

Description of Nasya with its Anatomical Point of View

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Abstract

The therapeutic technology of *Samsodhana* (biopurification) therapy is called *Panchakarma* as it involves five-fold procedures. Five major procedures to eliminate the toxins from the nearest orifice are popularly called *Panchakarma*. There are other important procedures also which are classified under this heading ***Panchakarma is an effective measure to encounter the disease as well as to eliminate the morbid materials from the body to maintain a healthy state. Nasya is one among the Panchakarma treatment.*** The word *Nasya* is derived from “*Nasa*” *Dhatu*. *Nasa dhatu* is used in sense of nose. *Nasya* by its name indicates it is a procedure related to nose. It is a procedure in which medicine is applied through the nasal cavity or nasal routes. *Nasya karma* is mainly indicated in the diseases of head. But it can also be done in many other conditions which affect the structures other than head, as head is the center for all the central nervous as well as other functions throughout body.

Keywords

Dhatu, Nasa, Nasya, Panchakarma, Samsodhana



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INTRODUCTION

According to *Ayurveda*, *Panchakarma* is cleansing process of the body. The *Sanskrit* term *Panchakarma* imparts five therapeutic procedures. *Pancha* refers to five, and the *Karma* refers to the Therapy that brings about homeostasis by way of evaluation of accumulated morbid *Dosha*¹. *Nasya* is one of the *Panchakarma* mentioned in *Ayurveda*. The procedure of *Nasya Karma* includes cleansing of the head from morbid *Dosha* by way of administering the medicine through the nasal route. Especially *Nasya karma* is beneficial for the diseases which occur above shoulder region as nose is the route way for the head by which it cures the diseases.² It eliminates *Aam Dosha* (toxins) from the nose, mouth, ears, eyes and paranasal sinuses. *Nasya* is used for dry nasal passages as well as common cold, sinus congestion, allergies, allergic rhinitis and chronic sinusitis rather it also helps in healing problems associated with ear and eye such as itching and watery eyes, hearing loss and tinnitus, glaucoma, conjunctivitis as well as loss of sense of smell. The importance and effectiveness of *Nasya karma* is such that it has been used as one of

- **Classification of the *Nasya*-**

the methods for changing the foetal sex (*Pumsavana karma*).³

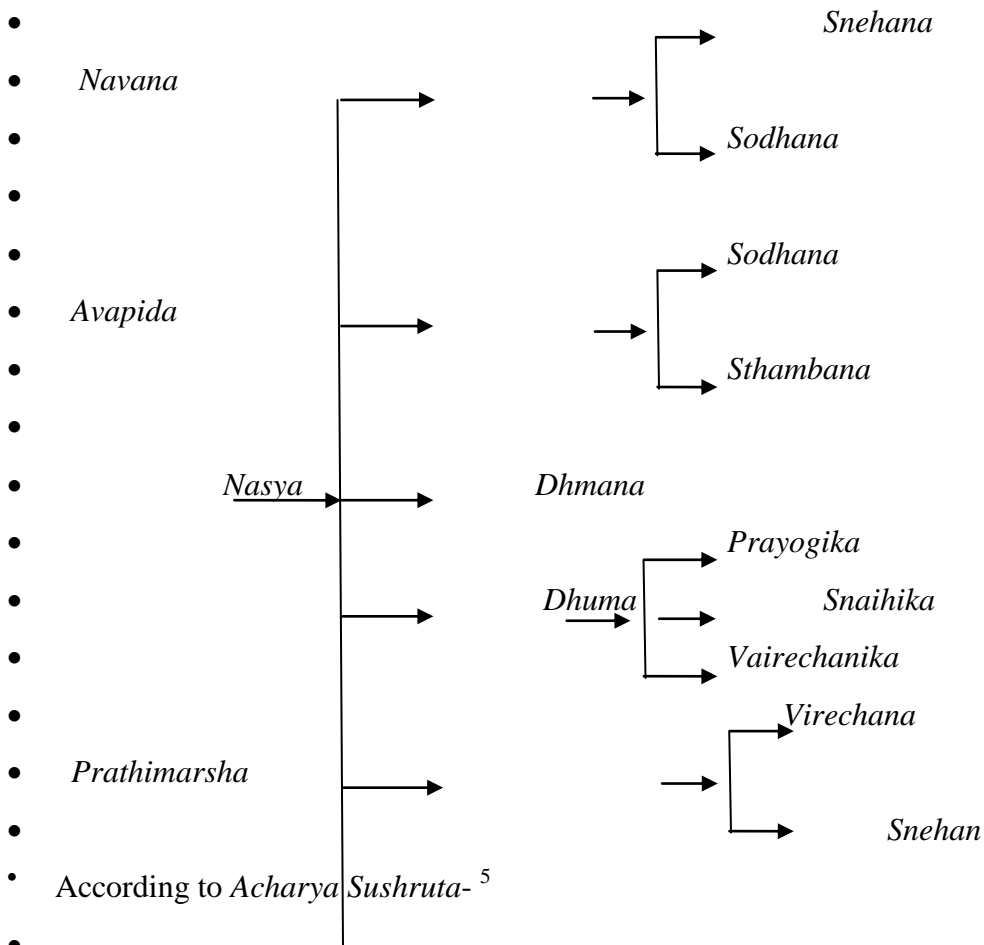
The following categories of patients are contraindicated for the *Nasya karma* procedure because of the various reasons.

