

## EFFECT OF AN AYURVEDIC FORMULATION IN THE MANAGEMENT OF VATAJA PRATISHYAYA W.S.R. TO ALLERGIC RHINITIS

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### ABSTRACT

Vataja Pratishyaya is a condition characterised by Sneezing, Nasal obstruction, Nasal discharge, Itching in nose etc. and occur mainly due to Vata Kapha Pradhana, alpha Pitta Dosha. As the symptoms of Vataja Pratishyaya are same as that of Allergic Rhinitis this disease was selected for the study. The present study is done on 10 patients of Vataja Pratishyaya and was treated with Vyaghri Haritaki as oral drug. The signs and symptoms were studied before and after treatment. Result of the study showed moderate improvement in 8 patients (80%) & mild improvement in 2 patients (20%).

**KEYWORDS:** Vataja Pratishyaya, Pradhana, Allergic rhinitis, Vyaghri Haritaki.

### INTRODUCTION

*Ayurveda* is the ancient system of Indian medicine based on natural and holistic living; derived from two Sanskrit words-*Ayus* or life and *Veda* or knowledge that means it is science of life and longevity. Our *Acharyas* divided *Ayurveda* into eight parts.<sup>[1]</sup> which deals with different parts of the body. Among them *Shalaky Tantra*,<sup>[2]</sup> deals with the description and treatment of diseases of organs above clavicle. A very common clinical condition, *Pratishyaya* (Rhinitis) is one among them increasingly prevalent now a days demanding greater concern over it. In *Uttartantra*, *Acharya Sushruta* has devoted one separate chapter to *Pratishyaya* after explaining *Nasagataroga*,<sup>[3]</sup> *Vata* is the main *Dosha* and *Kapha*, *Pitta* and *Rakta*,<sup>[4]</sup> are associated to it. *Vataja Pratishyaya* is explained in *Ayurvedic* system of medicine as Sneezing, Watery discharge from nose, Stuffy nose, Itching in nose etc.<sup>[5]</sup> which have relevance with Allergic Rhinitis.

Allergic rhinitis is an IgE mediated immunologic response of nasal mucosa to airborne allergen and is characterized by watery nasal discharge, nasal obstruction, sneezing and itching in the nose.<sup>[6]</sup> This may also be associated with symptoms of itching in the eyes, palate and pharynx. In modern medicine system a wide

range of medicines are available but these drugs have nothing to do with such a chronic condition.

This present study includes detailed study of the disease, its nature and course and to evaluate the effect of *Ayurvedic* drugs on chronicity of the disease. In the present study "Effect of an Ayurvedic formulation in the management of Vataja Pratishyaya w.s.r. to Allergic rhinitis" Vyaghri Haritaki was used as oral drug.

In this research work 10 patients were taken for study in single trial group. The duration of trial was 15 days for *Vyaghri Haritaki Avleha*, evaluation based on subjective criteria.

### AIMS AND OBJECTIVES

- To establish the prevalence of the disease according to age and seasonal variations.
- Try to find out correlation of *Vataja Pratishyaya* with Allergic Rhinitis.
- To know the systemic action of *Vyaghri Haritaki Avleha*.

## MATERIAL AND METHOD

### Selection criteria

Uncomplicated patients with signs and symptoms of Allergic rhinitis, attending OPD and IPD of RGGPG Ayurvedic college and Hospital Paprola were selected above 12 years age, irrespective of sex, religion and occupation etc.

### Inclusive criteria

- Patients presents with sign and symptoms of Allergic rhinitis.
- Age above 12 years.

### Exclusive criteria

- Patient below 12 years of age.
- Rhinitis caused by virus, bacteria etc.
- Hypertrophic rhinitis
- Atrophic rhinitis
- Rhinitis sicca
- Patient suffering from systemic disease like HTN, T.B., D.M. etc.

