Significance of *Nasya Karma in Panchkarma*

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**ABSTRACT**

The man of 21st century is living under various stress, anxiety, pressure, irregular or hectic lifestyle and unnatural food habits. So the prevalence of diseases are on rise day by day like stress induced insomnia, dementia, anxiety, tension headache, depression etc. a minute change in status of *mana* affect the homeostasis of the body. Physical and mental health plays an equal role for a healthy life of an individual. In this competitive era, it is a big challenge for a person to maintain healthy life. Modern medicine has many drugs for the treatment of mental disorders i.e., sedative, tranquilizers, antidepressant etc. but they have many side effects like drug dependence, hypotension, nausea, lack of coordination, depression etc. *Ayurveda* has given equal importance to physical and mental health. There is very rich profile of drug-treatment modules for prevention, promotion of mental health and to cure mental disorders. Among them *Nasya karma* is a procedure of great importance in respect of mental health. *Nasya* is considered as the best procedure because *Nasa* (nose) is considered as a direct gateway of *Shira* (brain). If we administer a medicine through the *Nasa* within a short interval it affects the brain. Selection of medicine depends upon *Doshas* involved in a particular disorder. If a person is suffering from stress induced insomnia, anxiety, panic attack and attention deficit syndrome with hyperacidity, it may be due to vitiation of *Vata*, so we can use *Bhrimhana (snehana) nasya* to balance the vitiated *vata*. If a person suffers from *Kahaja vikara* then *Shodhana nasya* is performed to balance the *Kapha dosha*. In *Pitta* dominant disorder *Shamana nasya* with *Pitta Shamaka* drugs are administered.

**KEYWORDS**

*Manas, Nasya, Ayurveda, Mental Health*
INTRODUCTION

The word Nasya is derived from 'Nasa' Dhatu. It conveys the sense of 'Gati'. Here, the Gati towards the internal structure mainly to head through Nose, accessory structure of Nose and head proper. Nasa Dhatu is used in sense of Nose. The literal meaning of the word Nasya is being in the nose or the things beneficial to the nose. The medicaments which administered through nose are called as Nasya, stated by Acharya Sushruta. Arundatta states 'Nasayam bhavam Nasya' which clearly indicate the rout of administration.

According to Bhavaprakasha also, all drugs and measures that are, administered through the nasal passage are called Nasya. Sharangadhara and Vagbhata are of same view.

Synonyms
Shirovirechana, Shirovireka, Moordhavirechana, Navana and Nastah Karma are the synonyms of Nasya Karma. The word Virechana means elimination of morbid dosha from the body. Thus Shirovirechana or Moordhavirechana indicate its main function of elimination of morbid Dosha particularly from the Shirah or parts situated above the clavicle. Charaka has used the term 'Nastah Prachhardana' for Nasya which denotes Shodhana done by Nasya.

The word Nastaha and Navana denote the site of administration. Nasta Karma and Navana Karma mean the measures, which are beneficial to nose or region of the nose. On the basis of the foregoing, it can be stated that Nasya Karma is a therapeutic measure in which the drug administered through nose by eliminating vitiated Doshas situated in head and its constituent parts; cures the disease of those parts. (Urdhvaajatrugata Vikaras).

Importance of nasya karma
Best method to eliminate and alleviate the vitiated Doshas of Urdhvanga.

- Only Shodhana procedure which can perform Uttamga Shuddhi.
- Different therapeutic forms of application like Churna, Kalka etc. According to Rogibala and Rogabala.
- Only procedure, which can directly influence Indriyas.
- Better chance of absorption through blood vessels.
- Wide range of application.

Historical review of nasya
India has been popular since time immortal for it’s highly developed system of Indian medicine.
It is generally believed that the Indian culture and Ayurvedic Glimpse can be seen in from Vedic time in some Mantras of Vedas. Although it is very difficult to say that the procedures of Nasyakarma therapy were in practice in Vedic period. But the few Mantras or Rigveda indirectly refer towards the Karmas which are included under PanchaKarma measures. There is a Mantras of Rigveda in which eradication of Roga from the routes of Nasa (nostrils), Chibuka (chin), Shira (head), Kama (ears) and Rasna (tongue) is mentioned.

From this one can derive a conclusion that Nasya or Shirovirechana was one method in eradication of disease from the above-mentioned routes most probably refers towards Nasa (nose) or Shirovirechana.

A reference to the use of "Sanjivani" for Nasya Karma is available in Valmiki Ramayana when Lakshamana became unconscious due to the blow of Meghnatha. Other earlier writers on the subject were Nimi, Janaka and Videhadhipati were contemporary writers during that period. Later on as the specially developed more workers devoted themselves to it whose names are follows - Acharya Krishna A'treya. Acharya Karala, Acharya Shaunaka, Acharya Bhadra, Acharya Satyaki, Acharya Kartikeya, Acharya Gargya, Acharya Galava and Acharya Bhoja but their works are not available now.

