



**A CLINICAL STUDY ON THE EFFECT OF SHUNTHI GUD AVAPEEDA NASYA IN  
KAPHAJA PRATISHYAYA W.S.R. TO CHRONIC RHINITIS**

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**ABSTRACT**

*Kaphaja Pratishyaya* is a condition in which vitiated *Vata* and *Kapha Dosha* causes *Nasa Avarodha* associated with either *Snigdha Kapha Sruti* (sticky nasal discharge), *Nasa Kandu* (Itching sensation in the nose) and *Gandha* and *Rasa Ajnanatha* (loss of smell and taste) with some of the clinical features of *Vatakaphaja Pratishyaya*. *Nasya Karma* is the special line of treatment for *Urdhwajatrugata Vikara*. *Shunthi Gud Avapeedana Nasya* which is prepared with *Kaphavatahara* and *Shirovirechana* drugs is being used for *Nasya Karma* in *Kaphaja Pratishyaya*. Patients presenting with the classical features of *Kaphaja Pratishyaya* and between the age group of 7yrs and 80yrs irrespective of sex were selected. 50 patients were selected and assigned in a single group. *Avapeeda Nasya* was administered for 7 days, once in the morning between 7am to 8am on an empty stomach. The treatment provided statistically significant result on the signs and symptoms of *Kaphaja Pratishyaya* (Chronic simple rhinitis). The treatment *Shunthi Gud Avapeeda Nasya Karma* provided marked improvement in 18% of the patients and 82% of the patients showed moderate improvement. The drugs *Shunthi* and *Gud*, possess *Kaphavatahara* and *Tridosahara* properties, which play an important role in pacifying doshas, participating in the pathogenesis of the disease *Kaphaja Pratishyaya*. This immune-modulation reduces the inflammatory process in nasal cavity and sinuses. The local irritation caused by the drug is helpful to liquefy the purulent sputum and ultimately expelled.

**KEYWORDS:** *Avapeeda Nasya*, Chronic Rhinitis, *Kaphaja Pratishyaya*.

**INTRODUCTION**

*Pratishyaya* is a complex disease involving several symptoms and diversified pathogenesis. It is a nuisance to the affected irrespective of age and sex. A lot of modern disease entities can be included under the heading of *Pratishyaya*. Unless it is not managed properly, can lead to several complications, which may be life threatening or crippling in future. *Pratishyaya* although a mild disease, it can make patients externally uncomfortable and can interfere with the routine activities. *Pratishyaya* is an IgE mediated hypersensitivity disease of mucous membranes of the nasal airways. It is a chronic disabling disorder affecting at least over 10% of the population. It is especially disturbing to notice that the spread of the disease is on a steady rise in recent years. This can be a consequence of urbanization, industrialization and subsequent pollution.

A simple common cold or *Pratishyaya* affects most of the population. Probably very few people have been left untouched by these annoying disorders. However, if this is neglected for a longer period, it may lead to more

serious problem like Sinusitis, Bronchitis or such other Upper respiratory tract infection. Even in *Ayurveda* it is said that *Pratishyaya* let it be *Ekadoshaja* or *Bahudoshaja*, if not treated properly may lead to *Dushta Pratishyaya* and later *Kasa*, or even *Kshaya*. It is well known for its recurrence and chronic appearance. Recurrence of the disease occurs because the *Doshas* have not been evacuated completely. Such *Doshas* reside in their latent stage (predisposing stage) and give rise to the same disease when factors (aggravating factors) are favorable. Even some times the *Pratishyaya* appears as a *Ritu* and *Kapha sambandha Vyadhi*.

Chronic Rhinitis is a major problem in the society. The magnitude of the condition can be understood by the fact that, though it is known from the ancient era and in spite of worldwide effects to combat this impediment, still there is no definite solution for the problem. As this disease is a chronic problem and characterized by recurrent exacerbations and complications, it makes the patient very much in trouble. The complaints like headache, sneezing, heaviness in head, results in reduced

working capacity of the person. Later on the complications, like nasopharyngitis, pharyngitis, sinusitis, tonsillitis, acute otitis media etc. may occur.

