

A COMPARATIVE CLINICAL STUDY ON EFFECT OF NASYA AND NASAL SPRAY WITH OR WITH-OUT SHAMANUSHADI IN VATAJA PRATISHYAYA VIS-À-VIS ALLERGIC RHINITIS¹*Dr. Manasa S. D. and ²Dr. Suma K. J.

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ABSTRACT

Pratishyaya is one among the Nasa rogas explained by Acharyas in detail in all classical books. Among the types of Pratishyaya, Vataja Pratishyaya can be co-related with Allergic rhinitis because of its similarities in aetiopathogenesis and symptomatology. Allergic Rhinitis (AR) is an immunoglobulin (Ig) E mediated inflammatory disease caused by the inflammation of airway mucosa with hypersensitivity resulting from seasonal or perennial responses to specific allergens. According to Ayurvedic texts Nasya is indicated in treatment of diseases of head and neck. The present study is intended to compare the efficacy of Surasadi taila Nasya with or without Shamanoushadhi Grutha bhrushta Haridra and Surasadi Nasal spray in Vataja Pratishyaya. This is a comparative clinical study with pre and post-test design. 45 patients diagnosed as Vataja Pratishyaya were selected and assigned randomly into three groups of 15 patients each. In Group A, patients were given Nasya with Surasadi taila, in Group B, patients were given Nasal spray with surasadi compound and in Group C, patients were given Nasya with Surasadi taila and Shamanoushadhi as Grutha Brushta Haridra. The subjective and objective parameters were assessed and statistically analysed. The result obtained was statistically insignificant therefore, effect of treatment was almost same in all the three groups. All the patients responded favourably to the treatment and in follow up, but in Group C the therapy has shown less recurrence when compared with other groups.

KEYWORDS: Vataja Pratishyaya, Nasya, Nasal spray, Allergic Rhinitis.**INTRODUCTION**

The sense organs and senses have great value in human life which enables us to enjoy the pleasures of the world and also serve as guide to move forward. Nose is responsible for warming and filtering of inspired air. Nasal passage has direct contact with external environment thereby prone to viral, bacterial, fungal infections, allergies and injury. The pollutants like dust, smoke and such other air borne materials are responsible for allergic disorders and may lead to symptoms like running nose, sneezing, watery eyes, itching etc. In India 26% of the population suffer from Allergic Rhinitis, which used to be less in earlier days. The increase in prevalence may be attributed to pollution and changing environmental factors. Allergic Rhinitis occurs commonly in those who are exposed to dust, mites and pollens. Hereditary factors also play an important role in this disease. The nidana^[1] and lakshana^[2] of Vataja Pratishyaya are very much similar to Allergic Rhinitis.^[3]

Though Allergic Rhinitis is not a life-threatening condition but complications can occur and the condition can significantly impair the quality of life. Drugs mentioned under Surasaadi gana^[4] of Sushruta has

kaphahara, pratishyayaghna, swasa, kasahara, krimihara property. So taila prepared using these drugs were used for Nasya karma^[5] in present study. Although Nasya karma is useful in the treatment of Pratishyaya, in diseases like Rhinitis where the bioavailability of the drug gets most commonly affected due to inflammation to increase the drug absorption rate surfactants can be added. Hence present study was carried out with change in modality of treatment by altering the formulation design in order to increase nasal drug absorption.

AIMS AND OBJECTIVE

- To evaluate the efficacy of Nasya with Surasadiganataila in Vataja Pratishyaya.
- To evaluate the efficacy of Surasadiganataila in the form of Nasal spray in Vataja Pratishyaya.
- To evaluate the efficacy of Nasya with Surasadiganataila and Shamanoushadhi Grutha Brushta Haridra in Vataja Pratishyaya.

MATERIALS AND METHOD

Source of the data: 45 patients of Vataja Pratishyaya were selected randomly from OPD and IPD of JSSAMC&H, Mysuru.

Method of collection of data

This is a comparative clinical study with pre and post-test design where patients of either sex were randomly assigned into three groups each comprising of 15 patients.

Following statistical methods were employed for the data collected – To calculate the test for significance before treatment, after treatment and follow-up, in the present clinical study Wilcoxon Signed Rank test was used. While to calculate the test for significance between the groups “Kruskal Wallis rank sum test” was selected. Statistical analysis was done based on “R-Software”.