**Ayurvedic Classics:** -

After Buddha period Charaka Samhita and Sushruta Samhita became famous. The subject of NasyaKarma therapy is elaborately described in Charaka and Sushruta Samhita. During 6th century A.D. Acharya Vagbhatta, Vriddha - Acharya Vagbhatta wrote Ashtanga Hridaya and Ashtanga Samgraha respectively and has elaborately dealt with the subject in their works Acharya Chakrapani (11th century A.D.), Acharya Sharangadhara (12th century A.D.) and Acharya Bhavamishra (15th century A.D.) have also contributed to the subject in detail. In Yogaratnakar the subject is also available and contributions have been made by author.

**History of Modern Medicine in Relation to the Nasva Therapy:** -

The uses of some powders for producing sneezing are available, which was utilized by Hippocrates (4th century B.C.) and Halen (1st century A.D.). After that during 17th century A.D., Barcon (1626) and Salva (1631) used powders for administration through the nose. Hallend (1601) was the first to use the technical term “Errhines” meaning tent like devices to be used into the nose. T. Johnson (1634) mentions about diy
errhines to be blown through pipe of quill into the nose. Start (1680) and fuller (1710) and A.T. Tomson (1811) administered powder tobacco through nose to produce sneezing. At present many preparations in the forms as stated below are being used for different purpose:

- Medicine - for local use
- Local anesthesia
- Inhalation - for general anaesthesia.

Classification of Nasya:

All the Acharyas have classified Nasya in different way. Mainly classified according to its function and on the basis of of preparation used for the Nasyakarma, i.e. Churna, Sneha etc., The classification according to Acharyas in details is as follow.

According to Acharya Charaka:
The Nasya is of five type’s i.e.⁶
1. Navana
2. Avapida
3. Dhmapana
4. Dhuma
5. Pratimarsha
Navana is further divided into (Snehana) and Shodhana. Avapidana into Shodhana and Stambhana. Dhuma into Prayogika, Vairechanika and Snaihika while Pratimarsha is divided into Snehana and Shodhana.

According to its function. Nasya has been classified into three groups i.e. Rechana, Tarpana and Shamana.⁷

Charka has also mentioned seven types of Nasya according to parts of the drugs to be used in Nasya karma i.e. Phala, Twaka⁸.

According to their functions, Nasya is of 2 types i.e. Shirovirechana, i.e. for the elimination of morbid dosha from Shirah, Pratimarsha and Nasha types may be used for Snehana⁹.

According to Acharya Sushruta
The Nasya is of five type’s i.e.¹⁰
1. Shirovirechana
2. Pradhamana
3. Avapida
4. Nasya
5. Pratimarsha

According to Acharya Vagbhnta¹¹
Ashtanga Samgraha has classified Nasya according to the function viz. Virechana, Brimhana, Shamana. Brimhana and Snehana Nasya have been further classified according to the doses into two groups i.e. Marsha and Pratimarsha. Avapida Nasya may be given for both Virechana and Shamana while Pradhmna Nasya is given only for Shirovirechana.

According to Astanga Hridaya, Nasya is of 3 types viz. Rechana, Brimhana and Shamana.

According to Acharya Kashyapa
Nasya is of two type’s i.e. Brimhana and Karshana, mentioned by Acharya Kashyapa. These two types also known as

1. Shodhana
2. Purana Nasya

According to Acharya Sharangadhara

Acharya Sharangadhara has classified Nasya, according to their function into two group’s i.e. Rechana and Snehana. Rechana Nasya is further subdivided into Avapida and Pradhamana Shamana Nasya is subdivided into Marsha and Pratimarsha. Bhoja has classified two types of Nasya i.e. Prayogika and Snaihika. Videha has mentioned two types of Nasya i.e. Sangyaprabhodhaka and Stambhana.

All the above-mentioned types of Nasya are being described here separately, on the basis of Charaka’s classification.

1. Navana Nasya -

Navana is one of the important and well applicable therapies of Nasya Karma. It can be mainly classified into Snehana and Shodhana. Navana is administered by instilling the drops of a medicated oil or Ghrita in the nose. Navana is generally a Snehana Nasya and is known as Nasya in general.

Snehana Nasya: -It is used for the feeling of head lightness, it gives strength to neck, shoulder and chest and beneficial for eyesight.

Indication


Table 1 The dosage of Snehana Nasya

<table>
<thead>
<tr>
<th>Type</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hina matra</td>
<td>8 drops in each nostril</td>
</tr>
<tr>
<td>Madhyama matra</td>
<td>16 drops in each nostril (Shukti pramana)</td>
</tr>
<tr>
<td>Uttama matra</td>
<td>32 drops in each nostril (Panishukti)</td>
</tr>
</tbody>
</table>

Shodhana Nasya: -

Shirovirechana, which is mentioned by Sushruta, can be categorized in Shodhana type of Navana Nasya. In this type of Nasya oil prepared by Shiro virechaka dravya like Vidanga, Apamarga, Shigru etc. can be used.

Indication-

Shleshma abhivyapta talu, kantha & shirah, Arochaka, Shirogaurava, Shirahshoola, Pinasa, Ardhavabhedaka, Krimi, Pratrishtyaya, Apasmara, Gandhaagyana, Urdhvajatrugata kaphavikara.

