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Review Article

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# REVIEW ARTICLE ON CONCEPTUAL STUDY OF NASYA KARMA AND ITS PHARMACODYNAMICS

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# **ABSTRACT**

Ayurveda is a science and art of suitable living which focuses on preventive as well as curative approach towards treatment. Ayurveda has the intention of achieving longevity and a healthy quality of life. Panchakarma is a specialized branch of Ayurveda, which deals with purification as well as pacification of Tridosha, viz Vata, Pitta and Kapha. It brings the body to a state of Sama-dosha. Panchakarma is a sort of bio purification process also known as Shodhana therapy, by which an attempt is made to purify or cleanse all the body tissue i.e. Sroto-Shodhana and bring harmony of Tridosha. Administration of medicine through nasal route is known as *Nasya*. Nasa is the entrance to the brain and it is also the doorway to

consciousness. An excess of bodily humors gets accumulated in the sinuses, throat, nose or head areas. Nose is the closest possible opening of brain. In our day-to-day lifestyles due to irregular food habits, sleeping disturbance, pain-killers, alcohol, drugs, tobacco, antibiotics, steroids, suppression of natural urges, depression, mental stresses, irregular day night practice etc. human gets Shiro Gata Roga and suffered from many diseases. Approximately 70% of people are suffering with Shiro Gata Roga and having different headaches. So, it is the demand of time to realize importance of Nasya Karma in Panchakarma by way of which a common guy gets healthy life without having any disorders.

**KEYWORDS**: Panchakarma, Nasya Karma, Shirogat Roga.

#### INTRODUCTION

In *Panchakarma* there are distinct styles of natural massages *Abhyanga Karma*, fomentation's which include steam *Swedana*, external oil remedies like *Snehan*, Vamana that is emesis through herbs, *Virechana* i.e. purgation through herbs, *Basti* means medicated enemas, Nasya means nasal administration of oils, medicated *swaras*, *kwath*, *sneha*, *churna* etc.

There are two types of processes in *Panchakarma*.

- 1. Purva-karma: Pre-purification Measures taken before Panchakarma.
- 2. Pradhana-karma: Main Purification measures taken for Panchakarma.

Nasya karma is a procedure in which herbal oils and liquid medicines etc. are administered through nostrils. On the grounds that nostril is the gateway of *Shirovah srotas*. It is surprisingly effective in curing a number of diseases pertaining to head, if it's far carried out systematically. It cleanses and opens the channels thereby enhancing the method of oxygenation that is *Prana-vayu*, which has a direct influence on the functioning of *sirovaha srotas*. It is miles useful if accomplished on a regular basis, as it maintains the eyes, nostril and ear healthful. It also prevents the early graying of hair and beard, loss of hairs etc. Head is the ruler of *indriyas* (senses) and *sthana* of *kapha dosha*. It really works on *kapha dosha*.

The drugs given via *Nasya* reaches up to the mind and thus it pulls out all of the sickness causing *doshas* impurities. Medication given through nostrils travels the complete passage and reaches cribriform plate that is porous in nature. From there it's far absorbed and reaches the tissues of brain. It is like the local application at the tissues of brain. In our daily life because of drug treatment, tobacco, alcohol, abnormal meals behavior, dozing disturbance, pain-killers, antibiotics, oral-contraceptives, steroids, suppression of urges, intellectual stresses, depression, night awaking & day drowsing mankind get *Shiro Gata Roga* and suffered from many painful diseases. Approximately 70% of humans are laid low with *Shiro Gata Roga* and having different complications. So, it is the demand of time to realize about *Nasya Karma* in *Panchakarma* & its significance by means of which a common guy get healthy existence while not having any disorder. So, I have decided to write on this subject matter to look at in distinctive approximately *Nasya Karma* in *Panchakarma* and its importance.

#### **Review of Literature**

The information about the concept of *Nasya Karma* in *Panchakarma* and its importance is mentioned in *Ayurvedic Samhita Granthas*. The detailed study of *Nasya Karma* in *Panchakarma* had been reviewed for collection of study material.

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#### AIMS AND OBJECTIVES

- 1. To study about the concept of Nasya Karma in Panchakarma.
- 2. To Study about the pharmacodynamics of *Nasya Karma*.

#### MATERIALS AND METHODS

- 1. Charak Samhita, Sushrut Samhita, Astang Hridaya & other Samhitas are taken into consideration.
- 2. Modern Medicine Books & Articles on Nasya Karma in Panchakarma.

Ayurveda emphasizes on preventative and restoration remedies at the side of numerous methods of purification and rejuvenation. Ayurveda is greater than a mere healing machine; it's miles a technological know-how and art of appropriate living which allows to obtain longevity. It can also guide each person with prevention of disease and long-term renovation of health. To achieve this balanced state of thoughts, body and consciousness, Ayurveda prescribes Panchakarma therapy for the cleansing body toxins.

