



UNIQUE JOURNAL OF AYURVEDIC AND HERBAL MEDICINES

Research Article

MANAGEMENT OF VATAJ PRATISHYAYA WITH KUSHTHADI TAIL NASYA AND NIDIGDHIKADI KWATH W.S.R.TO ALLERGIC RHINITIS

Lahankar MA¹, Magar Sunita V², Dwivedi Amar P^{3*}, Kanoja Prashant⁴

¹M.D. (Shalakya), Head of Department, Shalakya Tantra, M.A.Podar Govt.(Ayu.)Hospital, Worli, Mumbai

²M.S. (Shalakya), Asso.Professor, M.G.Ayurvedic Medical College, Salod, Wardha

³Ph.D. (Scholar), M.A.Podar Govt.(Ayu.)Hospital, Worli, Mumbai

⁴M.S. (Shlakya- Scholar), M.A.Podar Govt.(Ayu.)Hospital, Worli, Mumbai

***Corresponding Author:**

Dr.Amarprakash Dwivedi, 303/-White House Apartment, Khopat, Thane- West. Pin code: 400601 Maharashtra, India

Mobile: 09323097013

Email :dr.dwivedi@amarayurved.com

Received 02-06-2013: Revised 28-06-2013: Accepted 13-07-2013

ABSTRACT

Allergic rhinitis is one of the prime diseases of Rhinology found in all age groups. Its clinical manifestation is very much similar to ‘*Vataj Pratishyaya*’ described in Ayurveda.

Indulgence in un salutary life style and food habits like consuming ice cream, cold drinks etc. (even in winter season or ill health), junk food like pizza, burger, noodles (main ingredient Maida), exposure to Air conditioner, Coolers etc. are the main causative factors for *Pratishyaya*. Also, the Present century driving the human to use extra of his energy in every kind such as- physical, mental, environmental, social etc. leads to many emotional and climatic changes in the human body results in Vitiating of *Vata* and the persons who are unable to bear these changes suffer from Allergic rhinitis i.e. *Vataj Pratishyaya*.

Present study was planned to evaluate the nature of the disease, its course and management with Ayurvedic phytotherapy and to develop evidence based support for effect of Kushthadi taila nasya & Nidigdhikadi kwatha in *Vataj Pratishyaya* as mentioned in our ancient literature. The therapy proves to be an easily available, cost effective, herbal alternative in the management of *Vataja Pratishyaya* (Allergic rhinitis).

Keywords: Allergic rhinitis, *Vataj Pratishyaya*, *Nasya*, *Kushthadi taila*, *Nidigdhikadi kwatha*

INTRODUCTION

Allergic rhinitis, certainly one of the prime diseases of Rhinology, is such a disease, which hardly leaves any person of any age group¹. Allergic rhinitis is similar to the disease ‘*Vataj Pratishyaya*’ described in Ayurvedic classics. It is seen to be one of the major problems, which can cause disturbance in routine work. It needs an intensive care for its control & care. Our social set up has changed in such a way that people don’t hesitate to invite the disease by adopting almost all the means of *Viruddha Ahara Vihara* i.e. un salutary lifestyle and food habits, like consuming ice cream, cold drinks etc. (even in winter season or ill health), junk food like pizza, burger, noodles (main ingredient Maida), Air conditioner, coolers etc. which now a days has become a status symbol so nobody can avoid them. All of them are the main causative factors behind the manifestation of *Pratishyaya*. So such unhealthy pattern of life is definitely going to victimize the person and also it becomes inevitable to stop recurrence.

So, such type of negligence (*Prajnaparadha*) push the disease to recurrence and then to chronicity, which leads to a severe and complicated condition which is difficult to treat and cause lots of complications like *Badhira*, *Andhata*, *Gandhanasha* and even it becomes potential cause of *Kshaya roga*². Also, the Present century driving the human to use extra of his energy in every kind such as- physical, mental, environmental, social etc. leads to many emotional and climatic changes in the human body. Such abnormal changes with leads to Vitiating of *Vata* and the persons who are unable to bear these changes suffer from *Vataj Pratishyaya*. The concept of *pratishyaya* has been very well dealt in Ayurveda under broad heading of ‘*Nasa roga*’, which includes its etiology, pathology, intensities, consequence & its treatment³. Present study was planned to evaluate the nature of the disease, its course and management with ‘*Kushthadi taila*’ for *Nasyakarma* and ‘*Nidigdhikadi kwatha*’ internally in *Vataj Pratishyaya*.