Dose: -

According to Sushruta, the dosage of Shodhana Nasya is as follows:
Table 2  According to Sushruta, the dosage of Shodhana Nasya

<table>
<thead>
<tr>
<th>Type</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hina matra</td>
<td>4 drops</td>
</tr>
<tr>
<td>Madhyama matra</td>
<td>6 drops</td>
</tr>
<tr>
<td>Uttama matra</td>
<td>8 drops</td>
</tr>
</tbody>
</table>

**Time Schedule**

Navana Nasya should be administered according to the following time schedule.
1. In Kaphaja roga - Fore noon.
2. In Pittaja roga - Noon.
3. In Vataja roga - After noon.

In healthy persons Navana Nasya should be given according to the following seasonal schedule.
1. Sharad and Vasanta ritu & Swastha-Morning
2. Shitakala- Noon
4. Varsha ritu- only when sun is visible.

2. Avapida Nasya -
The word Avapida Nasya means Nasya given by extracted juice of leaves or pest (kalk) of required medicine." It is of two types.\(^\text{16}\)
1. Stambhana nasya.
2. Shodhana nasya.

Shusruta has opined the other name for Shirovechana 'Nasya is used for the purpose of producing Shodhana in head. In Raktapitta and other Pitta disorders the Stambhana variety of Nasya is used, with Sharkarra Ikshurasa, Ksheera, Ghrita and Mamsa rasa. The Avapida Nasya has been classified into three categories by Chakrapani, i.e. Shodhana, Stambhana, Shamana. Videha has classified Avapida Nasya into two types, i.e. Samgya prabodhana and Stambhana.

**Indication:**

Vishabhigata, Bhaya, Sanyasa, Manasaroga, Murchha, Chittavyakulavastha, Moha, Krisha, Apatantraka, Bhiru, Mada, Durbala, Apasmarai, Sukumara, Shirovedana, Krodha, Raktapitta

**Dose:**
The dosage of Avapida Nasya is as like as Shirovirechana viz, 4, 6, 8 drops is Hina, Madhyama and Uttama matra respectively

3. Dhmapana Nasya -

Dhmapana Nasya is a variety of Shodhana Nasya. It is also known as Pradhamana Nasya. The Churna is administered through nasal passage with the help of 'Nadi yantra', which is 6 Angula long and both side open ended. The Churna of required drug is kept at one end, and air is blown from the other end, so that medicine may enter into the nostrils.

Videha has mentioned another method for Pradhamana. In which fine powder of drug kept in a Pottali made by a thin cloth is used
to inhale, so that smallest particles of the medicine enter into the nostrils.

**Indication:**
- C'hetovikara.
- Krimija shiroroga.
- Vishabhipanna

**Dose:**
According to Videha the dose of Dhmapana Nasya is three Muchuti (3 pinch). For the Pottali method Churna should be Shukti Pramana (At least two Tolas i.e. 20 gms).

4) **Dhuma Nasya**

*Dhuma Nasya* is defined as medicated fume taken by nasal passage and eliminated by oral route. According to Chakrapani, fume taken by mouth is known as Dhumapana and is not included in Nasya. Dhuma Nasya, which is of 3 types.

1. Prayogika.
2. Snehika.
3. Vair echanika.

Acharya Charaka has mentioned Dhumanadi for Dhuma Nasya. The breath of Dhumanadi is of measuring one's own finger and length for Virechana type 24 angula, for Snehika Dhuma 32 angula length, for Prayogika Dhuma 36 angula length is suggested.

Indication: Shiroroga, Nasaroga, Akshiroga.

**Dose:**
During the prescribed times, a wise person should smoke twice for Prayogika Dhuma (Habitual variety). Once for Snehika Dhuma (Uncutous variety). And three to four times for the Virechanic Dhuma (Eliminative variety), for Prayogika Dhuma drugs like Harenuka. Priyangu, Ushira etc.should be used. For Snehika Dhuma vas, ghrita etc. and for Virechanic Dhuma, drugs like Aparajita, Apamarga etc. should be used.

5) **Marsha- Pratimarsha Nasya**

*Marsha* and *Pratimarsha* both consist of introduction of oils through the nostrils. It is well tolerated and is very much convenient procedure. *Pratimarsha* and *Marsha* are same in principles, but the main difference between them is of dose. In *Marsha Nasya* the dose is 6 to 10 drops, while in *Pratimarsha Nasya* 1-2 drops are given.

*Pratimarsha Nasya* can be given daily and even in all the seasons at morning and evening. It is given by dipping the finger in the required Sneha and then dropping it in the nostrils.

Indication are Kshata, Kshama, Bala, Vriddha, and Sukhatma.

Contraindication are Dusta peenasa, Madya peeta, Bala, Krimi dushita murdhni, and Utklishta dosha.

**Dose:**
Two drops in each nostril at morning and evening. The *Sneha* should at least reach from *Nasa* to *Kantha*, but it should not be
too much that could produce secretion in kantha.

