

**MANAGEMENT OF CHRONIC SINUSITIS THROUGH ALTERNATE RECHANA AND SNEHANA NASYA - REPORT FROM A PILOT STUDY**Remya T M<sup>1</sup>, Binitha A<sup>2</sup><sup>1</sup>PG Scholar, Department of Panchakarma, VPSV Ayurveda College, Kottakkal, Kerala, India<sup>2</sup>Professor, Department of Panchakarma, VPSV Ayurveda College, Kottakkal, Kerala, IndiaCorresponding Author: [drremyatm@gmail.com](mailto:drremyatm@gmail.com)<https://doi.org/10.46607/iamj1009112021>

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**ABSTRACT**

Chronic sinusitis is the chronic inflammatory condition affecting the paranasal sinuses. It may be correlated to *Dushta pratisyāya* in Ayurveda, which is a *Kapha* predominant disease affecting *jatṛurdhva bhāgā* which needs *teekshna virecana nasya* for its management. *Vāgbhaṭācārya* opines that except for *vātika rogas*, *nasya* should be done as *ekāhāntara* (alternate day) i.e., with a gap of one day in between. But according to *Cakṛadatta* commentary, *ekāhāntara nasya* is to be done with *virecana nasya* and *snehana nasya* on alternate days. For *virecana nasya*, *Tuḷasi paṭra svarasa* (*Ocimum sanctum* Linn.) and for *snehana nasya*, *Aṇutaila* were selected. A patient aged 43 years diagnosed with adult rhinosinusitis diagnostic criteria was taken for the study and was given *ekāhāntara nasya* with *Tuḷasi paṭra svarasa* and *Aṇutaila* for 7 days. During follow up period *Pathyākṣadhātryādi kaṣāya* was given for 15 days. *Samyak nasya lakṣaṇa* and Event evaluation scales were assessed on each day of *nasya* and Scale for scoring of symptoms, Rhinosinusitis Disability Index and Visual Analogue Scale were assessed before trial, after trial and after follow up. After the course of treatment 100% improvement was found in the Scale for scoring of symptoms, Rhinosinusitis Disability Index and Visual Analogue Scale.

**Keywords:** Case report, *Ekāhāntara* (alternate day) *nasya*, *Tuḷasipaṭrasvarasa*, *Aṇutaila*, Chronic sinusitis

## INTRODUCTION

Nasya is one of the *pañcakarma* which is widely used in routine clinical practice. It is the main *śodhana* procedure for *jatruṛdhva rogās*.<sup>(1)</sup> It is broadly classified into *śirovirecana* and *snehana*.<sup>(2)</sup> *Śirovirecana* eliminates the vitiated *kapha doṣa* and it leads to *karṣaṇa*.<sup>(3)</sup> *Snehana* pacifies vitiated *vāta* and *pitta* and it leads to *br̥mhaṇa*.<sup>(3)</sup> Sinusitis is one of the most common upper respiratory tract conditions. It has a prevalence of 15% in Indians.<sup>(4)</sup> It is classified into acute and chronic sinusitis. The main symptoms of chronic sinusitis are nasal obstruction, nonspecific headache, nasal discharge, postnasal drip and decreased sense of smell which lasts for a period greater than 12 weeks.<sup>(5)</sup> It can be correlated to *duṣṭa pīnasa* with a predominance of *kapha doṣa*. *Virecana nasya* is indicated for *śodhana* in *pīnasa*.<sup>(6)</sup> Conventionally *virecana nasya* is practised on consecutive days. According to the classics, *virecana* is to be done as *ekāhāntara* (alternate day) *nasya*.<sup>(7)</sup> There should be a gap day in between the procedure. According to *Cakradatta* commentary, *ekāhāntara nasya* is to be done with *virecana nasya* and *sneha nasya* on alternate days.<sup>(8)</sup> *Tuḷasi patra svarasa* was found more effective for *śirovirecana* in Chronic sinusitis.<sup>(9)</sup> *Tuḷasi patra svarasa* has *tīkṣṇa* and *kaphahara* property and it is indicated for *nasya* in the treatment of *pīnasa*.<sup>(10)</sup> *Añutaila* was taken for *snehana nasya* because it is *tridoṣa śamana* and *br̥mhaṇa*.<sup>(11)</sup>

### Diagnostic Criteria

Adult rhinosinusitis diagnostic criteria (American academy of otolaryngology-Head and Neck surgery) 2015.<sup>(12)</sup> At least 2 or more features of following for more than 12 weeks

1. Facial pain-pressure-fullness
  2. Nasal obstruction
  3. Anterior or posterior mucopurulent drainage
  4. Decreased sense of smell
- and inflammation is documented by one or more of
1. Purulent mucus or edema in middle meatus or anterior ethmoid region
  2. Polyps in the nasal cavity or middle meatus
  3. Radiographic imaging showing inflammation of paranasal sinuses

### Clinical profile of the Patient

Age: 43 years, Sex: Female

#### ❖ Clinical History of Patient-

- Frequent headache and heaviness of head with nasal obstruction, postnasal dripping, change in voice and moistness inside the nose- 2 Years.