AIMS AND OBJECTIVES

- 1) To study combined effect of *Kushthadi taila nasya* & *Nidigdhikadi kwatha* in *Vataja pratishyaya*.
- 2) To develop evidence based support for effect of *Kushthadi taila nasya* & *Nidigdhikadi kwatha* in *Pratishyaya (vataja)* as mentioned in our ancient literature.

MATERIALS AND METHODS

Title of Study: To study clinical effect of *Kushthadi taila-Nasya* and *Nidigdhikadi Kwatha* in *Vataja Pratishyaya*

Study Center: M.A.Podar Govt.(Ayu.) Hospital, Worli, Mumbai.

Type of Study: Open Randomized Study.

Number of Patients: 30

Drug Name:

1. *Kushthadi Tail Nasya*- 6 drops in each nostril
2. *Nidigdhikadi Kwatha*- 40ml BD with 2.5gm *Pippali churna* as a *prakshep dravya* orally.

Duration of treatment: 3 Cycles each of 7 Days (5 Weeks)

Follow up: First 2 follow up were kept on 3 days interval and next 4 follow up were kept 1 weekly.

Drug profile

Ingredients of *Kushthadi taila*⁴

- 1) *Kushtha Kalka*: 1part
- 2) *Pippali Kalka*: 1part
- 3) *Shunthi Kalka*: 1part
- 4) *Bilwa Kalka*: 1part
- 5) *Draksha Kalka*: 1part
- 6) *Kushthadi Kwath*: 120 parts
- 7) *Til tail*: 30 parts

Preparation of *Kushthadi tail*

As per Sharangadhar samhita, 1 part of *Kushthadi kalka*, 6 part of *Til tail* and 24 part of *Kushthadi kwath* was taken and heated till the *samyaka snehasiddhi lakshanas* were noted. This prepared tail was used in clinical trial⁵.

Preparation of *Nidigdhikadi kwatha*

To prepare the *Nidigdhikadi kwatha* all ingredients were taken in the *Bharad* form. After that 16 parts of water was added and reduced to 1/8 part by boiling. The freshly prepared *Kwath* was used in clinical trial⁶.

METODOLOGY**PATIENT INCLUSION CRITERIA**

- 1) Sex: Both male & female
- 2) Patients belonging to age group 12 to 70
- 3) All the cases presenting with classical features of *Vataja Pratishyaya*.

PATIENT EXCLUSION CRITERIA

- 1) Patient not willing for trial.
- 2) Pregnant & lactating women
- 3) Patient who need surgical & other intervention. (polyp etc)
- 4) Patient suffering from Diabetes, Hypertension, Tuberculosis, Malignancy.

Investigations:

Following investigations were done for every patient, CBC, ESR, BSL (F&PP), URINE (R&M).

Clinical Examination:

Patients undergoing trial were examined clinically at every follow up to maintain a record of the same.

CRITERIA FOR ASSESSMENT

Record and follow up of all the patients included in the trial was documented and maintained in the case record form. The efficacy of the therapy was assessed on subjective criteria and multidimensional scoring system was adopted for easier statistical analysis of the result. Score was given according to severity of the symptoms as follows,

1. BHRUSHAKSHAW (SNEEZING)

- 0 – no Sneezing
- 1 – 0 -10 Sneezing
- 2 – 10 -15 Sneezing
- 3 – 15 -20 Sneezing

2. JALABHA STRAVA (WATERY DISCHARGE)

- 0 – no discharge
- 1 – Occasional discharge with a feel of running nose
- 2 – Running nose which needs mopping
- 3 – Running nose which needs continuous mopping