*Kaphaja Pratishyaya* (Chronic Rhinitis) is recurring frequently and attending the chronic stage, as per the *Charaka* for which *Nasya* is the line of treatment. *Nasya* is the chief procedure to drain *Doshas* from *Shiras*. *Ayurveda* offers scope in the form of *Avapeeda Nasya*, which is explained as a procedure for resisting such disorders. So *Nasya* was selected as the chief *Shodhana* procedure and one indigenous drug compound was also included. *Avapeeda Nasya* is the *Nasya* consisting of the *Swarasa* of a drug administered through nasal passage.

Generally the people desire to get relief of their trouble in a minimum period. Though a number of medicines are available in every system of medicine for curing a single disease, still always challenges exists for an effective and safe drug. As a result of such an exploration, the present preliminary research study is planned to know about the effect of the classical drug compound *Shunthi Gud Avapeeda Nasya* by administering it to patients suffering from *Kaphaja Pratishyaya*.

Many of the modern remedies in this regard are probably effective but on chronic usage cause dependence, side effects and poor performance in the prescribed dosage. After studying its prevalence worldwide; this disease has been selected with following objectives.

1. To study in detail the aetiopathogenesis and prevalence of *Kaphaja Pratishyaya* as per diagnostic parameters of *Ayurvedic* & modern medical literature.
2. To evaluate the effect of *Shunthi Gud Avapeeda Nasya* as *Shodhan Nasya* in *Kaphaja Pratishyaya* w.s.r. to Chronic Rhinitis.

#### Source of Data

The patients attending the OPD & IPD of *Patanjali Bhartiya Ayurvigyan Avum Anusandhan Sansthan, Haridwar, Uttarakhand* were selected for research study.

#### Inclusion criteria

1. Patients between the age group of 7-80 years of sex, occupation, religion and socio economic status.
2. Patients suffering from signs and symptoms of *Kaphaja Pratishyaya* (Chronic Rhinitis)
3. Patients fit for *Nasya*.
4. Patients willing to give written informed consent.

#### Exclusion criteria

1. Patients below 7 years and above 80 years.
2. Other than *Kaphaja Pratishyaya* (*Vata, Pitta, Rakta, Sannipata*)
3. Patients suffering from Chronic Simple Rhinitis associated with tonsillitis, adenoids etc.
4. Gross DNS
5. *Nasa Arsha* (Nasal Polyp)

6. *Nasa Arbud* (*Nasal* neoplastic growth)
7. Patients with other systemic disorders like TB, HIV, Retro positive diabetes, hypertension and thyroid.
8. Patients *Ayogya* for *Nasya Karma*.

#### Criteria for selection of drug

##### *Shunthi Gud Avapeeda Nasya*

In this study *Shunthi* and *Gud* are used for the clinical trial. (*Sharangadhar Samhita Uttar khand 8/18*).

#### This compound drug has been selected for the trial due to the following reasons

- All the ingredients are herbal and easily available.
- Ingredients of this compound are having *Vatakaphahara, Srotoshodhana, Shothahara, Vatanulomana, Lekhana, Kaphaghna* and *Jantughna* properties.
- Anti-inflammatory, Antibacterial, Anti-oxidants, Analgesics and Immuno-modulatory properties.
- Keeping all the above points in mind the *Shunthi Gud Avapeeda Nasya* was selected to explore its effect in treating *Kaphaja Pratishyaya* (Chronic Rhinitis).

#### Method of preparation of *Shunthi Gud*

*Shunthi* and *Gud* were taken in equal quantity. Dried well and *Shunthi* was finely powdered separately and mixed thoroughly altogether and preserved.

#### Method of preparation of *Shunthi Gud Avapeeda Nasya*

All the drugs were taken in equal quantity sufficient for administration of 4/6/8 drops in each nostril for one patient at a time. *Kalka* was prepared and was squeezed through a piece of muslin cloth and the *Swarasa* thus obtained was filled in a dropper and was administered as *Nasya*. *Swarasa* was freshly prepared on each day of *Nasya*.

#### Collection and authentication of drugs

The raw drugs were collected / purchased from Divya pharmacy store of *Patanjali Bhartiya Ayurvigyan Avum Anusandhan Sansthan, Haridwar, Uttarakhand*. The identity of the drugs was confirmed by the HOD of *DravyaGuna* department of the *Patanjali* Institute. These drugs were compared with voucher specimen and available literature in institute.