- Complaints aggravate with weather change & dusty atmosphere.

- Nasal obstruction was unilateral and permanent; facial pain and heaviness on the forehead; occasional hoarseness of voice, anorexia; continuous postnasal drip and moistness inside bilateral nostrils.

- ❖ History of illness- she was a known case of hypothyroidism and was under allopathic treatment for the same and the Thyroid Function Test was within normal limit.

#### ❖ Personal history

Appetite-poor; diet- mixed & regular; bowel habits-regular; urine output- normal; exercise- moderate; addictions- nil; sleep- normal; emotional stress- moderate; allergy- to dust

- ❖ Treatment history- for headache and associated complaints she took allopathic treatment and got only temporary relief

#### ❖ Examination of Patient

- On general examination, the patient appeared healthy, average built and moderately nourished

- Respiratory rate, pulse rate, heart rate, blood pressure, the temperature was found normal

- Other systemic examinations –found no abnormality

- Examination of Nasal Cavity: -

#### ➤ Anterior Rhinoscopy:

- Nasal septum- deviated towards left

- Inferior & middle turbinates were hypertrophied

- Mucosa- Swollen & Red

- Floor of nose- watery secretion was present

- Pharyngeal tonsil: absent

- No abnormality was detected in the oral cavity, throat and ear

- On palpation of sinuses

- Grade 1 tenderness was present on bilateral frontal, left ethmoidal and left maxillary sinuses

- X-Ray PNS water's view - showed opacity in bilateral frontal, left maxillary and left ethmoidal sinuses.

### Ayurvedic management

The patient was given OP level treatment of Alternate day nasya with *Tuḷasi patra svarasa* and *Aṇutaila* for 7 days in the morning, followed by internal administration of *Pathyākṣadhātryādi kaṣāya* for 15 days.

2ml of *Tuḷasi patra svarasa* was mixed with 0.5 ml of honey and 1 pinch *saindhava* – was used for nasya and two instillations were done ie. 1+1 ml. The dose of *Aṇutaila* was also 2 ml as two instillations of 1 ml each.

The pattern of nasya was as follows: -

**Table 1: Pattern of nasya**

1 <sup>st</sup> day	2 <sup>nd</sup> day	3 <sup>rd</sup> day	4 <sup>th</sup> day	5 <sup>th</sup> day	6 <sup>th</sup> day	7 <sup>th</sup> day
<i>Aṇutaila</i>	<i>Tuḷasi patra svarasa</i>	<i>Aṇutaila</i>	<i>Tuḷasi patra svarasa</i>	<i>Aṇutaila</i>	<i>Tuḷasi patra svarasa</i>	<i>Aṇutaila</i>

- *Poorvakarma* of Nasya  
*Talam* on vertex with *rasnadi churna*  
*Abhyanga* with *tila taila* on face, neck and shoulder followed by *bashpa sweda*

- *Paschat karma* of nasya  
*Dhoomapana* was given with *Haridra varti* & *Kabala* with lukewarm water

Follow up: - *Pathyākṣadhātryādi kaṣāya*, 75 ml twice daily 1 hour before food, for 15 days.

Advice: During 7 days of nasya, the patient was advised to avoid head bath, intake of cold food items, exposure to cold, wind, sunlight etc. During follow up period advised to follow all restrictions except avoidance of head bath.

### Assessment Criteria

The assessment was done using Rhinosinusitis Disability Index, Visual Analogue Scale & Scale for scoring of symptoms (before trial, after trial and after follow up ie. On 0<sup>th</sup>, 8<sup>th</sup> and 22<sup>nd</sup> day) and Event evaluation scale & *Samyak nasya lakṣaṇa* (on each day of nasya)

### Scale for scoring of symptoms

#### 1. *Nasa Srava* (Nasal discharge):

- No discharge: 0
- Occasional: 1
- Frequent: 2
- Continuous heavy: 3
- Continuous heavy and foul smell: 4