# Nasya

Nasal karma cleanses brain and body by using the application of scientific oils or powders locally. The nostrils are considered as entrance to the brain and nasal utility of oils for curing various conditions like allergic sinusitis, migraines and epilepsy. If the Nasya remedy has been carried out successfully, vitiated Kapha dosha which is associated with toxins is removed from the Para nasal sinuses. The area gets nourished with this karma and the patient feels great relief as alleviation within the head and clarity of the sense organs occurs. Respiration turns into absolutely unobstructed which gives sound sleep at night time. Olfactory improvement is also felt.

Nasya has amazing role for chronic sinusitis complications, throat illnesses, continual colds, chest congestion, epilepsy, catarrh, migraine, voice constraint, eye diseases and cervical spondylosis.

# **❖** Aacharya Charaka: (Cha.Su.2/3,4,5,6)

**Drugs useful in Shiro-virechana**: Acharya Charaka describes drugs for Shirovirechana in sutra stahna 2 i.e., Apamargatandulia adhayaya. The drugs are Apaamaargabeeja, pippali, mareecha, vidanga, shigru, sarshapa, tumburu, ajaaji, ajagandha, peelu, ela, harenuka, prutweeka, surasa, shweta, kutheraka, phaninjaka, shireeshabeeja, lashuna, haridra, lavanadwaya, jyotishmati, naagaraare used for the shirovirechana or nasyakarma.

Their indications: These drugs are used for Shiro-virechana in conditions like shirogauravata (heaviness of the head), shirashoola (headache), peenasa (rhinitis), ardhaavabedhaka (hemicranias), shirogatakrimi (worm infestation of head), apasmara (epilepsy), ghraananaasha (derangement of smell sensation), pramohaka (fainting).

# Shirovirechaniya dravya

- 1. Jyotishmati
- 2. Shavaka
- 3. *Marich*
- 4. Pippali
- 5. Vidaga
- 6. Shigru
- 7. Sarshapa
- 8. Apamarga tandula
- 9. Shveta
- 10. Mahashveta

#### **Types**

5 types

- i. Navan Nasya: Again classified into snehan and shodhan nasya.
- ii. Avpeeda Nasya: Again classified into shodhan and stambhan nasya.
- iii. Dhamapan nasya: churna nasya, shadangula naadi dehsjhrotovishodhanam
- iv. *Dhoom nasya*: Classified into *vairechnik*, *snehik* and *prayogik nasya*.
- v. Pratimarsha nasya: classified into snehan and vairechnik nasya

# Karmanusar Nasya division

- Rechan nasya
- ii. Tarpan nasya
- iii. Shaman nasya

# According to aashrya of vanaspati or plant

- i. Mool
- ii. Twak
- iii. Patra
- iv. Pushpa
- v. Phal
- vi. Kanda
- vii. Niryas
- ❖ Aacharya Sushruta: (Su.Chi. 40/20 57) Acharya Sushruta has explained 2 major types of the *nasyas* which have 5 subtypes.
- a) Shiro-virechana nasya
- b) Snehana nasya

Again these 2 two types have 5 subtypes, which are as.

- Nasya
- ii. Avapeed
- iii. Pradhamana
- iv. Shirovirechana
- v. Pratimarsha

Among these Snehana Nasya and Shiro-virechana nasya are two main and important ones.

Pratimarsha nasya is a type of Snehana Nasya. Avapeeda nasya and pradhamana nasya are the types of *Shiro-virechana nasya*. (Su.Chi.40/21).

**Indications of** *SnehanaNasya:* The *sneha nasya* is administered to make up the deficient oily matter in the head in cases like Shoonya shirasa (Emptiness of the Head), Greevaskandha-urasobalajananartham (to impart strength to neck, shoulders, **Dristiprasadajananartham** (to improve the vision). In conditions like *vatajashiroroga* (the diseases of the head due to the vitiation of wind), Danta-keshasmashrupaata (falling of teeth, Hair of the scalp and beard), *Karna shola* (Earache), *Karnakshweda* (Tinnitus), *Timira* (Defective vision), *Swaropaghata* (Hoarseness of the voice), *Nasaroga* (Diseases of the nose), *Aasyashosha* (Dryness of the mouth), *Avabahuka* (frozen shoulder), *Akaalajavalipalita* (Premature wrinkles-graying of the Hairs), *Vatapittajavikaras* (Disorders arising due to wind and fire), *mukha-rogas* (Diseases of the oral cavity).(*Su.Chi.*40/22).