Diagnostic Criteria

- Diagnosis was established on the basis of signs and symptoms of Vataja Pratishyaya.
- Allergy to dust, smoke, weather etc.

Inclusion Criteria

- Patients fulfilling the diagnostic criteria which are based on symptomatology of Vataja Pratishyaya were selected for the present study.
- Patients fit for Nasya Karma.
- Patients irrespective of sex, occupation, religion, socio economic status were selected for the study.
- Patient aged between 8yrs-80yrs were selected for study.

Exclusion Criteria

- Patients suffering from any other systemic diseases which interfere with treatment were excluded.
- Patients with Deviated Nasal Septum, Nasal polyp.
- Infective rhinitis, secondary rhinitis due to Hyperthyroidism, Bronchial asthma were excluded.

Assessment Criteria

Assessment Parameters	Grading
Tanu nasa srava	No Discharge: 0 Occasional discharge which needs mopping: 1 Running nose which needs mopping: 2 Running nose which needs continuous mopping: 3
Nasavarodha	No obstruction: 0 Inhalation and exhalation with effort: 1 Inhalation and Exhalation to be supplemented with mouth breathing: 2 Complete block with mouth breathing: 3
Kshavathu	No sneezing: 0 0-10 sneezing: 1 10-15 sneezing: 2 15-20 sneezing: 3
Shirashoola/ Shiro gaurava	No headache: 0 Present at the time of attack only: 1

- Patient who have undergone any type of nasal surgeries or taking steroid were excluded.

Intervention

45 patients of Vataja Pratishyaya were selected and divided randomly into three groups, Group A, Group B and Group C.

Group A – Patients were given Nasya Karma with Surasadi Taila for 7 days.

Group B – Patients were given Nasal Spray with Surasadi emulsion for 7 days.

Group C – Patients were given Nasya Karma with Surasadi taila along with Ghrita bhrushta Haridra 5gms tid as Shamaoushadi for 7 days.

Total Duration of Treatment: 7 days.

Follow up: All the patients were followed on 21st day after the completion of Nasya.

Total Duration of Study: 21days.

Purva Karma: Mridu Abhyanga with Tila taila to Mukha and Shira is done followed by Nadi sweda.

Pradhana Karma: Patient is made to lie down in supine position with neck slightly extended. Surasadi taila 6-6 drops to each nostril is instilled one after the other. Later patient is asked to sniff the medicine in and advised not to swallow the medicine or mucous rather spit it out.

Pashchat Karma: Patient was asked to lie for about 10 minutes. Then patient is advised to do kavalagraha, using warm water followed by Dhoomapana with Haridra varti. Samyak Nasya lakshana were noted on each day.

	Present only for few hours: 2 Present throughout the day: 3 Subsides with medication: 4 Not subsides with the medication: 5
Gala Talu Shushkata	Absent: 0 Present: 1
Swaropaghata	Absent: 0 Present which relieve on cleaning throat: 1 Present with altered quality of voice: 2 Breathy voice: 3
Mucosal edema/ Congestion/paleness of nasal mucosa	Absent: 0 Present: 1
Post Nasal Drip	Absent: 0 Present: 1

OBSERVATION

Among 45 patients of Vataja Pratishyaya registered for the study, maximum (72%) patients were of age group of 15-35 years, 64.4% were females, 93% were Hindus, 53% were unmarried, 53% were graduates, 80% were from upper middle class, 93.3% patients were from urban habitat. Maximum of 45% were having the family history of Vataja pratishyaya, 56% had chronicity more than five year, 51% were taking mixed diet. Maximum of 44% were of Pitta Kapha Prakruti, 86% were of Madhyama Sara, 67% were having Madhyama Samhanana, 68% were Vyamishra Satmya, 84%(38) were Madhyama Satva, 75%(30) of the patients were of Madhyama Pramana, 87%(39) had Madhyama abhyavaharana shakti, 80%(36) had Madhyama Jarana shakti, 87%(39) had Madhyama Vyayama Shakti. 93% (42) people had raja, dhuma sevana as aggravating factor while 69% (31) people had ritu vaishmya as aggravating factor. Out of 45 patients 21 patients (46%)

had irregular onset, 17 (37%) had perennial allergic rhinitis. Maximum no. of patients was registered in spring & rainy season.