#### Diagnostic criteria

An elaborate patient case format incorporating the points of history taking and physical examination was prepared. It mainly emphasized on signs and symptoms of *Kaphaja Pratishyaya* (Chronic Rhinitis). Routine laboratory investigation (Hb%, TLC, DLC, ESR), A.E.C. examination was made to rule out other pathological conditions. Radiological investigation X-ray PNS was done for confirmation of the diagnosis.

- Mucoid / mucopurulent nasal discharge
- Nasal blockage
- Post nasal blockage

- *Kandu* in *Nasa*, *netra*, *gala*, *talv*.
- *Shiro gurutva*.
- Change in color of nasal mucosa
- Swollen turbinates
- Difficulty in smell perception

#### History of present illness

- Nature of discharge
- Consistency of discharge
- Quantity of discharge
- Duration of discharge
- Itching
- Nasal blockage
- Discomfort in nose
- Epitaxis

#### Examination of Nose

- 1) Inspection: External nose/Tip/ Bridge etc.
- 2) Anterior Rhinoscopy
  - Lower & ant, Part of septum
  - Anterior Part of inferior & middle turbinate
  - Floor of the nose
  - Mucosa: Pink/Pale/Red/Normal
  - Septum
- 3) Obstruction of nose/ Nasal Patency

#### Research Design

It is a randomized, open labeled, observational clinical study. Patients were assigned in single group excluding dropouts with pre, mid and post test study.

**Total no of patients: 50 patients** receives *Shunthi Gud Avapeeda Nasya*

**Dose:** 4/6/8 drops in each nostrils (According to *Rogi & Roga bala*)

**Time:** Once in a day every morning (7 AM to 8 AM) on an empty stomach for 7 days

#### Criteria for assessment

To assess the effect of *Shunthi Gud Avapeeda Nasya*, subjectively and objectively the following classical criteria were taken.

##### 1. Nasal obstruction

- 0 - No obstruction/occasional
- 1 - Partially occasional & unilateral
- 2 - Partially occasional & bilateral
- 3 - Complete, frequently & unilateral
- 4 - Always complete & bilateral

##### 2. Nasal discharge

- 0 - No discharge
- 1 - Occasional discharge
- 2 - Scanty Intermittent discharge
- 3 - Recurrent discharge
- 4 - Profuse muco-purulent discharge

##### 3. Itching sensation

- 0 - No itching
- 1 - Mild itching

- 2 - Moderate itching
- 3 - Severe itching
- 4 - Severe intolerable itching through the day

##### 4. Smell perception

- 0 - Normal
- 1 - Occasional loss of sense
- 2 - Partial loss of sense
- 3 - Complete loss of sense

##### 5. Headache (*Shirashula*)

- 0 - No
- 1 - Occasional
- 2 - Intermittent
- 3 - Continuous
- 4 - Intolerable

##### 6. Post Nasal discharge

- 0 - Not present
- 1 - Occasional present
- 2 - Frequent discharge
- 3 - Continuous discharge
- 4 - Continuous heavy discharge

#### Objective criteria

##### 1. Spatula Test

- 0 - Patent (RT & LT bilateral)
- 1 - Partial block (RT & LT unilateral)
- 2 - Complete block (RT & LT bilateral)

##### 2. Anterior Rhinoscopic Findings (Color of mucosa)

- 0 - Pink
- 1 - Red
- 2 - Cherry Red/Blue

#### OBSERVATIONS AND RESULTS

Maximum 68% patients belong to the age group between 21-40 years, 56% patients were male and 44% were female, 52% was married, 60% were students, 10% each were doing business, 20% patients were Housewives and 10% patients were doing service. 50% patients were graduated. 52% were of upper-middle class, 32% patients were taking vegetarian diet. 46% patients were having good appetite. 64% was having regular bowel habit. 78% was having sound sleep. 28% were doing regular exercise, 40% patients were addicted to cold drink, 60% were having *Vishamagni*, 58% patients were having *Madhyam Kostha*. 52% had habit of hot water bathing and 48% patients had bath with cold water. 34% had tensive nature, 52% patients were doing moderate type of work. *Vatapittaj Prakriti* patients were 36%, *Vatakaphaj prakriti* patients were 28% and *Pittakaphaj Prakriti* patients were 36%. Majority of patients 72% were having *Rajasika prakriti* and 28% patients were having *Tamasika Prakriti*.