**Classification of Nasya according to their pharmacological action**

A. Rechana.
B. Tarpana (Brimhana).
C. Shamana.

**Rechana nasya (virechana nasya)**

The Rechana Nasya denotes to elimination of vitiated Doshas from Urdhvajatrugata part of the body. Churna of the required drug or the Sneha prepared with the Shirovirechana drugs like 'Apamarga, Pippali, maricha etc. should be used. It may also be given with Kwath or Svarasa of Shirovirechana drugs or by dissolving these drugs in Madya, Madhu, Saindhava, Asava, Pitta and Mutra or mixed with the drugs specific for that disease.

**Indication:**

It is indicated specifically in Kaphaja type of Shiroroga like Stambha, Supti and Guruta of Shirah. Sushruta and Vagbhata have given its other indications as Shleshma abhivyapata in Talukantha and Shirokrimi, Arochaka, Shoola, Shirogaurava, Pinas, Pratishyaya, Urdhvajatrugata Kaphaja vikara. Urdhvajatrugata shopha, Praseka, Vairasya, Arbuda, Dadru and Kotha, Galaroga, Sannipataya jvara, Atinidra, Manovikara, Abhishyanda, Sarpadnasha and Murchha. Shirovirechana Nasya may be given with Kalka, Churna and Swarasa also, but if the immediate effects are required, Churna should be used. Rechana Nasya prepared in Sneha is particularly indicated to the afraid, women, weak and delicate patients.

**Tarpana Nasya**

Tarpana Nasya mentioned by Charaka. Sneha Nasya described by Sushruta and Sharangadhara and Brimhana Nasya mentioned in Astanga Samgraha may be considered as the synonyms of each other. The Sneha prepared with Vata Pittahara drugs should be used and the drugs of Madhura Skandha may also be employed. According to Vagbhata, Sneha prepared with the drugs useful for that particular disease should be used for Snehapaka of Nasya. Exudations of certain trees, meat soup and blood also may be administered.

**Indication:**

It is specifically used for Vatika Shiroroga, Ardhavabheda, Dantapata, Keshapata, Darunaka and other Vata-Pittaja roga. Sushruta also advised the use of Snehana Nasya for promoting the strength and increasing the vision power. It is also for curing the shirahkarroa and Ardita.

**Shamana Nasya**
Shamana Nasya is used for the alleviation of Dosha situated in Shirah (head). Charaka and Vagbhata have described Shamana Nasya only. It may be correlated with Snehana and Marsha-Pratimarsha.

**Indication:**
It is used to stop bleeding in Raktapitta. It is also indicated in Akala Valita. Palita and Khaliitya, Darunaka, Raktaraji, Vyanga and Nilika. Anutail Nasya as a measure of Swasthavritta should be administered in Pravritta, Sharada and Vasanta ritu to promote the functions of eyes, ears and nose to prevent Khaliitya and Palitya and other disease like Manyastambha, Shirahasool, Ardita, Hanustambha, Pinasa, Ardhavahbedaka. Shirokamapa and sudden onset of other disease which may occur in the Urdhvajatru pradesha.

**Indications of nasya:** -
The specific indications of Shodhana Nasya. Tarpana Nasya, Shamana Nasya, Navana Nasya, Avapida, Dhmapana and Dhuma Nasya etc. have already been discussed in the classification of Nasya, but Charaka has mentioned the following general indications in which Nasya therapy should be used. Shirastambha (stiffness of head), Akshiroga (disease of eyes), Manyastambha (stiffness of neck), Murdharoga, Dantastambha, Shiroroga, Galagandra, Ardita, Hanugraha, Apatanaka, Pinasa, Galaganda (goiter), Galashundika, Dantashula (toothache), Timira, Vartmaroga, Danta chala (movable tooth), Vyanga, Akshiraji, Upajihvika, Arbuda (tumor), Ardhavabhedaka (hemicrania), (hoarseness of voice), Grivaroga, Vakgraha, Skandha roga (disease of shoulder), Gadgadatva, Amsashula (pain at scapular region), Krathana, Nasikaroga, Urdhvajatrugata

**Contra indications of naysa:** -
In Ayurvedic classics, some special conditions have been mentioned in which Nasya should not be administered, otherwise various complications may occur. This is a general rule but it is also said that in emergency condition seasonal regime can be over rule. Common contra indication of Nasya mentioned in Brihatrayi has been mentioned below.

Bhuktabhakta (who has taken meal), pita sneha (who has drunken oil or ghee), pita madya (who has taken alcohol), pita toya (who has taken water), snatukama (who wants to have head bath), anuvasita (who has undergone oil enema), nava pratisyaya (acute rhinitis), durdina (bad day), anritu (bad season).

**Suitable time for giving Nasva:** -
According to Charaka, generally *Nasya* should be given in *Pravrita, Sharada* and *Vasant ritu*. However, in emergency it can be given in any seasons by providing artificial condition 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.  