3. AANADDHA PIHITA NASA (NASAL OBSTRUCTION)

- 0 – no obstruction
- 1 – Inhalation and exhalation with effort
- 2 – Inhalation and exhalation to be supplemented with mouth breathing
- 3 – Complete block with mouth breathing

4. SHIRASHULA (HEADACHE)

- 0 – No headache
- 1 – Mild with not interfering with daily activities
- 2 – Moderate with carry routine work with more difficulty
- 3 – Severe with which renders the patients

5. SWARBHEDA (HOARSENESS OF VOICE)

- 0 – absent
- 1 – Present which relieve on clearing throat
- 2 – Present with altered quality of voice hoarse voice
- 3 – Breathy voice

STATISTICAL ANALYSIS

All the data generated & collected during the study was subjected to statistical analysis to reach final results & conclusions.

A) For subjective Parameters (Qualitative Data) (Relief in Symptoms) Non - Parametric test is applied. This test says that the null hypothesis tested in the sample is symmetrically distributed around a specified centre. It is often used to test the difference scores of data before & after an experimental manipulation.

Wilcoxon signed Rank Test.

It is used to compare one sample/paired two samples. Otherwise the 't' test is applied to test the difference between two population means; but if the population is too small / not normally distributed 't' test is not valid. Therefore the signed Rank test is applied.

ASSESSMENT OF EFFECT OF THERAPY

The effect of the therapy was assessed in terms of cured, markedly improved, improved and unchanged. The details are as follows-

1. **Cured:** 100% relief, from all the signs & symptoms, was considered as totally cured.
2. **Markedly Improved:** 50% to <100% relief from, the signs & Symptoms, was considered as markedly improved.

3. **Improved:** 25% to 50% relief, from the signs & symptoms was, considered as improved.

4. **Unchanged:** Less than 25% or no relief, from the signs & Symptoms, was considered as unchanged.

RESULTS AND DISCUSSION

The data generated during the study can be grouped under two headings which are as follows:-

I. Demographic analysis

II. Clinical efficacy of therapy during the study

I. DEMOGRAPHIC ANALYSIS

1. Age wise distribution of patients

It was seen that 26.66% of patients were in age group 12-20 years, 30% in group 21-30 yrs, 23.33% in group 31-40 yrs, 13.33% in group 41-50 yrs and 6.67% in group 51-60 yrs.

2. Gender wise distribution of patients

In this study it was seen that males and females were equally distributed.

3. Occupation wise distribution of patients

Out of the 30 patients observed in this study, 10% were students, 30% were servicemen, 26.67% were housewives, 13.33% were businessmen, 6.66% were retired and 13.33% were workers.

4. Prakruti wise distribution of patients

In the study group it was seen that 46.67% were of *Vata pradhan Kapha prakruti*, 16.67% patient were of *Vata Pitta prakruti*, 33.33% were of *Kapha Vata prakruti*, 3.33% patients were of *Kapha Pitta prakruti*.

5. Vihara wise distribution of patients

In the study group it was seen that 56.67% of patients were used to AC and 43.33% of patients were not adapted to AC.

6. Agni wise distribution of patients of clinical trial

Out of the 30 patients observed 10 patients (33.33%) had *Vishamagni*.

19 patients (63.33%) had *Mandagni* and 1 patient (3.33%) had *Tikshnagni*.

7. Distribution of patients by type of rhinitis

It was observed that 66.67% of patients had allergic rhinitis, 20% of patients had vasomotor rhinitis and 23.33% of patient non specific infective rhinitis (common cold)

8. Distribution of patients by Chronicity

In study group 66.67% of patients had chronic rhinitis, 33.33% of patients had acute or chronic rhinitis. None of the patients had acute rhinitis.

9. Distribution of patients by habitat

In study group it was seen that 93.33% of patients were from urban region while only 6.67% of patients were from rural region.

10. Distribution of patients by symptoms

In this study it was observed that all the patients had sneezing and watery discharge whereas only 86.67% of patients had nasal obstruction, 83.33% of patients had headache and 80% of patients had swarbheda.