54% had bilateral Nasal obstruction & 52% had intermittent nasal obstruction. 84% patients had nasal obstructions at night. 40% had mucoid discharge. 54% had purulent discharge. 56% had profused quantity of

discharge. 62% had foul smell in discharge. Patients with chronic simple rhinitis had usually swollen turbinates, DNS or hypertrophied turbinates with mucoid to mucopurulent discharge which often trickles to the throat as post nasal discharge and the patient tries to clear the throat on and off. 60% had moderate coughing, while it was absent in 12% of patients. Itching was present in 45 patients. Headache was present in 42 patients. 50% had half side headache, 59.52% had moderate headache, 73.81% had intermittent headache. 60% had pink nasal mucosa while 26% of patients had pale nasal mucosa. Deviated Nasal septum was absent in 46% of patients, while it was present in 54% of patients. 56% had ethmoid sinusitis, while 22% had maxillary sinusitis.

#### Data Related to disease

**Prodromal Symptoms** - *Shirogurutwa* was present in 90% of patients; *Kshavathu* was present in 32%,

#### Relief Percentage

Symptoms & Test Findings	Symptom Score		Relief %
	BT	AT	
Nasal obstruction	129	41	68.21
Nasal discharge	134	49	63.43
Itching	117	36	69.23
Heaviness of head	111	35	68.46
Post nasal discharge	98	41	58.16
Smell perception	65	29	55.38
Spatula test	107	30	71.96
Anterior Rhinoscopic findings	38	9	76.31

The relief percentage in individual symptoms of *Kaphaja Pratishyaya* revealed a better therapeutic efficacy of *Shunthi Gud Avapeeda Nasya Karma*.

**Statistical Results:** The total effect of therapy on symptoms of each patient was evaluated before and after completion of the treatment. The initial mean score of 50 patients for Nasal obstruction was 2.58 which were reduced to 0.82 after treatment. The total effect of treatment provided statistical significant ( $P < 0.001$ ) result with 't' value of 11.69. In symptom Nasal discharge, the mean before treatment was 2.68 which was reduced to 0.98, exhibiting highly significant ( $P < 0.001$ ) improvement with 't' value of 12.16. In symptom Itching, the mean before treatment was 2.60 which was reduced to 0.80, exhibiting highly significant ( $P < 0.001$ ) improvement with 't' value of 12.99. In symptom Heaviness of head, the mean before treatment was 2.64 which was reduced to 0.83, exhibiting highly significant ( $P < 0.001$ ) improvement with 't' value of 12.61. In Post nasal discharge, the mean before treatment was 2.39 which was reduced to 1.0 after treatment. The total effect of treatment provided statistical significant ( $P < 0.001$ ) result with 't' value of 9.99. The initial mean score for post nasal discharge was 1.76 which were reduced to 0.78 after treatment. The treatment provided statistical significant ( $P < 0.001$ ) result with 't' value of 7.09 after completion of the treatment.

*Angamarda* in 68%, *Parihrishtaromata* 34% and *Stambha* in 70% patients.

**Presenting complaints** - Nasal obstruction and nasal discharge were present in 100% patients followed by itching in 92% patients, heaviness of head in 84%, post nasal discharge in 82% and smell perception in 70%.

**Spatula Test** - Maximum number of patients i.e. 66% had Grade II positive spatula test.

**Anterior Rhinoscopic findings** - 70% patients had deviated nasal septum (DNS) and 52% had bilateral hypertrophied turbinated. 96% patients had a narrow nasal passage. Mucoid nasal discharge was present in 82% of patients.

**Effect of Therapy on Test Findings:** The initial mean score of 50 patients for spatula test was 2.14 which were reduced to 0.6 after treatment. The total effect of treatment provided statistical significant ( $P < 0.001$ ) result with 't' value of 11.76. The initial mean score for anterior Rhinoscopic findings, the mean before treatment was 0.76 which was reduced to 0.18, exhibiting highly significant ( $P < 0.001$ ) improvement with 't' value of 5.04.

**Assessment of Overall effect of Therapy:** The treatment *Shunthi Gud Avapeeda Nasya Karma* provided marked improvement in 18% of the patients and 82% of the patients showed moderate improvement. No patient got complete remission and no patient was found unchanged/no response and mild improvement.