<table>
<thead>
<tr>
<th>Ritu</th>
<th>Time of Nasya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grishma ritu</td>
<td>Before noon (morning)</td>
</tr>
<tr>
<td>Sheeta ritu</td>
<td>Noon</td>
</tr>
<tr>
<td>Varsha ritu</td>
<td>Day should be clear</td>
</tr>
<tr>
<td>Sharada + Vasanta</td>
<td>In the morning (Vagbhata)</td>
</tr>
<tr>
<td>Shishira + Hemanta</td>
<td>Noon</td>
</tr>
<tr>
<td>Grishma Ritu</td>
<td>Evening</td>
</tr>
<tr>
<td>Varsha Ritu</td>
<td>When sunlight appear</td>
</tr>
</tbody>
</table>

According to Sushruta in normal condition *Nasya* should be given on empty stomach, at the time when the person usually takes his meal.

B) Time schedule in *Doshaja vikara* should be as below.  

<table>
<thead>
<tr>
<th>Doshaja vikara</th>
<th>Time of Nasya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaphaja vikara</td>
<td>Morning</td>
</tr>
<tr>
<td>Pittaja vikara</td>
<td>Noon</td>
</tr>
<tr>
<td>Vataja vikara</td>
<td>Evening</td>
</tr>
</tbody>
</table>

Vagbhata has prescribed same timing as Sushruta has mentioned. According to Doshaja vikara it has suggested some more important points also.

*Nasya* may be given daily in morning and evening in *Vataja Shiroroga* Ardhavabhedaka, *Hikka, Aptantraka, Manyastambha* and *Swarbhramsha*.

Sharangadhara has described same time schedule for different seasons as Sushruta has mentioned. V'ridhha Vagbhatta has stated that *Nasya* could be given in night, if the patient is suffering from *Lalasrava, Supti, Praalapa, Putimukha, Karnanadi, Trishna, Ardita, Shiroroga* etc. conditions.

*Nasya* may be given for seven consecutive days. In condition like *Vata dosha* in head, hiccough, convulsion, loss of voice etc. it may be done twice a day

The use of *Nasya* on 3rd, 5th, 7th, and 9th day or till the patient shows the symptoms of *Samyaka Nasya* as slated in Astanga Sangraha. Bhoja says that if *Nasya* is given continuously beyond nine days then it became *Satmya* (adaptable) to patients and if given further, it neither benefits nor harm to the patients.

According to Sushruta, *Nasya* may be given repeatedly at the interval of 1, 2, 1 and 21 days depending upon the condition of the patient and the diseases he suffers. Charaka has not mentioned specific duration of the *Nasya* therapy, but suggested to give according to the severity of disease.

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Acharya</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sushruta</td>
<td>1,2,7,21</td>
</tr>
<tr>
<td>2</td>
<td>Bhoja</td>
<td>9</td>
</tr>
</tbody>
</table>
3 Vagbhata 3, 5, 7, 8

**Dose of Nasya:**

The dose of *Nasya* drug depends upon the drug utilized for it and the variety of the therapy. Charaka has not prescribed the dose of the *Nasya*. Sushruta and Vagbhata have mentioned the dose in form of Bindus, here one Bindu means the drop which is formed after dipping the two phalages of *Pradeshini* (index) finger

Table 5 Dose of Nasya

<table>
<thead>
<tr>
<th>Types of Nasya</th>
<th>Hrisva Matra</th>
<th>Madhyama Matra</th>
<th>Uttam Matra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shamana Nasya</td>
<td>8</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Shodhana Nasya</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Marsha Nasya</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Avapida Nasya</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Pratimarsha Nasya</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Administration of nasya

The method of Nasya therapy may classify into three headings

1. Poorva Karma.
2. Pradhanaka Karma.
3. Pashchata Karma.
   a. 1. Poorva karma: -
   b. Before administrating Nasya mainly three points should be taken into consideration. Collection of the things, which are necessary for Nasya therapy.
   c. There should be a special room "Nasya Bhavana" free from direct blow of air and dust, and lighted appropriately.
   d. Nasya Aasana- A chair for sitting purpose. A cot for lying purpose,
   e. The drugs which are necessary in form of Kalka, Kwatha. Churna, Kshira, Sneha, Aasava, Dhutna etc. in sufficient quantity,
   f. Nasya Yantra- For Snehana, Avapida. Marsha and Pratimarsha nasya there should be a dropper or pichu (cotton). For Pradhainana Nasya shadangula Nadi and specific Dhumayantra for Dhuma Nasya are required.
   g. There should be a big pot (bowl) for expelled materials,
   h. Napkin and towel must be there for cleaning of the mouth.

Selection of the patient:

a. Patients should be selected according to the indication and contra-indication of *Nasya* described in Ayurvedic classics,

b. For *Nasya Karma*, suitable age of patient must be in between 7 to 80 yrs. The time for administrating *Nasya* should be selected according to the *Doshika* predominance of the disease. Simultaneously seasonal factors also should be considered for deciding time of the *Nasya*. All these aspects are already described earlier.

Preparation of the Patient:
The patient should pass the natural urges like urine, stool etc. After that diet should be given to them. After some time toothbrush (and other routine daily activities like bath, prayer, light breakfast (not feel hungry) etc. should be done.) Before giving Nasya, Snehana and Swedana Karma should be administered to the head, Snehana Karma: - Only Bahya Shiroabhyanga should be performed by some oil like Tila taila, Panchaguna taila, Dhanvantary tail etc. for at least three to five minutes. Sneha should not be given by mouth.

a. Swedana Karma: - According to Ayurvedic classics Swedana should not be given to the head. Mridu swedana may be given for elimination of doshas and liquifaction of Doshas. Panitapa Sweda may be given on Shirah, Mukha, Nasa, Manya, Griva and Kantha region. Cloth dipped in hot water may be useful for Mridu sweda.

