida</i> , <i>Dhmapana</i> , <i>Dhuma</i> , <i>Pratimarsha</i>
		7		According to various parts of drugs utilized – <i>Phala</i> , <i>Patra</i> , <i>Mula</i> , <i>Kanda</i> , <i>Pushpa</i> , <i>Niryasa</i> , <i>Twaka</i>
2	<i>Sushruta</i>	5	Su.Chi.40/21	<i>Shirovirechana</i> , <i>Pradhamana</i> , <i>Avapida</i> , <i>Nasya</i> , <i>Pratimarsha</i>
3	<i>Vagbhata</i>	3	As.H.Su.20/2	<i>Virechana</i> , <i>Brimhana</i> , <i>Shamana</i>
4	<i>Kashyapa</i>	2	Ka. Si. 2 & 4	<i>Brimhana</i> , <i>Karshana</i>
5	<i>Sharngdhara</i>	2	Sha.Utt.8/2, 11, 24	<i>Rechana</i> , <i>Snehana</i>
6	<i>Bhoja</i>	2	Dalhana Su. Chi. 40/31	<i>Prayogika</i> , <i>Snehika</i>
7	<i>Videha</i>	2		<i>Sangya Prabodhaka</i> , <i>Stmabhana</i>

Taking the *Charaka*'s classification as the basis, all the above mentioned types of Nasya are being described here separately.

1. Navana Nasya

Navana is one of the important and well applicable therapies of Nasya Karma.

Method

Navana is administered by instilling the drops of a medicated oil or *Ghrita* in the nose.

Classification

It can be mainly classified into *Snehana* and *Shodhana Nasya*.^[6]

Snehana Nasya

As the word *Sneha* suggests, *Snehana Nasya* gives strength to all the *Dhatu*s and is used as *Dhatuposhaka*.

Dose

The following is the dosage schedule for *Sneha Nasya*.

- Hina Matra* – 8 drops in each nostril.
- Madhyamamatra* – *Shukti Pramana* - 16 drops in each nostril.
- Uttama Matra* - *Panishukti Pramana* – 32 drops in each nostril

Benefits of Sneha Nasya

It is used for the oiling in case of light headedness. It gives strength to neck, shoulder and chest and increases eye sight.

Indications of Sneha Nasya

Vatika *Shirahshula*, *Keshapata*, *Dantapata*, *Shmashrupata*, *Tivrakarnashula*, *Timira*, *Nasaroga*, *Mukhashosha*, *Avabahuka*, *Akalaja Valita*, *Akalaja Palita*, *Darunaprabodha* and *Vatapittaja Mukharoga*.

Shodhana Nasya

Sushruta's *Shirovirechana* type is included in *Shodhana* type of *Navana Nasya*. It eliminates the vitiated *Doshas*.

Drugs

In this type of *Nasya*, oil is prepared by *Shirovirechana* *Dravyas* like *Pippali*, *Shigru* etc. can be selected.

Dose

It can be given in following dosage schedule according to *Sushruta*

- Uttama* - 8 drops
- Madhyama* - 6 drops
- Hina* - 4 drops.

Indications

Kaphapurna Talu & Shira, *Aruchi*, *Shirogaurava*, *Shula*, *Pinasa*, *Krimi*, *Ardhavabhedaka*, *Pratishyaya*, *Apasmara*, *Gandhagyananasha* and *Urdhvajatrugata Kapharogas* and *Urdhvajatrugata Shopha*, *Praseka*, *Arbuda* and *Kotha*.

2. Avapida Nasya

It is a type of *Shodhana Nasya*.

Definition

The word *Avapida* means the expressed juice of leaves or paste (*kalka*) of required medicine (*Chakrapani*).^[7]

Method

For this purpose *Kalka* of the required medicine is prepared first, which is placed in white & clean cloth & then is squeezed to obtain the required quantity of juice, administered directly into the nostril of the patient. The administration of the drug in this way is known as *Avapida Nasya* (Sha. Utt. 8/12). This type of *Nasya* may also be given with *Kalka* (paste) etc. Though *Sushruta* recommends it only for *Shirovirechana*, *Sharkara* & *Ikshurasa* have been recommended for *Stambhana* in the disease like *Raktapitta*.

Types

It is mainly of two types

1. *Stambhana Nasya*
2. *Shodhana Nasya*.