### Plan of Work

The study was planned in different steps as mentioned below:

### Assessment Criteria

General evaluating scoring

#### • *Kshavathu* (Sneezing)

No sneezing	0
1-10 sneezing in each bout	1
10-15 sneezing in each bout	2
15-20 sneezing in each bout	3
>20 sneezing in each bout	4

#### • *Nasavarodha* (Nasal obstruction)

No obstruction	0
Feeling of obstruction in inhalation and exhalation with one nostril	1
Feeling of obstruction in inhalation and exhalation with both nostril	2
Inhalation and exhalation with both nostrils with effort	3
Complete blockage with total mouth breathing	4

#### • *Nasa srava* (Rhinorrhoea)

No discharge	0
Occasional Rhinorrhoea with a feeling of running nose Without visible fluid	1
Rhinorrhoea with occasional running nose with Visible fluid	2
Rhinorrhoea with running nose which needs mopping	3
Severe Rhinorrhoea with copious fluid needs Continuous moping	4

#### • *Kandu* (Itching)

No itching	0
Can tolerate without rubbing of nose	1
Can tolerate after frequent rubbing of nose	2
Continuous rubbing of nose	3

**1. Proforma:** A special proforma will be prepared for the evaluation of the etiopathogenesis and assessment if treatment efficacy. A detailed history will be taken and simultaneously general and systemic examination of the patients was done having signs and symptoms suggesting of Allergic rhinitis.

### 2. Investigations

Haematology- Hb%, TLC, DLC, ESR, LFT, RFT.

Biochemistry- FBS

Radiology- X ray PNS Water's view.

These investigations are done to rule out any other pathology e.g. DNS, Sinusitis, Polyp etc.

### Clinical Assessment

Assessment of the effect of treatment has been done on the basis of relief of signs and symptoms of Allergic rhinitis were graded in 4 gradations. Most of signs and symptoms of Allergic rhinitis described in texts are subjective in nature. Hence multidimensional scoring system was adapted for statistical analysis and to give results on subjective parameters. Scores were given according to the severity of symptoms as follows:

Irresistible itching	4
<b>• Aruchi</b>	
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
<b>• Shirogurava</b>	
Nil/Absent	0
Mild	1
Moderate	2
Severe	3
Very severe (forced to take medicine)	4
<b>• Gandhahani</b>	
No loss of smell	0
Partial and unilateral	1
Partial and bilateral	2
Complete unilaterally	3
Total loss of smell	4
<b>• Swarbhanga</b>	
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
<b>• Shirah shoola (Headache)</b>	
No headache	0
Headache occur sometimes	1
Headache occurs frequently but is able to carry routine work Without difficulty	2
Severe headache, patient restless and able to carry routine work With great difficulty	3
Severe crippling headache that renders patient bed ridden	4
<b>• Shwasa Kashtata</b>	
No dyspnoea	0
Dyspnoea after heavy work and walking	1
Dyspnoea after moderate work and walking	2
Dyspnoea after mild work	3
Dyspnoea even at resting condition	4
<b>• Kasa (cough)</b>	
No cough	0
Occasional cough	1
Moderate cough	2
Continuous cough with throat and chest pain	3
Severe continuous cough with throat and chest pain	4
<b>• Bhutwa Bhutwa (Recurrent attacks)</b>	
No attacks	0
Period between attacks more than two days	1
Period between attacks 1-2 days	2
Period between attacks 12-24 hrs	3
Attack within 12 hrs	4

- **Jwara**
- No fever 0
- Intermittent fever 1
- Continuous fever 2
- Double rise with morning and evening peaks 3
- With high peaks and relative bradycardia 4

**Criteria For Over All Assessment**

The total effect of therapy was assessed considering the following criteria-

- Complete remission: 100% relief in the signs and symptoms
- Markedly improvement: >75% relief in signs and symptoms
- Moderately improvement: > 50% relief in the signs and symptoms
- Mild improvement: >25% relief in signs and symptoms
- Unchanged: <25% relief in the signs and symptoms.