II. CLINICAL EFFICACY OF THE THERAPY

Percentage (%) of Relief Obtained in the Parameters on Various follow ups of Study

1. Bhrushakshaw (sneezing)

It was observed that 52.23% of relief from sneezing was obtained after 1st cycle i.e. On 3rd follow up, 70.14% of relief was obtained on 4th follow up i.e. before 2nd cycle 88.06% of relief was obtained on 5th follow up i.e. after 2nd cycle and 89.55% of relief was obtained after 3rd cycle on 6th follow up (Table 1).

2. Jalabha strava (watery discharge)

It was observed that 56.52% of relief from jalabha strava was obtained after 1st cycle i.e. On 3rd follow up, 78.26% of relief was obtained on 4th follow up i.e. before 2nd cycle and 88.40% of relief was obtained on 5th follow up i.e. after 2nd cycle and 92.75% of relief was obtained after 3rd cycle on 6th follow up (Table 2).

3. Aanaddha pihita nasa (Nasal Obstruction)

It was observed that 51.92% of relief from aanaddha pihita nasa was obtained after 1st cycle i.e. On 3rd follow up, 76.92% of relief was obtained on 4th follow up i.e. before 2nd cycle and 82.69% of relief was obtained on 5th follow up i.e. after 2nd cycle and 92.30% of relief was obtained after 3rd cycle on 6th follow up (Table 3).

4. Shirashula (Headache)

It was observed that 42.85% of relief from *Shirashula* was obtained after 1st cycle i.e. On 3rd follow up, 71.42% of relief was obtained on 4th follow up i.e. before 2nd cycle and 87.5% of relief was obtained on 5th follow up i.e. after 2nd cycle and 94.64% of relief was obtained after 3rd cycle on 6th follow up (Table 4).

5. Swarbheda (Hoarseness of voice)

It was observed that 41.02% of relief from *Swarbheda* was obtained after 1st cycle i.e. On 3rd follow up, 56.41% of relief was obtained on 4th follow up i.e. before 2nd cycle and 87.17% of relief was obtained on 5th follow up i.e. after 2nd cycle and 94.87% of relief was obtained after 3rd cycle on 6th follow up (Table 5).

STATISTICAL ANALYSIS OF EFFECTS OF THERAPY ON SUBJECTIVE PARAMETERS

Wilcoxon signed rank test

1. Bhrushakshaw (sneezing)

Results of *Bhrushakshaw* (sneezing) are mentioned in table 6.

2. Jalabh strava (watery discharge)

Results of *Jalabh strava* (watery discharge) are mentioned in table 7.

3. Aanaddha pihita nasa (Nasal block)

Results of *Aanaddha pihita nasa* (Nasal block) are mentioned in table 8.

4. Shirashula (Headache)

Results of *Shirashula* (Headache) are mentioned in table 9.

5. Swarbheda (Hoarseness of voice)

Results of *Swarbheda* (Hoarseness of voice) are mentioned in table 10.

RESULTS OF TOTAL THERAPY IN CLINICAL TRIAL

Results of total therapy in clinical trials are mentioned in table 11.

Table 1: % of Relief in *Bhrushakshaw* (sneezing)

Days	score	Mean	SD	SE	% of relief
BT	67	2.23	0.68	0.12	52.23
F3	32	1.07	0.74	0.13	
Diff	35	1.17	0.53	0.097	
F4	20	0.67	0.55	0.099	70.14
Diff	47	1.57	0.50	0.09	
F5	8	0.27	0.45	0.08	88.06
Diff	59	1.97	0.67	0.12	
F6	7	0.23	0.43	0.078	89.55
Diff	60	2.00	0.64	0.11	

Table 2: % of Relief in *Jalabha Strava* (watery discharge)

Days	Score	Mean	SD	SE	% of relief
BT	69	2.3	0.79	0.15	56.52
F3	30	1	0.87	0.17	
Diff	39	1.3	0.70	0.14	
F4	15	0.5	0.68	0.13	78.26
Diff	54	1.8	0.81	0.16	
F5	8	0.27	0.52	0.10	88.40
Diff	61	2.03	0.81	0.16	
F6	5	0.17	0.38	0.073	92.75
Diff	64	2.13	0.82	0.16	

Table 3: % of relief in *Aanaddha pihita nasa* (NASAL)