Below seven year of age (as *Dhatu*'s are not fully matured) and above eighty years of (*Dhatukshya*) as *Nasya* is a *Shodhana Karma*. The age, physical and psychological status to be assessed.

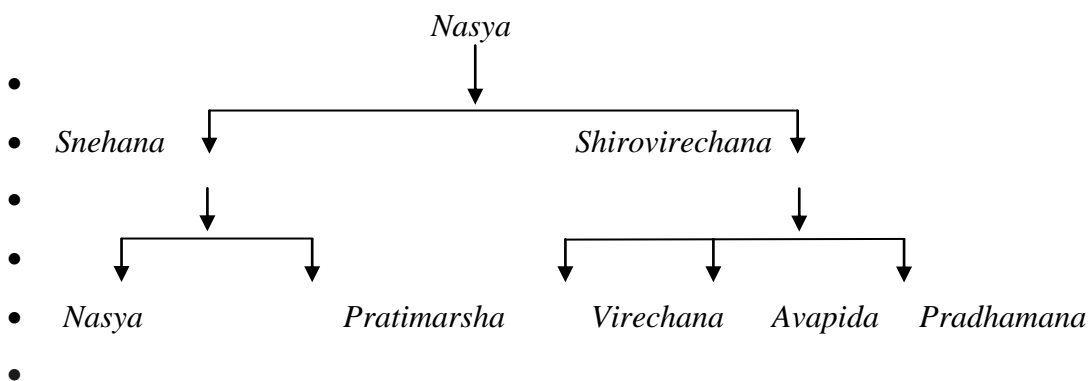
According to *Acharya Charak*, the following types of the patients are uneligible of *Nasya Karma* procedure-⁷

- *Ajirni* (The patients suffering from indigestion)
- *Bhukta-Bhakta* (After tacking meal)
- *Pitasneha* (After consuming medicated or other oils)
- *Pitamadya* (One who has plenty of water and consumed alcohol)
- *Kshudharta evam Trishnarta* (Hungry or thirsty person)
- *Sastradandahat* (Injured person)
- *Murchhita* (Unconscious persons)
- *Garbhini* (Pregnant woman)
- *Bala* (children)
- *Vridhha* (elderly person above the age of 80 years)
- *Sutika* (peurpurium)

- *Nasya* is classified in different ways in the various texts of *Ayurveda*.
- According to *Acharya Charak*-⁴



According to *Acharya Sushruta*-⁵



Indications of the Nasya-⁸

Nasya karma is particularly indicated in *urdhwa-jatroogata vikaras* like

- Stiffness of the head, teeth or side of the neck
- *Timira*
- Moles
- *Saluka*
- Facial paralysis
- Convulsions
- Toothache
- Alteration of voice

All procedures explained in classics have three stages as *Poorvakarma*, *Pradhanakarma* and *Paschatkarma*. The *Poorvakarmas* prepares, assist and enhances the *Pradhanakarma*. The *paschat karmas* are directed towards avoiding complications that can arise due to *Pradhana karma*.

Suitable time for giving Nasya-

According to *Charaka*, generally *Nasya* should be given in *Pravrita*, *Sharada* and *Vasant Ritu*.⁹ However, in emergency it can be given in any season by providing artificial condition of the above mentioned seasons.

a) Time schedule in different seasons should be as follows

Ritu	Time of Nasya
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<i>Grishma ritu</i>	Before noon (morning)
<i>Sheeta ritu</i>	Noon
<i>Varsha ritu</i>	Day should be clear
<i>Sharada+vasanta</i>	In the morning (Vagbhata)
<i>Shishira+hemanta</i>	Noon

According to *Sushruta*, in normal condition *Nasya* should be given on empty stomach, at the time when the person usually takes his meal.¹⁰

b) Time schedule in *Doshaja vikara* should be as follows¹¹

<i>Doshaja vikara</i>	Time of Nasya
<i>Kaphaja vikara</i>	Forenoon
<i>Pittaja vikara</i>	Noon
<i>Vataja vikara</i>	Afternoon

Vagbhata has prescribed same timing as *Sushruta* has mentioned.