**DRUG REVIEW**

Ingredients of *Vyaghri Haritaki Avleha* (Bhs.Rt.)<sup>[7]</sup>  
**Lewyiq'iPNnd.Vdk;kZ Lrqyka tyæks.kifjlyqrk¥t**  
**gjhrrdhuap “kra fun;/k f}iP; IE;d~ pj.ko”kks’ke~**  
**xqML; nYok “kresrnXukS foiDoeqYkk;Z rr% lq”khrsA**  
**dVqf=dap f}iyçek.kaiykfu ‘kViq’ijl; pk=A**  
**f{kisPprqtKZriya ;FkkfXu**  
**ç;qT;ekuksfof/kuk.oysg%**  
**okrkReda fiYkdQksnHkoap f}nks’kdklufi p**  
**f=nks’ke~A**  
**{k;ksöoap {ketap gU;kr lihulÜoklLoj{k;ap**  
**;}{ek.kesdkn”keqxz:ia Hk’xwifn’Va fg jlk;ua**  
**L;kr~AA**  
**¼HkS- j-(p- n- 11@66&69½**

**Rasa Panchaka in Vyaghri Haritaki Avleha.**

Rasa	Katu
Guna	Laghu
Viryā	Ushna
Vipaka	Katu
Dosha karma	Vatakaphashamak

**Method of Preparation**

Method of preparation of drug (*Vyaghri Haritaki Avleha*): In relation with table no. 1 in this section:

- First of all 5 kg *Panchang* of *Kantkari* was grinded. 15lt (3 times) water was added to it and the mixture was heated over *Mandagni* till the quantity reduced to 1/4<sup>th</sup> (*Kwath*). The reduced mixture was filtered with the help of muslin cloth.
- Now 5 kg of *gud* was added to this *Kwath* and was heated over *Mandagni* till its one thread form is attained.
- After that powdered the ingredients *Haritaki*, *Shunthi*, *Pippali*, *Marich*, *Twak*, *Nagkesar*, *Ela*, *Tejpatra* separately and passed through sieve no. 85 to obtain a fine powder.

- All the powdered ingredients were added to the *Kwath* prepared and heated over *Mandagni* till the *Avleha* formulation get prepared.
- Later *Madhu* was added when *Avleha* get cooled.
- Packed it in tightly closed containers to protect from light and moisture.

**Group, Dose & Duration**

**Single group**

**Study design:**

Open uncontrolled study.  
 Number of patients – 10

**Drug Schedule**

- *Vyaghri Haritaki Avleha* as oral drug.

**Dose**

- *Vyaghri Haritaki Avleha* - 12 gms twice a day.

**Duration**

- *Vyaghri Haritaki* - 2 weeks

**Anupana**

- *Godugdha*.

**Duration of treatment**

- 2 weeks

**Follow up**

- 7 days

**Statistical Analysis**

**Statistical Analysis**

The information gathered regarding demographic data is shown in percentage. The scores of criteria of assessment were analysed statistically in form of mean score B.T. (Before treatment), A.T. (After treatment), (B.T.-A.T.) difference of mean, S.D. (Standard deviation), S.E. (Standard error). Student paired ‘t’ test was carried out at p>0.05, p<0.05 and p<0.001.

The results were considered significant or insignificant depending upon value of ‘p’.

- Highly significant - p < 0.001
- Significant - 0.05 < p > 0.001
- Insignificant - p > 0.05

**Consent of patient**

All the patients selected for trial were explained the nature of the study and their written consent was obtained on the proforma before including them in the clinical study.

## OBSERVATION

In the present study 50% of the patients were of age group 21-30 years, 90% were females, 60% were married, 80% belonged to rural area, 100% were Hindus, 50% were educated upto higher secondary school, 50% belonged to lower class, 80% patients were having mixed dietary habits, 70% of patients were having no addiction, 70% of patients were housewives, 40% of patients were having previous family history and no family history was recorded in 60% patients, Most of patients have chronicity of >5 years, almost all patients respond to aggravating factors like smoke, pollution, dust etc. and some to exposure to pollens, animal changes and climatic changes. Most of patients i.e. 60% belonged to Vatakaphaja Prakriti, 90% were having madhyama Satva, Satmaya and Samhanana, 70% of patients were having madhyama Vyayama shakti. As incidence of signs and symptoms were concerned almost all patients showed symptoms like Kshavathu, Nasanaha, Nasasrava, 80% patients were having symptoms like Kanduu, Bhutwa bhutwa and approx. 50-60% of patients showed symptoms like Gandhahani, Shorahshoola, Swarbhanga.