#### Matra

i. Prathama maatra: 16 Bindu first dose

ii. Dwiteeyamaatra: Shukti 32 Bindu second dose

iii. Triteeyamaatra: Paani-shukti 64 Bindu third dose. (Su.Chi. 40/28).

# Indications for Shirovirechana Nasya

Conditions of palate-throat-head due to the vitiation of *kapha dosha like Taalukantha-shira* effected by *kapha dosha*, *Arochaka* (Anorexia), *Shirogaurava* (Heaviness of the Head), *Shirashoola* (Head ache), *Peenasa* (Coryza), *Ardhavabedhaka* (Hemicrania), *krimi* (worm infestation), *Pratishyaya* (Coryza), *Apasmara* (Epilepsy), *Gandha agynana* (loss of the smell sensation), *Kaphaja shiroroga* (Diseases of the head due to *kapha dosha*) (*Su.Chi.*40/28).

**Drugs**: Unctuous substance prepared by the *shiro-virechana* drugs. Quantity of medicines for *shiro-virechana nasya*.

i. Minimum dosage: 4 Bindu per nasaput

ii. Medium dosage: 6 Bindu per nasaput

iii. Maximum dosage: 8 Bindu per nasaput (Su.Chi. 40/36).

**Indication for** *Pradhamana-nasya*: In cases of *Chetana vikriti* (derangement of the Mind), *Krimi* (worm infestation), *Vishapeedita* (Poisoning).

In these conditions one of the *Shiro-virechana* drug is used in powdered form and sprayed into the nasal orifice. (*Su.Chi*.40/46).

# ❖ Aacharya Vagbhata: (A.Hri.Su.20)

*Nasya Karma*:-The procedure of instilling medicines through the nasal orifice is called *Nasya karma*. The nasal orifices are believed to be the entrance of the head (*shirovaha srotas*). The medicine instilled through them easily penetrates the *Sringataka marma* and spreads to *Sirah* i.e., arterioles of Head (*shira*), Eyes (*netra*), Ears (karnavaha shrotra), Throat (kantha) and expels out the impurities. (*A.Hri.Su.*20/1).

Types of *Nasya karma*: According to the functions the *nasya*, *karmas* are of 3 types. (A.Hri.Su.20/2.

- i. Virechananasya
- ii. Brihmananasya
- iii. Shamana nasya

According to the quantity of the *nasya* drug used, it can be further be classified into 2 types. (A.Hri.Su.20/28)

- i. Marsha nasya
- ii. Pratimarsha nasya

Description of various forms

# i. Virechana Nasya

Indications: It is mainly indicated in the diseases of head caused by *Kapha Dosha* or its predominance like:- *Adhigaurava* (Heaviness of the Head), *Shopha* (Swelling or tumor in the Head), *Upadeha* (Feeling as if something sticking on the Head), *Kandu* (itching), *Stambha* (Stiffness), *Abhishyanda* (Conjunctivitis), *Srava* (Excess secretions), *Praseka* (Excess salivation), *Vairasya* (Anorexia), *Arochaka* (Loss of taste), *Swarabheda* (Hoarseness of the voice), *Krimi* (Worm infestation in the Head), *Pratishyaya* (Coryza), *Apasmara* (Epilepsy), *Gandha Agynana* (Loss of smell), *Granthi* (Cyst), *Arbuda* (Tumor), *Dadru* (Ringworm infestation), *Kotha* (Blebs).

- ii. *Brihmana Nasya*: Indications: Indicated in *Vataja* or *Vata* pre dominant diseases like-*Sooryavarta* (Migraine), *Ardhava bedhaka* (Hemi crania), *Krimija Shiroroga* (diseases of head due to worms), *Akshi sankocha* (Constriction of the Eyes), *Akshi spandana* (Tremors of the Eyes), *Timira* (defects of the vision), *Krichra vabobhaka* (Difficulty in getting up from sleep), *Dantashoola* (Toothache), *Karna shoola* (Earache), *Karnanada* (Tinnitus), *Nasa Mukha Shosha* (Dryness of nose and the oral cavity), *Vaksanga* (Difficulty in speech), *Swaropaghata* (Hoarshness of voice), *Manyaroga* (diseases of Neck region), *Apatanaka* (Orthotonos), *Avabahuka* (Frozen shoulder), *Nidranaasha* (Insomnia).
- iii. *Shamana Nasya*: Indications: Indicated in diseases due to the vitiation of *Rakta* and *Pitta- Raktaja* and *Pittaja* like *Akaala-vali* i.e. pre mature wrinkles, *Palita* i.e. premature graying of Hairs, *Khalitya* i.e. Hair fall, *Daarunaka* i.e. Psoriasis of the scalp, *Raktaraaji*

i.e. Redness of the Eyes, *Vyanga Neelika* i.e. Blackish discoloration on face, *Raktasrava* i.e. bleeding from nose (*A.Hri.Su.*20/4).