Like *Shirovirechana*, *Avapida Nasya* should be given in the following dose –

<i>Hina Matra</i>	- 4 drops
<i>Madhyama Matra</i>	- 6 drops
<i>Uttama Matra</i>	- 8 drops

Indications

<i>Manasaroga</i>	<i>Apasmara</i>	<i>Shirovedana</i>
<i>Chitta- vyakulavastha</i>	<i>Moha</i>	<i>Mada</i>
<i>Murchha</i>	<i>Sanyasa</i>	<i>Bhaya</i>
<i>Krodha</i>	<i>Bhiru</i>	<i>Sukumara</i>
<i>Krisharogi</i>	<i>Stri</i>	<i>Raktapitta</i>
<i>Vishabhighata</i>	<i>Apatantraka</i>	

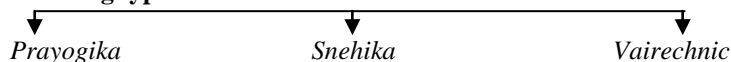
3. Dhumapana Nasya

Dhumapana or *Pradhamana* is a specific *Shodhana Nasya*.

Definition

Types

Dhuma Nasya are of the following types



Dose

During the prescribed time, a wise person should smoke twice for habitual variety of smoking, Once for *Snehika Dhuma* (Unctuous variety) and three to four times for the *Vairechnic Dhuma* (eliminative variety of smoking).

Drugs

For *Prayogika Dhuma* drugs like *Priyangu*, *Ushira* etc. should be used. For *Sneihika Dhuma Vasa*, *Ghritha* etc. and for *Vairechnic Dhuma*, drugs like *Aparajita*, *Apamarga* etc. should be used.

Indication

Dhuma Nasya is indicated in *Shiroroga*, *Nasaroga* and *Akshiroga*.

This type of *Nasya* is instilled with *churna* (powder) specifically for *Shirovirechana*. *Dhmapana* mentioned in *Charaka* & *Pradhamana* described in *Sushruta*.

Method

In *Pradhamana Nasya*, *Churna* (powder of drugs) is administered (inhaled) by *Nasal* passage with the help of *Nadi Yantra* (*Shadangula Nadi* both side open ended).^[8] The *Churna* (fine powder) of required drug is kept at one end, and air is blown from the other end, so that the medicine may enter into the nostrils.

Dose

According to *Videha* the dose of *Dhmapana Nasya* is three *Muchuti* (3 pinch). For the *Pottali* method *Churna* should be atleast 2 *Tolas* i.e. 20 gms.

Drug

Generally *Tikshna* drugs like
Rock salt Garlic *Guggulu*
Maricha *Vidanga*, etc

Indications

- Shiro Roga* (Disease of the head)
- Nasa Roga* (Disease of the nose)
- Akshi Roga* (Disease of Eye)

4. Dhuma Nasya

Definition

Dhuma Nasya is defined as medicated fume taken by *Nasal* route and eliminated by oral route. *Acharya Sushruta* has not described it as a type of *Nasya*. The smoking per mouth is known as *Dhumapana* and is not included in *Nasya*. It is harmful to eye sight.

5. Marsha – Pratimarsha Nasya

Definition

Marsha and *Pratimarsha* both consists of introduction of oil through the nostrils. It is well tolerated and is very much convenient procedure.

Pratimarsha and *Marsha* are same in principle, 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 to 10 drops.⁹

Pratimarsha Nasya

Pratimarsha Nasya can be given daily and even in all the seasons at morning and evening.

Method

It is given by dipping the finger in the required *Sneha* and then dropping it in the nostrils. The patient should be advised not to sniff the *Sneha* given in the form of *Nasya*.

Dose

2 drops morning and evening.

Indications

Pratimarsha can be given in

- Any age
- Any season
- Even in not suitable time & season i.e. in *Varsha* and *Durdina*
- *Bala*
- *Vridhta*
- *Bhiru*
- *Sukumara*
- Weak patients
- *Kshtakshama*
- *Trishna Pidita*
- *Mukhashosha*
- *Valita* and *Palita*

Contraindications

It is contraindicated in

- *Dushta Pratishtaya*
- *Krimija Shiroroga*
- *Madhyapi* (drunkers –habitual)
- *Badhira* (deafness)
- *Bahudosh*
- *Utklisha Doshas*

Suitable time for giving Nasya

According to *Charaka* generally *Nasya* should be given in *Pravrita*, *Sharada* and *Vasant Ritu*. However in emergency it can be given in any season by providing

artificial conditions of the above mentioned seasons, for example in summer *Nasya* can be given in cold places and in cold season it can be given in hot places.

a) Time schedule in different seasons should be as below

According to Ritu (Seasons)^[10]

Season	Nasya given at -
(i) <i>Shita Kala</i>	Noon
(ii) <i>Sharada</i> and <i>Vasanta</i>	Morning
(iii) <i>Grishma Ritu</i>	Evening
(iv) <i>Varsha Ritu</i>	Only when sun is visible.

b) Time Schedule^[11]

Navana Nasya should be administered according to the following time schedule.