2. Pradhana Karma

For the description purpose Pradhana Karma may classify into three divisions:

Nasya Karma: -

a. The patient should be lie down in supine position with ease on Nasya shayya Head should be "Pralambita" i.e. hanging down slightly and foot part is to be 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.

b. After covering the eyes with cotton cloth, the physician should raise the tip of the patient's nose with has left thumb and with the right hand, lukewarm medicine should be dropped in both the nostrils in proper way. The dose of the Nasya should be given as previously described or according to the Bala of the patient. He should avoid speech, anger, sneezing, laughing & head shaking during Nasya Karma.

- Immediate measures after giving Nasya and some important instructions: -

a. After giving Nasya Karma, patient should remain in supine position about one minute (time of counting 100 numbers).

b. After administration of Nasya, the head, cheek, neck should again be given Swedana, so that oil has been dropped in the nose may be repeatedly drained out together with the morbid Doshas especially-mucous and also not portion of the medicated oil is left behind.

c. At the time of the Nasya therapy, feet, shoulders, palm and ear should be massaged well.
d. Patient should spit of the excessive medicine, which has come into the mouth.

e. Patient should take long inhalation by both the nostrils and expelled out the morbid Dosha (Kapha/mucous) from the mouth and never from nose.

f. During the process of giving Nasya, patient should not contract or stiffen his body but he should remain relaxed position.

Observation:-
Symptoms of Samyaka yoga, Hina yoga and Atiyoga should be observed after giving the Nasya therapy. The effect of the Nasya therapy may be assessed in the terms of Samyaka yoga, Ayoga and Atiyoga in Ayurveda,

a. Samyaka yoga: -The symptoms of Samyaka yoga of Nasya according to Charaka, are Urah-Shiro Laghava (Feeling of lightness in chest and head) Indriyavishuddhi (Sensorial Proficiency) and Srotovishuddhi (Cleansing of channels). In addition, Sushruta has described Sukhaswapna- prabodhana (Good sleep and awakening), Chitta-indriya-prasannata (mental and seasonal happiness) and Vikaropashama (Improvement). Besides this proper respiration and sneezing have been described by Vagbhata as the general symptoms of Samyaka yoga of Nasya Karma.

b. Ayoga: -If Nasya is not given in a proper way or the dose is less, the following features arise like Shirogaurava (Heaviness in head), Grivoplepa (Throat coated with mucus) and Nisthivana (excessive spitting). According to Sushruta Kandu (Itching in nose), Upadeha (feeling of wetness), Guruta (Heaviness), Srotasam kapha srava (Excess mucus secretion in channels) are the symptoms of Hina shuddhi. Dryness in mouth and nose are also the symptoms of Ayoga of Nasya Karma.

c. Atiyoga: -The general features of excessive Nasya are feeling of Arti (uneasiness) and Toda (pricking like pain in the head, eyes, temporal region and ears). Kapha srava (salivation), Shirahshula (headache) and Indriya vibhrama (confusion) are the other symptoms of Atiyoga of Nasya. Mastulunga agania, Vatavriddhi, Indriyavibhrama, and Shirah shunyata are also the symptoms of Atiyoga of Shirovirechana.

Vyapada (Complications): -
After completion of the Nasya Karma, if patient does not follow the regimen mentioned previously then the Prakopa of Dosha may again occur leading to many Vyapada.
Generally complications arise by two ways one is from Doshotklesha and the other from
Dosha kshaya. The complications, which are produced by provocation of Doshas, the treatment should be done on the line of Shodhana therapy and if complications are arise from Doshakshaya, then the treatment to be given on the line of Brimhana therapy. If Nasya is given in the contra-indicated conditions like Ajirna, Bhuktabhakta, Jalapitta etc. or in season or time e.g. cloudy atmosphere in which Nasya Karma is contra indicated, then there is possibility of production of Kapha rogas like asthma, cough, sinusitis and indigestion etc. In such conditions, the treatment should be done with Kaphanashaka Upachara like use of Ushna and Tikshna Aushadha and Karma.

If Nasya is given in Krishasharira (emaciated), Virikta (patient who had taken Virechana), Garbhini (pregnant lady), Vyayama klanta (exhausted with exercise) and in Thirsty person then vitiation of vata takes place and may lead to Vataj vikara. In the above conditions, Vatanashaka procedures like Snehana, Brimhana and Swedana should be done. The pregnant lady should specifically be treated with the use of Ghrita and Milk.

The conditions like fever, Shokabhitapta and in Madyapita, if Nasya is performed then Timiraroga may occur. Ruksha, Sheeta Anjana. Lepa and Putapaka should be applied for the treatment of these conditions.