#### 2. *Kshavathu* (Sneezing):

- No sneezing: 0
- Occasionally <5/day: 1
- 5-10 times / day: 2

11-15 times / day: 3

>16 times / day: 4

#### 3. *Nasavarodha* (Nasal obstruction):

No obstruction: 0

Partially, occasionally and unilateral: 1

Partially, occasionally and bilateral: 2

Complete, frequently and unilateral: 3

Always complete and bilateral: 4

#### 4. *Shoola and Gaurava* (Facial pain-pressure-fullness):

No headache: 0

Occasionally with low intensity: 1

Frequently with moderate intensity but do not disturb daily routine work: 2

Always with moderate intensity, sometimes disturb routine work: 3

Always severe intensity associated with vomiting, nausea etc.: 4

#### 5. *Swarabheda* (Change of Voice):

No change of voice: 0

Occasional hoarseness of voice: 1

Frequent hoarseness of voice more in morning hours: 2

Frequent hoarseness of voice throughout the day: 3

Cannot speak due to hoarseness of voice: 4

#### 6. *Ghrana viplava* (Loss of smell):

No loss of smell: 0

Partial and unilateral: 1

Partial and bilateral: 2

Complete and unilateral: 3

Total loss of smell: 4

**7. Postnasal Drip:**

No postnasal drip: 0

Occasional: 1

Frequent: 2

Continuous: 3

Continuous heavy: 4

**8. Kasa (Cough):**

No cough: 0

Dry or unproductive cough: 1

Productive cough with scanty sputum: 2

Productive cough with a moderate amount of sputum: 3

Productive cough with a large quantity of sputum: 4

**9. Aruchi (Anorexia):**

No anorexia: 0

Occasional loss of appetite: 1

Moderate loss of appetite: 2

Continuous loss of appetite: 3

Loss of appetite associated with nausea and vomiting: 4

**10. Mukha Daurgandhya (Halitosis):**

No halitosis: 0

Occasional bad smell in the mouth: 1

Frequent bad smell in the mouth: 2

Continuous bad smell in the mouth: 3

The severe bad smell which can be perceived by others:

**11. Nasikakleda (Moistness inside the nose):**

No moistness: 0

Occasionally and unilateral: 1

Occasionally and bilateral: 2

Complete and unilateral: 3

Always complete and bilateral: 4

**12. Nasasosha (Dryness inside the nose):**

No dryness: 0

Occasionally and unilateral: 1

Occasionally and bilateral: 2

Complete and unilateral: 3

Always complete and bilateral: 4

**Observations**

The observations in symptoms of chronic sinusitis before trial, after trial and after following up are given in the table.

**Table 2:** Score of symptoms before trial, after trial and after follow up

Chief and Associated Complaints	Before trial	After trial	After follow up
Nasavarodha	3	0	0
Shoola and Gaurava	3	0	0
Swarabheda	2	0	0
Postnasal Drip	3	1	1
Aruchi	2	0	0
Nasikakleda	4	2	0
Total	17	3	1

The change in headache was assessed using VAS; Visual analogue scale: BT-8; AT-0; AF-0

A score of Rhinosinusitis Disability Index: BT-38; AT-3; AF-2

**Table 3:** Number of *Samyak nasya lakshanas* obtained on each day

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
2	3	3	10	10	11	11

Complications- burning sensation and irritation was found on the first day of *Tulasi svarasa nasya*. During the first 2 days, the headache was there, later it got subsided.

**DISCUSSION**

A large number of ayurvedic drugs are used in the treatment of Chronic sinusitis. The present study was aimed to evaluate the therapeutic effect of *Nasya* in a different method as alternate *rechana* and *snehana*

*nasya*. As *rechana nasya* is done using *teekshna* medicines it may cause severe irritation and mucosal damage in the nostrils. So, to reduce these complications *snehana nasya* was also administered on alternate days with *rechana nasya*.

Effect of *nasya* on symptoms of Chronic sinusitis: *Nasavarodha* is produced due to inflammation of nasal mucosa which in turn cause obstruction of sinus ostia leading to accumulation of *kapha*. *Sūla* and *gourava* are also due to the accumulation of *kapha* in sinuses. The obstruction is relieved by the excretory action of *nasyakarma*. Properties of Medicines and steam inhalation as a part of *Pūrvakarma* of *nasya* help to increase mucociliary clearance and reduce the viscosity of mucus which facilitates removal of *kapha* from sinuses leading to reduced pain and heaviness of the head. Inflammation of nasal and sinus mucosa leads to increased mucus production which is the cause for Postnasal drip and *nāsakleda*. *Svarabheda* is due to postnasal drip. The anti-inflammatory action of drugs and expulsion of *kapha* by *nasya* helped to relieve these symptoms. Swallowing drainage from the nose is the cause of loss of appetite in chronic sinusitis patients. Expulsion of *kapha* by *nasya* help to decrease Postnasal drip, thus increasing appetite, also *nasya* has a stimulating effect on the satiety centre through olfactory and trigeminal pathways. *Tuḷasi patra svarasa* is a hypertonic solution having acidic pH which is the cause for burning sensation and irritation. The tocopherols in sesame oil which is the main ingredient of *Anutaila* might have helped to prevent tissue damage due to *virechana nasya* in subsequent days.<sup>(13)</sup> During the initial days of *nasya* elimination of *kapha* was less which in turn led to *siroruk* and it was relieved after steam inhalation. *Pathyākṣadhātryādi kaṣāya* is *kapha pitta samana* and *vātānulomana*, which is commonly used for *ūrdhvajatrugata rogas*, helped to prevent the recurrence of disease during follow up period.

## CONCLUSION

In this case, the improvement in score of symptoms after treatment was 82% and after follow up it was 94% compared to before treatment. Changes in VAS

was 100% both after treatment and after follow up. Improvement in RDI score was 92% after treatment and 94.7% after follow up compared to before treatment. By analysing the above study of the patient significant improvement is noticed after ayurvedic treatment, so same can be administered to large number of patients to further prove the efficacy of the ayurvedic treatment and to standardize the treatment.

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