Again Nasya is divided into two parts.

- i. *Avapeeda-nasya*: *Virechana* or *shaman nasya* where the paste of the drug kalka is squeezed into the nostrils called *avapeeda-nasya* (*A.Hri.Su.*20/7).
- ii. *Pradhamana-nasya*: *Virechana nasya* where the powder *choorn*a is used is called *pradhamana nasya*. (A.Hri.Su.20/8).
- *iii.* The main purpose of all *nasyas* is to expel *Kapha Dosha* i.e. *Kapha Virechana* from the head. So, all *nasya karmas* are called as *Virechana nasya*. When strong drugs are used in the *Virechana nasya karma* it is called as *shirovirchana-nasya*.

# Quantity of drug used

A. *Marsha Nasya*: It is administered for a specific motive, which won't be disorder, but a situation of uneasiness arises due to particular disorder. (*A.Hri.Su.*20/9)

Amount of the unctuous medicine in *Marsha nasya: (per nasaput)* 

- i. *Uttama-maatra -10 bindu (per nasaput)*
- ii. Madhyama-maatra 8 bindu (per nasaput)
- iii. *Hriswa-maatra* 6 bindu (*per nasaput*)

Amount of decoction in Marsha nasya

- i. *Uttama-maatra 8 bindu (per nasaput)*
- ii. Madhyama-maatra 6 bindu (per nasaput)
- iii. *Hriswa-maatra* 4 Bindu (*per nasaput*)

The amount of the liquid trickling down from the index finger i.e., *pradeshini* finger which is dipped in the liquid up to 2nd inter phalangeal joint and taken out is called one *Bindu*. (*A.Hri.Su*.20/10).

**Quantity of the powder in the** *Pradhamana nasya*: The quantity of powder required to reach the throat (*kantha*) when blown through a 6 *angul pramana* long pipe is the quantity for *pradhamana nasya*. This can be repeated multiple times depending on the intensity of the *doshas*. Also *acharya Videha* described *matra as* 3 *muchuti*.

#### **Contraindications**

• *Marsha nasya* is contraindicated before the age of 7 years and after the age of 80 years (A.Hri.Su.20/30).

# B. Pratimarsha Nasya.

Nirdoshakrit, na cha doshavan, pratah nishi cha sarvadaah.

**Indications**: *Kshaama* (Weak), urahkshata (injury to the chest), *Trishna* (Thirst), *Mukha shosha* (dryness of the oral Cavity), *Vriddha* (old Age), *Baalaka* (Young), *Bheeru* (timid), *Sukumara* (tender or delicate Personality).

Pratimarsha nasya can be administered in unseasonable time (kaala), Durdinaand (on inauspicious day), Varsha ritu (Rainy season), Aajanmamarana (from birth to death).

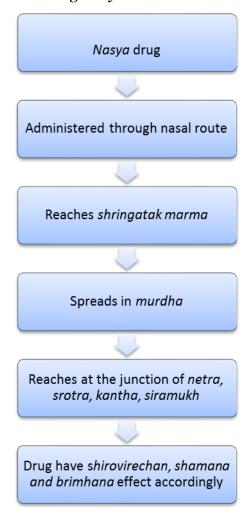
Contraindications: Dushta Pratishyaya (Chronic Catarrha), Bahu-dosha-kriminashiro (worm infestation and diseases of head involving multiple Doshas), Madyapeeta (one who drank alcohol), Durbala shrotra (weakness of the hearing organ).

*Pratimarsha nasya* given in these conditions will aggravate the condition as the doshas are in highly aggravated state. (A.hri.su.20/26).

#### Dose.

- *Pradeshini* finger which is dipped in the liquid up to first inter phalangeal joint and then Sneha is poured into *nasa*
- 2 bindu per nasa put
- Amount of *Sneha* that is poured into *nasa* but does not cause *srava*

# Nasya Pharmacodynamics according to Ayurvedic and modern view



#### **Modern View**

# a) Neuronal Pathway

Drug is absorbed by olfactory receptor cells and then by olfactory nerve. From there it goes to olfactory bulb, olfactory tract and limbic system and then finally to hypothalamus which regulates nervous and endocrine system.

# b) Vascular Pathway

Drug well administered gets diffuse into capillaries and facial vein and goes into Intracranial circulation and systemic circulation.

# c) Diffusion

When we administered the *Nasya Aushadha* it diffuses through Plasma Membrane of Nasal mucosa and excrete the waste.

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