(i) In <i>Kaphaja Roga</i>	Fore noon
(ii) In <i>Pittaja Roga</i>	Noon
(iii) In <i>Vataja Roga</i>	Evening

Table 2: Course of Nasya Karma.

No.	Name of Acharaya	Days
1	<i>Sushruta</i>	1,2,7,21
2	<i>Bhoja</i>	9
3	<i>Vagbhata</i>	3,5,7,8

Acharya *Charaka* has not mentioned specific duration of the *Nasya* therapy, but suggested to give according to the severity of disease.

Dose of Nasya Karma

Acharya *Charaka* has not prescribed the dose of the *Nasya*. *Sushruta* and *Vagbhata* have mentioned the dose in form of *Bindus* (drops), here one *Bindu* means the drop which is formed after dipping the two phalanges of *Pradeshini* (index) finger.

Table 3: Dosage of Nasya Karma.

No.	Type of Nasya	Drops in each Nostril		
		<i>Hrasva Matra</i>	<i>Madhyama Matra</i>	<i>Uttam Matra</i>
1	<i>Shamana Nasya</i>	8	16	32
2	<i>Shodhana Nasya</i>	4	6	8
3	<i>Marsha Nasya</i>	6	8	10
4	<i>Avapida Nasya (Kalka Nasya)</i>	2	2	2
5.	<i>Pratimarsha Nasya</i>	2	2	2

Administration of Nasya

The procedure of giving *Nasya* therapy may be classified into the following three headings.

1. *Purvakarma* (Pre-measures)
2. *Pradhanakarma* (*Nasya* therapy)
3. *Paschatkarma* (Post measures)

1) Purvakarma

Before giving *Nasya*, prior arrangement of the material and equipments should be done. There should be a special room "*Nasya Bhavana*" free from atmospheric

effects like direct blow of air and dust, etc. and lighted appropriately. In it the following articles should be collected.

(i) *Nasya Asana* - (a) A chair for sitting purpose. (b) A cot for lying purpose.

(ii) *Nasya Aushadhi* – Drugs required for induction and management of *Shirovirechana* should be collected in the form of *Kalka*, *Churna*, *Kwatha*, *Kshira*, *Udaka*, *Sneha*, *Asava*, *Dhuma* etc. in sufficient quantity.

(iii) *Nasya Yantra* - For *Snehana*, *Avapida*, *Marsha* and *Pratimarsha Nasya*, there should be a dropper or *Pichu*. For *Pradhamana Nasya Shadangula Nadi* and specific *Dhumayantra* for *Dhum Nasya* are required.

Besides this one needs efficient assistant, dressing material, spitting pots, bowl, napkins and towels also.

- **Selection of the patient:** The patient should be selected according to the indications and contraindications of *Nasya* described in classics.
- **Preparation of patient:** According to *Sushruta's* description following
 - Regimens are given to the patient to prepare him for *Nasya Karma*.
 - Patient should have passed his natural urges like urine & stool.
 - Should have completed his routine activities like tooth brushing, bath, etc.
 - Light breakfast 1 hr prior to *Nasya karma* is advised.
 - Now the patient is ready for *Nasya karma*. He should lie down on *Nasya table*. Before *Nasya*, *Mridu*

Abhyanga (massage) should be done on scalp, forehead, face and neck for 3 to 5 minutes by medicated oil like *Bala Taila*, *Panchaguna Taila* etc.

- *Snehapana* should not be given immediately before *Nasyakarma*.
- *Swedana* should not be given to the head. *Mridu Swedana* may be given for elimination of *Doshas* and liquification of *Doshas*. *Tapa sweda* may be given on *Shira*, *Mukha*, *Nasa*, *Manya*, *Griva* and *Kantha* region. Cloth dipped in hot water may be useful for *Mridu Sweda*. After *Swedana* smooth massage should be applied on regions of *Gala*, *Kapola* and *Lalata*.

2) *Pradhana Karma*

According to *Charaka*, *Vagbhat* and *Sushrut*, the following procedure should be adopted for performing the *Nasya Karma*.

- Patient should lie down in supine position with ease on *Nasya table*.
- *Shira* (head) should be "*Pralambita*" (lowered i.e. hanging down) and feet are slightly raised.
- Head should not be excessively flexed or extended.
- If the head is not lowered, the *Nasal* medication may not reach to the desired distinction and if it is lowered too much, there may be the danger of getting the medication to be lodged in brain.
- After covering the eyes with clean cotton cloth, the physician should raise the tip of the patient's nose with his left thumb and with the right hand the luke warm medicine (*Sukhoshna* drug) should be dropped in both the nostrils alternately in proper way.
- The drug should be neither less nor more in the dose i.e. it should be in the proper quantity.
- It should also be neither very hot nor very cold. i.e. it should be luke warm.