For Nasya if the drug used is very hot or cold or given in less or in excess quantity or during administration of Nasya the patient has lowered his head more or sneezed or Nasya is given during the time when it is contra-indicated then it may lead to the complications like Trishna and Udgara. If Patient gets Murccha during Nasya, he should be treated with the pouring of cold water on Lalata and Kapala.

3. Paschata karma: -

As described by Charaka27, Astanga Hridaya28 and Sushruta29. After administration of medication through nasal passage patient should lie supine for about 2 minute time interval consumable for counting numbers up to 100. After an administration of Nasya foots, shoulders, palm and ears should be massaged. The head, cheek and neck should be again subjected to sudation.

The patient should avoid swallowing of Nasya Aushadhi. The oil that has been dropped in the nose may be repeatedly drained out together with the morbid doshas especially mucous, should be taken that no portion of the medicated oil is left behind. Patient should spit out the excessive medicine, which has come to oropharynx.
Medicated Dhumapana and Gandusha are advocated to expel out the residue mucous lodged in Kantha and Shringataka. Patient should stay at: windless place, light meal (Laghu aahara) and hike warm water (Sukhoshna jala) is allowed. One should avoid dust, smoke, sunshine, alcohol, hot bath, riding, anger, excess fat and liquid diet. Day sleeping and cold water for any purpose like pana. snana etc. should be avoided after Nasya Karma.

**Mode of action of nasya karma:**

The clear description regarding the mode of the Nasya Karma is not available in Ayurvedic classics. According to Charaka, Nasa is the portal (gateway) of Shirah. The drug administered through nose as Nasya reaches to the brain and eliminates only the morbid Dosha responsible for producing the disease. In Ashtanga samgraha, it is explained that Nasa being the door way to Shira (head), the drug administered through nostrils, reaches Shringataka (Sira Marma by Nasa Srota) and spreads in the Murdha (Brain) taking route of Netra (eye), Shrota (ear), Kantha (throat), Siramukhas (opening of the vessels) etc, and scratches the morbid Doshas in supra clavicular region and extracts them from the Uttamanga.

Sushruta has clarified Shringataka Marma as a Sira Marma formed by the union of Siras (blood vessels) supplying to nose, ear, eye and tongue. Commentator Indu of Ashtanga Samgraha opined Shringataka as the inner side of middle part of the head i.e. Shiraso Antarmadhya.

Under the complications of Nasya Karma Sushruta noted that the excessive eliminative errhine might cause Mastulunga to flow out to the nose.

According to all Acharyas, Nasa or nose to be the gateway of Shira. It does not mean that any anatomical channel connects directly to the brain but it might be connected through blood vessels or through nervous system (olfactory nerve etc.)

It is an experimentally proven fact that where any type of irritation takes place in any part of the body, the local blood circulation is always increased. This is the result of natural protection function of the body. Something happens when provocation of Doshas takes place in Shirah due to irritating effect of administered drug, which resulting an increase of the blood circulation of brain. So extra accumulated morbid Dosha are expelled out from small blood vessels and ultimately these morbid Doshas are thrown out by the nasal discharge, tears and by salivation

**The Modern Point of View**-
Thus to understand the pathways of *Nasya* drug (classical errhine) acting on the central nervous system, it is important to go in details of the modus operandi of *Nasya Karma*. On the basis of fractional stages of the *Nasya Karma* procedure, we can draw certain rational issues that are as follows:

**Effect on neurovascularjuction**

The lowering of the head, elevation of lower extremities and fomentation of face, seem to have an impact on blood circulation of the head and face. As the efferent vasodilator nerves are spread out on the superficial surface of the face, receive stimulation by fomentation and it may engender the increased blood flow to the brain, i.e. momentary hyperemia. It is also possible that the fall of arterial pressure due to vasodilatation may encounter with Cushing's reaction. When the ratio between the C.S.F. pressure and arterial pressure has reduced, the increased C.S.F. pressure tends to compress the arteries in brain causing a transient ischemia in the brain. By this, the aroused 'ischaemic response' will subsequently raises the arterial pressure (Gushing). This act convinces us more of "Slush" created in intracranial space; probably this may be the explanation for the benzyl penicillin like drugs, which do not attain a therapeutic level in the brain in normal condition found to be effective during the inflammatory conditions of meanings (Gillman and Goodman 1980).

In this ground, we can state the modus operandi of *Nasya Karma* has a definite impact on central neurovascular system and likely lower the blood brain barrier to enable certain drug absorption in the brain tissue.