#### DISCUSSION ON PROCEDURE

**Purva Karma:** *Abhyanga* with *Tila Taila* in *Urdhvanga* was done followed by *Bashpasweda*. During *Svedana* eyes were covered with cotton. *Abhyanga* causes *Mriduta* of *Doshas* and *Svedana* causes *Vilayana* (Liquification) of accumulated *Doshas*. According to Modern science due to *Abhyanga* blood circulation increases. *Svedana* shows effect by two ways- Due to *Svedana* the collected mucous liquefies. It also causes vasodilatation. Due to vasodilation permeability of blood vessels increases. Thus it also makes faster the drug absorption. Proteins like Kinins, Prostaglandins, etc. in

the blood enter into the interstitial fluid as the permeability of blood vessels increase; and local immunity increases due to these proteins.

**Pradhana Karma:** In *pradhana karma*, the *Avapeedana Nasya (Svarasa)* is administered into the nostrils in head low position of the patient. The *Sukshma Anu Dravyas* reaches the *Sringataka Marma* and from there to different *Siras* and it also spreads to other parts like eyes, ears, throat, etc. and bring out the morbid *Doshas* which helps in *Sroto Shuddhi* and makes the *Anuloma Gati* of *Vata* and *Kapha* which is vitiated in *Kaphaja Pratishyaya*. The drug which was administered causes the irritation of local nerves and also stimulation of the parasympathetic nerves. Parasympathetic nerves also secretes acetylcholine and increases the nasal gland secretions. Increased nasal gland secretion regulates the movements of cilia and helps in expulsion of the mucous and other collected matters from the nasal cavity and increases local immunity and helps to cure the disease.

**Paschat Karma:** In *Paschat Karma* of *Avapedana nasya*, *Mridu Abhyanga*, *Dhoomapana* and *Kavala* is done. *Mridu Abhyanga* and *Sveda* soon after administration of the medicine helps to relieve the irritation which is caused by *Teekshanata* of the *Dravyas*.

#### Probable mode of action of drugs

The drug *Shunthi* has *Katu Rasa*, *Laghu*, *Snigdha Guna*, *Ushna Virya*, *Madhur Vipaka* and *Kaphavata shamaka* properties. The *Gud* has *Madhura Rasa*, *Natishita*, *Snigdha Guna*, *Ushna Virya*, *Madhur Vipaka* and *Tridoshashamaka* properties. The compound drugs contain *Katu*, *Madhura Rasa*, *Laghu*, *Snigdha Guna*, *Ushna Virya*, *Madhur Vipaka* and *Tridoshashamaka* (especially *Kapha Vata*) properties. These drugs produce *Draveekarana* (liquefaction) and *Chedana* (expulsion) of the vitiated *Doshas* there by relieving the features of the disease. All the ingredients are herbal and easily available. The post operative procedures like *Dhumpana* acts as *Sleshmahara*, *Sravahara*.

As per the above classical description of the drugs, it can be inferred that *Shunthi Gud Avapeeda Nasya* is having *Vatakaphahara*, *Brumhana*, *Vatanulomana*, *Lekhana*, *Kaphaghna*, *Jantughna* *Shothahara*, *Sravahara* properties hence is capable of removing the *Kapha Avarana* in addition helps in *Vatashamana* and promote *Vata Svamarga Pravritti* thus capable of controlling *Kaphaja Pratishyaya*. It also acts as Anti-inflammatory, Antibacterial, Anti-oxidants, Analgesics and Immunomodulator.

#### CONCLUSION

The treatment *Shunthi Gud Avapeeda Nasya Karma* provided marked improvement in 18% of the patients and 82% of the patients showed moderate improvement. The immune-modulation effect reduces the inflammatory process in nasal cavity and sinuses. The local irritation caused by the drug is helpful to liquefy the purulent

sputum and ultimately expelled. Bacteriostatic property of ingredients will arrest the secondary infection. Hence *Nasya Karma* is a reliable therapy for treating *Kaphaja Pratishyaya*. Finally it can be concluded that *Shunthi Gud Avapeeda Nasya* therapy is more effective in the management of *Kaphaja Pratishyaya*. These drugs are safe, not having any side or toxic effects and are natural in origin are added advantages.

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