- The patient should remain relaxed while taking *Nasya*. He should avoid speech, anger, sneezing, laughing and head shaking during *Nasya Karma*.

3) *Paschat Karma*

According to *Charaka*, *Ashtanga Hridaya* and *Sushruta*, following regimen should be followed.

After administration of medication through *Nasal* passage patient should lie supine (*Uttana*) for about 2 minute time interval & ask him to count numbers upto 100. After an administration of *Nasya* feets, shoulders, palms and ears should be massaged. The head, cheek and neck should be again subjected to sudation.

- The patient should avoid swallowing of *Nasya Aaushadhi*.
- The oil that has been dropped in the nose may be repeatedly drained out together with the morbid *Doshas*, specially mucus; should be eliminated by the patient by sneezing slowly.
- Care should be taken that no portion of the medicated oil is left behind.
- Patient should spit out the excessive medicine which have come into the oropharynx.
- Medicated *Dhumapana* and *Gandusha* are advocated to expel out the residue mucus lodged in *Kantha* (gullet) and *Shringataka*.
- Patient should stay at windless place. Light meal (*Laghu Ahara*) and luke warm water (*Sukhoshna Jala*) is allowed.

Patient should avoid dust, smoke, sunshine, alcohol, hot bath, riding, anger, excess fat and liquid diet.

Importance of Post *Nasya* Massage

- A comfortable light massage on the frontal, temporal, maxillary, mastoid & on *Manya* regions may help to subside the irritation of somatic constriction due to heat stimulation.
- It may also help in removing the slush created in these regions.
- However, interesting here is regarding *Manya* which is a *Marma* existing in neck on either side of the trachea which likely correspond to the carotid sinuses of the neck.
- Pressure applied on the baroreceptors may bring the dearranged cerebral arterial pressure to normalcy (Hejmadi S. 1985). Because these receptors lying on bed of bifurcation of common carotid artery have a buffering action on the cerebral arterial pressure (Best & Taylor 1958).

Mode of Action of *Nasya*

A clear description regarding the mode of action of *Nasya Karma* is not available in Ayurvedic classics. *Acharya Charaka* has described that *Nasa* is the only gateway to *Shirah*. (Ch. Si. 9/88). So, the medicine administered through *Nasa* can easily spread to *Shirah* and get absorbed.

Acharya Vagbhata has given some more details about the mode of action (As.S.Su.29/2).^[12] It is explained that *Nasa* being gate way to *Shirah*, the drug administered through nostrils reaches *Shringataka*, a *Siramarma* by *Nasa Srota* and spreads in the *Murdha* (Brain), taking routes of *Netra* (Eyes), *Shrotra* (Ears), *Kantha* (Throat) and stretches the morbid *Doshas* from *Urdhwajatu* and expels them from *Uttamanga*.

Indu commentator of *Ashtanga Samgraha* mentioned that *Shringataka* is situated in the inner side of middle part of the head.

The role of *Shringataka Marma* in *Nasya Karma* can be interpreted in the following ways-

Table 4: Facts about *Shringataka Marma*.

Facts	Interpretation
<i>Shringataka</i> is the union point of <i>Shrotas</i> of <i>Jihwa</i> , <i>Ghrana</i> , <i>Netra</i> and <i>Shrotra</i> (Su. Sha. 6/27)	Confirms the influence of <i>Nasya Karma</i> on senses.
<i>Shringataka</i> is a <i>Sadya Pranahara Marma</i>	Proper stimulus can cause desired effect suddenly.
<i>Shringataka</i> is a <i>Siramarma</i>	Through these <i>Nasya</i> , <i>Dravya</i> is absorbed in vascular circulation.

So in Ayurvedic point of view assimilation and transportation of *Nasya* drug take place through

Shringataka Marma and reaches to local as well as general circulation.

Table 5.

Pharmacokinetics	Ayurvedic comparison
Drug absorption may be through <ul style="list-style-type: none"> Receptor cells of olfactory mucosa Sensory receptors of Trigeminal nerve Cavernous Sinus 	<i>Shringataka Marma</i>
Circulation of drug <ul style="list-style-type: none"> Neuronal pathway (A) Olfactory (B) Trigeminal Circulatory pathway (A) Cavernous sinus 	<i>Prana</i> <i>Sira marma</i>
Target <ul style="list-style-type: none"> Limbic System Sensory area trigeminal nerve Circulation 	Psychic level of <i>Prana</i> Sensory level of <i>Prana</i> Physical level of <i>Prana</i>

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