### Effect of Therapy

- 1. Kshavathu (Sneezing):** The initial score of sneezing was 2.6 which were reduced to 1.3 after treatment. The percentage relief was 50% which is highly significant statistically at level of  $p < 0.001$  ( $t = 8.510$ ).
- 2. Nasavarodha/Nasanaha (Nasal Obstruction):** The initial score of *Nasavarodha* was 2 which was reduced to 0.9 after treatment. The percentage relief was 55% which is highly significant statistically at level of  $p < 0.001$  ( $t = 6.128$ ).
- 3. Nasasrava (Nasal discharge):** The initial score of *Nasasrava* was 2.2 which was reduced to 0.9 after treatment. The percentage relief was 59.09% which is highly significant statistically at level of  $p < 0.001$  ( $t = 8.510$ ).
- 4. Kanduu (Itching):** The initial score of *Kanduu* was 2.1 which was reduced to 1.12 after treatment. The percentage relief was 46% which is significant statistically at level of  $p < 0.050$  ( $t = 3.742$ ).
- 5. Gandhahani (Anosmia):** The initial score of *Gandhahani* was 1.5 which was reduced to 0.5 after treatment. The percentage relief was 66.66% which is significant statistically at level of  $p < 0.050$  ( $t = 3.873$ ).
- 6. Swarbhanga (Hoarseness of voice):** The initial score of *Swarbhanga* was 1.75 which was reduced to 0.5 after treatment. The percentage relief was 71% which is significant statistically at level of  $p < 0.050$  ( $t = 5.000$ ).
- 7. Shirahshoola (Headache):** The initial score of *Shirahshoola* was 1.4 which was reduced to 0.4 after treatment. The percentage relief was 71% which is highly significant statistically at level of  $p < 0.001$  ( $t = 8.683$ ).
- 8. Bhutwa Bhutwa (Recurrent attacks):** The initial score of *Bhutwa Bhutwa* was 1.87 which was

reduced to 0.75 after treatment. The percentage relief was 60% which is significant statistically at level of  $p < 0.050$  ( $t = 3.813$ ).

Among 10 patients, 8 patients were moderately improved and 2 patients had mild improvement. There was no patient who was cured, markedly improved or unimproved.

## DISCUSSION

*Vataja Pratishyaya* (Allergic rhinitis) is one of the most common ENT ailment affecting people in entire society and it is one of the challenging problem of all ENT surgeons. The disease looks simple but it doesn't bring satisfactory relief to the patients even after repeated visits to ENT clinic. It is one of the most common and most prevalent ailment with equal distribution throughout the world.

Repeated attacks and improper management of the disease leads to many complications like recurrent sinusitis, Nasal polyps, Serous otitis media, orthodontic problems etc. Keeping all this in mind an attempt had been made to evaluate the treatment protocol for patients suffering from *Vataja Pratishyaya* (Allergic rhinitis). As mentioned by our *Acharyas Pratishyaya* is *Vata- Kapha* predominant *Tridoshaj* disease. As description of this disease is scattered at various places the disease is most vividly described among the *Nasa Rogas*. The symptoms of *Vataja Pratishyaya* like *Kshavathu*, *Tanunasasrava*, *Nasa avrodha*, *Shrahshoola*, *Kanduu*, *Bhutwa Bhutwa* etc. can be correlated with symptoms of allergic rhinitis which are sneezing, nasal discharge, stuffy nose, repeated attacks, coughing, fever headache, itching in nose, recurrent attacks etc.

### *Vataja Pratishyaya* VIS-A-VIS Allergic rhinitis

The resemblance of *Vataja Pratishyaya* with Allergic rhinitis in terms of aetiology, clinical features and complications is evident from following discussion:

Aetiology of *Vataja Pratishyaya* grouped into various categories can be compared with etiological factors of Allergic rhinitis which include food and drug ingestion (*Aharaja Nidana*), Occupational (*Viharaja Nidana*), allergy and infection (*Rogajanidana*) and iatrogenic causes.