Courses of Nasya karma-

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 (in morning and evening).

Dose of Nasya-

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

According to *Sushruta* its first dose is eight drops coming out of two phalanges of the index finger; the second dose (medium one) is one *Sukti* (thirty two drops) while the highest dose is *Panisukti* (sixty four drops). These three doses are to be used according to strength.¹²

Poorva Karma-

- Person suitable for the *Nasya Karma* should be selected.
- *Nasya* should be performed in the favorable environment (particularly when the sky is devoid of clouds).
- Just before the procedure the patient must be devoid of natural urges like urination, defecation etc.,
- Advice not to take food before *Nasya*.
- The person is made to lie down in supine position on the *Abhyanga* table.
- Before starting the actual therapy, *Snehan* and *Swedan* is done over person head, face and neck region for the purpose of lubrication and elimination of toxins on local site, which further facilitates in subsequent results.

Pradhana Karma-

Therapist standing at the head ends of the table, must elevate the tip of the person nose with the left thumb and then allows

dropping the oil from the dropper in to each nostril subsequently. Alternatively the cotton swab soaked in oil is squeezed into the nostril to drop the oil. After dropping the oil into one nostril, the other nostril is closed with a finger and the person is asked to take deep inhalation so that the medicine reaches deep inside the nose, this must be repeated in the other nostril after the administration of the oil. The medicine should be taken in a *Nadi* (tube), *Pichu* (cotton swab) and dropper.

Paschat Karma-

- After application of medicine, massage should be done at shoulder, face, below ear, neck etc.
- When the medicine reaches the throat one should spit it, by turning to his right side or left side. He should be instructed not to swallow the medicine.
- *Swedan* should be repeated after the *Nasya Karma*.

Medicines used in Nasya-

Anu tail, *Shadbindu tail*, milk, *Kataphala churna*, *Bramhi tail*.

Probable route of absorption and mode of action

For understanding the accurate mode of action/mechanism of *Nasya*, a relative gross anatomy of the nasal cavity is very

important. The nasal cavity is surrounded by floor, roof, medial and lateral walls. Important anatomical structures for consideration are mainly the floor and the roof. 1) Floor is formed by the horizontal plate of the Palatine bone, palatine process of maxilla. 2) Roof - a) Middle horizontal part is formed by the cribriform plate of the ethmoid. b) The anterior slope is formed by the nasal part of the frontal bone. c) The posterior slope is formed by the inferior surface of the body of the sphenoid bone.¹³ Cribriform plate is a specific plate which forms the floor of the anterior cranial fossa, having small pores in it.

Drugs administered to the nasal cavity rapidly traverse through the cribriform plate into the CNS by 3 routes.

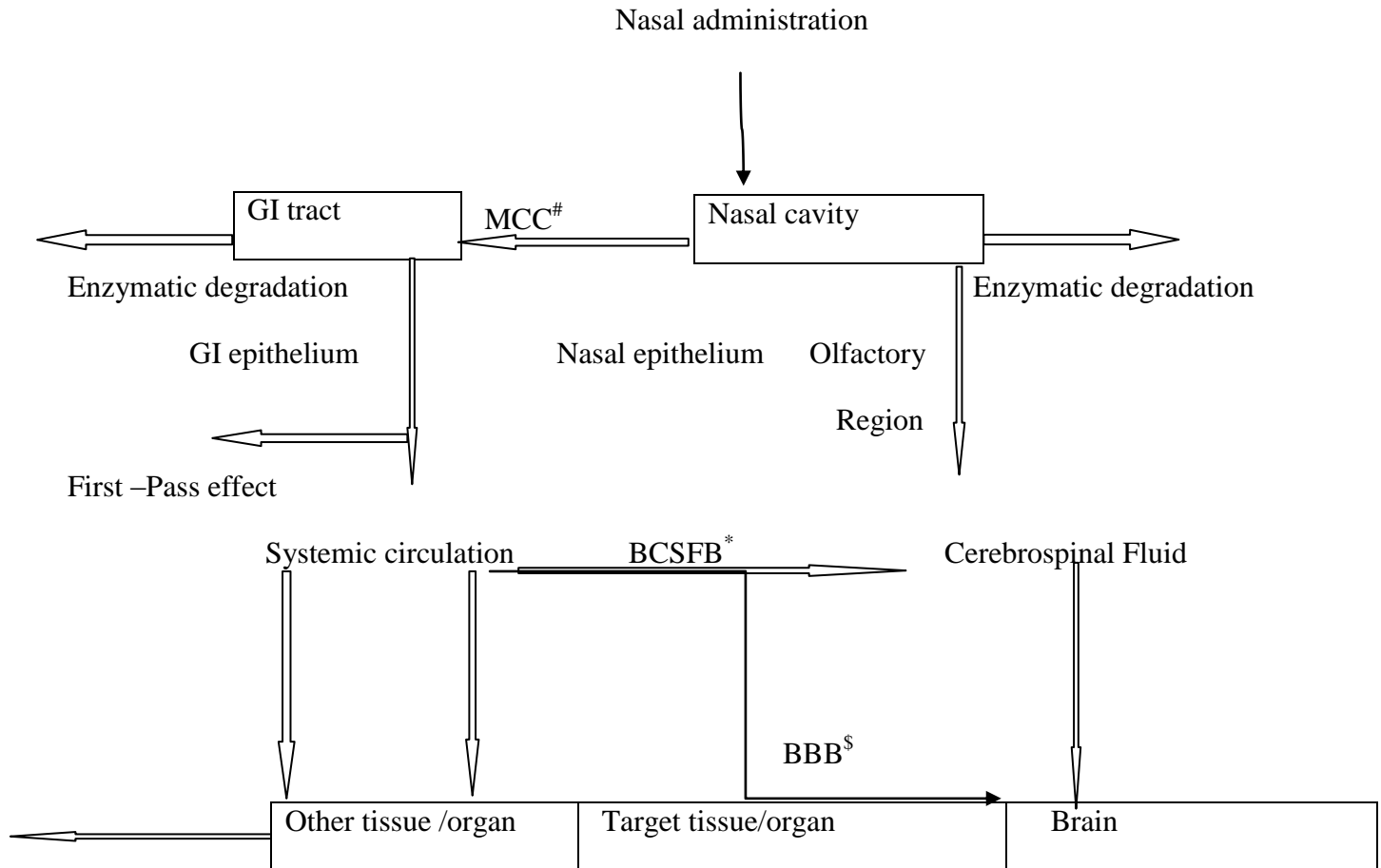
- olfactory neurons
- supporting cells and the surrounding capillary bed; and
- Cerebrospinal fluid (CSF).