**Effect at neuro endocranial level**

The peripheral olfactory nerves are chemoreceptor in nature. This olfactory nerve differs from other cranial nerves, excepting optic nerve, in its nature. It is phylogenetically closely related to brain. However, it is known that these nerves are connected with limbic system of the brain including hypothalamus. This limbic system and hypothalamus are having control over endocrine secretions. Moreover, hypothalamus is considered to be responsible for integrating the function of the endocrine system and the nervous system. It is known to have direct nervous connections with the posterior part of pituitary. In addition hypothalamus is indirectly having connections with anterior lobe of pituitary through portal vessels which supplies blood to the gland, having previously ramified in the corpora mammilaria of the hypothalamus in animals.
is capable of inducing secretion in the anterior pituitary, and it is believed that the products of such hypothalamic are drained by the portal vessels into the anterior lobe. The experimental stimulation of olfactory nerves caused stimulation in certain cells of hypothalamus and amygdelois complex, but the nature of the effects is not properly understood (Tonabe 1975). It is understood that just like primitive mammals, man also responds to the language of smell in the environments (B.S.M. 1980). Abraham and colleagues (1979) on their experimental studies have noticed that a more exposure to the smell of the Jasmine flower reduces the activity of mammary gland. If the fragrance could have the effect, it may be acting through impulses traveling via the olfactory pathways influencing hypothalamus which in turn, causes the inhibition effect through the pituitary (Abraham et al, 1979). Olfaction of certain chemical pheromones is also observed to have an impact on menstrual cycle (Russel 1977).

At this juncture we can grasp the humor behind the recommendation of Nasya by Ayurvedic Scholars in Pumsavana for changing the sex of the foetus. These drug used for Pumsavana may be acting through the olfacto hypothalamo pituitary pathway. **Effect on neuro-psychological levels**

The adjacent nerves called terminal nerves that run along the olfactory are connected with limbic system of the brain including hypothalamus (Hamilton 1966). Thus, certain drugs administered through nose may have an impact on immediate psychological functions by acting on limbic system through olfactory nerves. Such phenomenon has been revealed in the work of Cowely et al, 1975. The work has been carried out on the effect of exposing people for a short period of time, to known phenomenon. These things certainly support the recommendation of Nasya made mentioned by Ayurvedic scholars for mental disorders like Apasmara and Unmada.

**Effect on drug absorption and transportation**

Keeping the head in lower position and retention of medicine in nasopharynx help in provide sufficient time for local drug absorption. Any liquid soluble substance has greater chance for passive absorption directly through the cell of lining membrane. On other hand, massage and local fomentation also enhances the drug absorption (Fingl. 1980).

The later course of drug transfusion can occur in two ways.
1. By Systemic circulation.
2. Direct pooling into the intracranial region.
The second way is more of interest in this present study. This direct transportation can be assumed again two paths viz.

a. By Vascular Path.

b. By Lymphatic Path.

**Vascular Path** transportation is possible through the pooling of nasal vein blood to the facial vein, which naturally occurs. Just of the opposite entrance the inferior ophthalmic veins also pool into the facial vein.

Interestingly, both facial and ophthalmic veins have no vein valves in between. So that, blood may drain on either side, that is to say the blood from facial vein can enter cavernous venous sinus of the brain in reverse direction. Thus, such a pooling of blood from nasal veins to venous sinuses of the brain is more likely in the head lowered position due to gravity. On this line, the absorption of drug materials into meninges and related parts of intracranial organs is worth considering point. Moreover, the modern scholars have noted that the infective thrombosis of the facial vein may lead to infection of the meninges easily through this path (Williams et al, 1971).

Pooling of blood from paranasal sinuses also possible in the same manner. Vagbhata's notation of *Shringataka Srotas* (anterior cranial fossa) seems to relation with the above explanation.

**Lymphatic Path** Drug transportation by lymphatic path, can reach direct into the C.S.F. It is known that the arachnoid matter sleeve is extended to the submucosal area of the nose along with olfactory nerve. Experiments have shown that the dye injected to arachnoid matter has caused coloration of nasal mucosa within seconds and vice versa also (Hamilton 1971).

Here it may be worthy to recall Sushruta's caution that the excessive administration of *Virechana Nasya* (eliminative errhine) may cause oozing of *Mastulunga* (C.S.F.) into the nose. On this basis, we may say that ancient scholars of Ayurveda were aware of the lymphatic path in direct absorption into the brain from nose

**Importance of post nasal massage**

The *Ayurvedic* texts recommended light massage on the Frontal, Temporal, Maxillary, Mastoid and on *Manya* region. A comfortable massage on the above region may help to subside the irritation of somatic construction 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 *Marrna* existing in neck on either side of the trachea (S.SSha.6/29) which likely
correspond to the carotid sinuses of the neck pressure applied on the baro-receptors may bring the deranged cerebral arterial pressure to normalcy (Hejmadi S. 1985). Because of these receptors lying on the bed of bifurcation of common carotid artery, have buffering actions on the cerebral arterial pressure (Best and Taylor 1958). On the basis of the foregoing observations it can be stated that the procedures, postures and conducts explained for Nasya Karma are of vital importance in drug absorption and transportation. The facts discussed here are also convincing about the definite effect of Nasya Karma in the disorders of central nervous system, mental and some endocrinal disturbances also.

Nasya Karma as per the opinion of Ayurvedic texts, not only the treatment of the disease but many types of Nasya Yoga described in Ayurveda for maintenance of healthy life "Swasthasya Swaasthya Rakshanam". Pratimarsha Nasya can be used in all groups, so one can assess the importance of the Nasya Karma.

CONCLUSION

Nose is the gate of the Head and Nasya karma is the treatment for all the ShiroRoga and disease of Uttamanga. So everyone should know about the nasya karma for the benefit of society.
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