**Table 1: Symptoms of VatajaPratishyaya which resemble those of Allergic rhinitis are as follow.**

Sr. No.	Samanya&VisheshLakshanas of Pratishyaya	Chief & associated clinical features of Allergic rhinitis
1.	Kshavathu	Sneezing
2.	AanadhaPihita Nasa (Nasavrodha)	Nasal obstruction
3.	TanusravaPravaritini	Watery nasal discharge
4.	Gal TaluOasthShosh	Dryness in throat, palate, lips
5.	Swaropghata	Hoarseness
6.	GranaatiToda	Painful sensation in nose
7.	NistodaSankhyostatha	Headache
8.	Kandu	Itching in nose
9.	Shirogurava	Heaviness in head
10.	Kasa	Cough
11.	BhutwaBhutwa	Recurrent attacks

**VyaghriHaritakiAvleha**

In this formulation '**Kantkari**<sup>[8]</sup>, which is main ingredient is having *Katu Rasa* and *KatuVipaka* mainly which help in opening of channels, *Tikshnaguna* which help in *Bhedana* and *Rechana* of *KaphaDosh*, *UshnaVirya* due to which *KaphaVataShamaka*. Due to these properties it help in *Bhedhana* and *Rechana* of *Kapha*, open channels and with the help of normal *gati* of *Vata,Doshas* are expelled out. It also show *Shothahar* and *Kandughan* properties due to which help in reducing swelling due to inflammation and itching.

Other ingredient '**Haritaki**<sup>[9]</sup> has mainly *Anulomanaction* which help in normal *gati* actions of *VataDosh* which is responsible for disease *VatajaPratishyaya* mainly. *SecundalyHaritaki* is *Rasayan* so can increase *Vyadhikshamtva* of the individual which play an important role in this disease.

'**Shunthi**<sup>[10]</sup>, and '**Pippali**<sup>[11]</sup>, used has *Bhedhan* action on *KaphaDosh* to expel it out after opening channel due to their *Srotovibandhar* property. These also help in improving *Vyadhikshamtva* of the individual.

Other contents '**Maricha, Twak, Naagkesar, Elaichi, Tejpatra, Gud**' improve Appetite and promote digestion. These also have *Kashar* properties, used in cough.

**Madhu**<sup>[12]</sup> used is *Lekhana, Ropana* and *Sukshmamarganusari, Tridoshshamaka* due to which help in *VatajaPratishyaya* treatment.

The trial drug *VyaghriHaritakiAvleha* is having dominant *Katu Rasa* (43.75%), *LaghuGuna* dominant (40.90%), *UshnaVirya* (77.78%), *KatuVipaka* (55.56%) and *KapahaVataShamaka* (66.67%) properties which are countering the *Samprapti* (pathogenesis) of *VatajaPratishyaya*.

The dominant *Rasa Katu* having properties like *Ghranam Asravayati, Shwayathu Anupahanti, Krimi Hinasti, Marga Vivrinoti* as per *Ch. Su. 26<sup>13</sup>* helps a lot in reduction of signs and symptoms. The dominant *Guna* of drug is *Laghu*, that helps in relieving symptoms like heaviness. *LaghuGuna* relieves the oedema of nasal

mucosa and clear the osteo-meatal complex. As the *Pratishyaya* is aggravated by cold food habits and environment conditions *UshnaVirya* help to combat with this precipitating factor. Also *UshnaVirya* help in reducing *Kapha* i.e. discharge or over secretions & help to reduce *Kapha* and *Vata*, so act against *Vata* and *Kapha* predominance of *VatajaPratishyaya*. *KatuVipaka* have same function as *Katu Rasa*.

In *VyaghriHaritakiAvleha* most of drugs having *Agnivardhaka, Deepana Pachana* properties. This is having *Rasayana, Jeevniya, Balya, Brimhaniya, Ojovardhaka, Ayuwardhaka* properties which indirectly increase *Vyadhikshamtva*.

**CONCLUSION**

If we see the symptomatology of *VatajaPratishyaya* in *Ayurveda* we find the same symptomatology in Allergic rhinitis. Hence there is correlation between *VatajaPratishyaya* and Allergic rhinitis.

In the present study the treatment given is proved cheap and effective without any complication in the management of this disease. In modern medical system a wide range of medicines are given but these are not so much effective in such chronic conditions. *Vyaghri Haritaki Avleha* should be given in routine OPD patients as these show good symptomatic relief to patients without any side effects.

**Overall result of therapy in present study is**

Among 10 patients, 8 patients were moderately improved and 2 patients had mild improvement. There was no patient who was cured, markedly improved or unimproved.

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