The transneuronal absorption is generally slow, whereas absorption by the supporting cells and the capillary bed is rapid.

The clear description regarding the mode of the *Nasya Karma* is available in *Ayurvedic*

classics. According to *Charak*, *Nasa* is the gateway of *Sira*.¹⁴ The drug administered through nose as *Nasya* reaches the brain and then either it eliminates the morbid *Dosha* responsible for producing the disease or nourishes the area. Appropriate drug for a particular disease may also pacify the disease by reaching the site. It may be used as a potential drug route for treating systemic diseases also. In *Ashtang Sangraha*, it is explained that *Nasa* is the door way to *sira* (head), and it communicates with eyes, ears, throat etc. by minute channels. The drug administered through nostril, reaches *Shringhatak Marma* and spreads into the *Murdha* (brain), *Netra* (eye), *Shrota* (ear), *Kantha* (throat), *Siramukhas* (opening of the vessels) and snatches the morbid *Dosha* from these regions and expels them from the *Uttamanga*.

Susruta has classified *Shringataka Marma* (anatomical area). The *Shringataka Marma* is an association of *Ghrana* (nasal), *Akshi* (visual), *Shrotra* (auditory), and *Jiwha* (lingual) *Siras* (nerves and vessels).¹⁵



Elimination

^{\$}BBB: Blood brain barrier

^{*}BCSFB: Blood cerebrospinal fluid barrier

[#]MCC: Muco ciliary clearance

DISCUSSION AND CONCLUSION

In *Ayurveda*, nose has been considered as the pathway of head. In our classics there is explanation regarding the direct pooling of drugs into the brain tissues. *Shira* is considered as site of *Pancha gyanendriyas*

even in modern science it is considered as a control area of body, because various controlling centers are being situated in the head (*Shira*) region, there *Gyanendriyas* are developed from *Satvik* and *Rajas Ahankar*. The developmental anatomy of nose & paranasal areas are seen in 4th week of fetal life. Two epithelial thickening known as “nasal placodes” develop on head on further proliferation, they develop into two nostrils having the nasal cavity inside, it is surrounded by four sinuses named as

ethmoid, sphenoid, maxillary and frontal. These sinuses maintain the relative balance of atmospheric changes.

The areas related to olfaction & respirations are present in the nose & this area plays an important role in maintaining hemodynamic activity actively.

The mucous membrane of nasal cavity continuous with various structures-

- Through the ducts and paranasal sinuses
- Through Eustachian tube with ears
- Through the slings of myelinated sheath with olfactory bulb
- Through nasopharynx with the oral cavity & receptor tract

The olfactory area (epithelium) is composed of 3 types of cells

1. Supporting (substantacular cells)
2. Receptor cells
3. Basal cells

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