Days	score	mean	SD	SE	% of relief
BT	52	1.73	1.05	0.20	51.92
F3	25	0.83	0.91	0.72	
Diff	27	0.9	0.67	0.13	
F4	12	0.4	0.72	0.14	76.92
Diff	40	1.33	0.96	0.19	
F5	9	0.3	0.65	0.12	82.69
Diff	43	1.433	0.89	0.17	
F6	4	0.13	0.34	0.07	92.30
Diff	48	1.6	1.13	0.21	

Table 4: % of relief *Shirashul* (Headache) on various follow ups

Days	Score	Mean	SD	SE	% of relief
BT	56	1.87	1.14	0.22	42.85
F3	32	1.07	0.74	0.14	
Diff	24	0.8	0.76	0.14	
F4	16	0.53	0.57	0.11	71.42
Diff	40	1.33	0.95	0.1	
F5	7	0.23	0.43	0.08	87.5
Diff	49	1.63	1.09	0.21	
F6	3	0.1	0.30	0.06	94.64
Diff	53	1.77	1.14	0.22	

Table 5: % of relief in Swarbheda (Hoarseness of voice) on various follow ups

Days	score	Mean	SD	SE	% of relief
BT	39	1.3	0.79	0.15	41.02
F3	24	0.8	0.77	0.14	
Diff	16	0.53	0.57	0.11	
F4	17	0.57	0.57	0.11	56.41
Diff	22	0.73	0.63	0.12	
F5	5	0.17	0.38	0.07	87.17
Diff	34	1.13	0.73	0.14	
F6	2	0.07	0.25	0.04	94.87
Diff	37	1.23	0.77	0.15	

Table 6: Results of Bhrushakshaw in study group

Group A		mean	SD	SE	W	No. of pairs	Z	p	Results
BT-F3	BT	2.23	0.68	0.12	406	28	4.62	<0.005	Highly significant
	F3	1.07	0.74	0.13					
	Diff	1.17	0.53	0.097					
BT-F4	F4	0.67	0.55	0.099	465	30	4.78	<0.001	Significant
	Diff	1.57	0.50	0.09					
BT-F5	F5	0.27	0.45	0.08	465	30	4.78	<0.001	Highly significant
	Diff	1.97	0.67	0.12					
BT-F6	F6	0.23	0.43	0.078	465	30	4.78	<0.001	Highly significant
	Diff	2.00	0.64	0.11					

Table 7: Results of Jalabh strava in study group

Group A		mean	SD	SE	W	No. Of pairs	Z	p	results
Bt-F3	BT	2.3	0.79	0.15	406	28	4.62	<0.005	Highly significant
	F3	1	0.87	0.17					
	Diff	1.3	0.70	0.14					
BT-F4	F4	0.5	0.68	0.13	435	29	4.70	<0.001	Highly significant
	diff	1.8	0.81	0.16					
BT-F5	F5	0.27	0.52	0.10	465	30	4.78	<0.001	Highly significant
	diff	2.03	0.81	0.16					
BT-F6	F6	0.17	0.38	0.073	465	30	4.78	<0.001	Highly significant
	diff	2.13	0.82	0.16					

Table 8: Results of Aanaddha pihita nasa (Nasal block) in study group

Group A		mean	SD	SE	W	No. Of pairs	Z	p	results
Bt-F3	BT	1.73	1.05	0.20	253	22	4.10	<0.005	Highly significant
	F3	0.83	0.91	0.72					
	Diff	0.9	0.67	0.13					
BT-F4	F4	0.4	0.72	0.13	325	25	4.37	<0.001	Highly significant
	diff	1.33	0.96	0.17					
BT-F5	F5	0.3	0.65	0.12	378	27	4.54	<0.001	Highly significant
	diff	1.433	0.89	0.17					
BT-F6	F6	0.13	0.34	0.06	364	27	4.37	<0.001	Highly significant
	diff	1.6	1.13	0.21					

Table 9: Results of Shirashula (Headache) in study group

Group A		mean	SD	SE	W	No. Of pairs	Z	p	Results
Bt-F3	BT	1.87	1.14	0.22	171	18	3.72	<0.005	Highly significant
	F3	1.07	0.74	0.14					
	Diff	0.8	0.76	0.14					
BT-F4	F4	0.53	0.57	0.11	253	22	4.10	<0.001	Highly Significant
	diff	1.33	0.95	0.1					
BT-F5	F5	0.23	0.43	0.08	300	24	4.28	<0.001	Highly significant
	diff	1.63	1.09	0.21					
BT-F6	F6	0.1	0.30	0.06	325	25	4.37	<0.001	Highly significant
	diff	1.77	1.14	0.22					

Table 10: Results of *Swarbheda* (Hoarseness of voice) in study group

Group A		mean	SD	SE	W	No. Of pairs	Z	p	Results
Bt-F3	BT	1.3	0.79	0.15	105	14	3.29	<0.005	Highly significant
	F3	0.8	0.77	0.14					
	Diff	0.53	0.57	0.11					
BT-F4	F4	0.57	0.57	0.11	190	19	3.82	<0.001	Highly Significant
	diff	0.73	0.63	0.12					
BT-F5	F5	0.17	0.38	0.07	300	24	4.28	<0.001	Highly significant
	diff	1.13	0.73	0.14					
BT-F6	F6	0.07	0.25	0.04	300	24	4.82	<0.001	Highly significant
	diff	1.23	0.77	0.15					

Table 11: Results of total therapy in clinical trial

Remarks	No. of Patients	Percentage
Cured	15	50
Markedly Improved	15	50
Improved	0	0
Unchanged	0	0

CONCLUSION

The study entitled, "To study clinical effect of *Kushthaditaila nasya* and *Nidigdihikadi kwatha* in *Vataja Pratishyaya*." Primarily aimed at evaluating the *S haman* effects of *Nasya* and *kwatha* in *Vataja Pratishyaya*.

Following Observations in the study can be highlighted:

- Highest incidence of *Vataja pratishyaya* was found in age group 21-30 years (30%) followed by age group 12-20 years (26.67%).
- Gender plays no role in the etio pathogenesis of the *Vataja pratishyaya*.
- Following factors play important role in the etiopathogenesis of *Vataja Pratishyaya*:
 - *Agnimandya*
 - *Vatakapha prakruti*
 - *Krura koshtha*
 - Exposure to the dust smoke allergens and air conditioned environment.
- Prevalence of allergic rhinitis is more among the population.

5. *Vataja Pratishyaya* is the disease of urban region.

Following Conclusions can be derived from the study:

- Results of the study drug are significant on all the parameters.
- The drug exerts *Strotoshodhaka*, *Dosha Anulomaka* and *Tarpak* effect thereby relieving these symptoms.
- It proves to be an easily available, cost effective, easy, herbal alternative in the management of *Vataja Pratishyaya*.

REFERENCES

- Scott Brown's Otorhinolaryngology Edited by Alan G. Kerr. 1st Indian Edition 1994.
- Vd. Yadavaji Trikamaji Acharya, 2008, Charaksamhita of Agnivesha elaborated by Charaka and Dridhabala with Ayurveda-Dipika commentary by Chakrapanidatta, Chaukhamba surabharati prakshana, Varanasi.

3. Vd. Yadavaji Trikamaji Acharya and Narayan Ram Acharya, 2002 7th publication, sushruta samhita of sushruta with the Nibandhasangraha commentary of sri Dalhanacharya & the Nyayachandrika panjika of sri Gayadasacharya on nidanasthana;
4. Deshpande AP, Prof. Javalagekar RR, Ranade S, Edi-Jan. 2001, Dravyaguna vidnyana part I & II; Anamol prakashan, Pune 2.
5. Vd. VM. Gogate, 1st edn. 2000, Ayurvedic Pharmacology and therapeutic uses of medicinal plants; Bharatiya vaidyabhavan SPARC, Mumbai.
6. The Ayurvedic Pharmacopeia of India, Part I, Published by Government of India, Ministry of Health and Family Welfare, 1st edition 1999.

Source of support: Nil, Conflict of interest: None Declared