RESULT

Results are interpreted after statistically analyzing the grading given for the signs and symptoms mentioned in assessment criteria before and after treatment in all 45 patients. And finally, overall assessment was done based upon the results. Data regarding all the above said parameters were collected on 7th day of treatment and on 21st day after completion of treatment. To calculate the test for significance before treatment, after treatment and follow-up, in the present clinical study Wilcoxon Signed Rank test was used. While to calculate the test for significance between the groups "Kruskal Wallis rank sum test" was selected. Statistical analysis was done based on "R-Software".

Group-A

Table: Showing statistical analysis Before and After treatment.

Sl. No	Features	Mean BT	Mean AT	% of change	V value	P value	Significance
1.	Nasa Srava	1.8	0.07	96.7↓	120	0.0005	Significant
2.	Nasavarodha	1.53	0.33	78.4↓	91	0.001	Significant
3.	Kshavatu	1.93	0.2	89.7↓	120	0.0005	Significant
4.	Gala talu shushkata	0.8	0.07	91.6↓	66	0.001	Significant
5.	Shirashoola	0.87	0	100↓	45	0.007	Significant
6.	Swaropaghata	0.33	0.07	79.7↓	10	0.07	Not Significant
7.	Shirogaurava	0.87	0	100↓	55	0.003	Significant
8.	Mucosal edema	0.87	0.27	68.9↓	45	0.003	Significant
9.	Paleness/congestion of nasal mucosa	0.93	0.27	70.9↓	55	0.001	Significant
10.	Post nasal drip	0.27	0.067	74↓	6	0.1	Not Significant

Group A: The parameters Nasa srava showed 96.7% reduction and significant at P=0.0005, Nasavarodha showed 78.4% reduction and significant at p=0.001, Kshavathu showed 89.7% reduction and significant at p=0.0005, Galatalu shushkata showed 91.6% reduction

and significant at p=.001, Shirashoola showed 100% reduction and significant at p= 0.007, Swaropaghata showed 79.7% reduction and was statistically insignificant at p=0.07, Shirogaurava showed 100% reduction and significant at p= 0.003, Mucosal edema

showed 68.9% reduction and significant at $p=0.003$, Paleness/Congestion of nasal mucosa showed 70.9% reduction and significant at $p=0.001$, Post Nasal Drip

showed 74% reduction and was statistically insignificant at $p=0.1$ after treatment.

Table: Showing statistical analysis before treatment and FU (21st day).

Sl. No	Features	Mean BT	Mean at FU	% of change	V value	P value	Significance
1.	Nasa Srava	1.8	0.33	81.7↓	91	0.001	Significant
2.	Nasavarodha	1.53	0.4	73.9↓	91	0.001	Significant
3.	Kshavatu	1.93	0.27	86↓	105	0.0008	Significant
4.	Gala talu shushkata	0.8	0.07	91.2↓	66	0.001	Significant
5.	Shirashoola	0.87	0.07	91.2↓	51	0.01	Not Significant
6.	Swaropaghata	0.33	0	100↓	10	0.08	Not Significant
7.	Shirogaurava	0.87	0.07	92↓	61	0.009	Significant
8.	Mucosal edema	0.87	0.33	62.1↓	36	0.005	Significant
9.	Paleness/congestion of nasal mucosa	0.93	0.33	64.5↓	45	0.003	Significant
10.	Post nasal drip	0.27	0.07	74.1↓	12	0.2	Not Significant

Group A: The parameters Nasa srava showed 81.7% reduction and significant at $P=0.001$, Nasavarodha showed 73.9% reduction and significant at $p=0.001$, Kshavathu showed 86% reduction and significant at $p=0.0008$, Galatalu shushkata showed 91.2% reduction and significant at $p=0.001$, Shirashoola showed 91.2% reduction and was statistically insignificant at $p=0.01$, Swaropaghata showed 100% reduction and was

statistically insignificant at $p=0.08$, Shirogaurava showed 92% reduction and significant at $p=0.009$, Mucosal edema showed 62.1% reduction and significant at $p=0.005$, Paleness/Congestion of nasal mucosa showed 64.5% reduction and significant at $p=0.003$, Post nasal drip showed 74.1% reduction and was statistically insignificant at $p=0.2$ during Follow up(21st day after treatment).

Group-B

Table: Showing statistical analysis before and after treatment.

Sl. No.	Variables	Mean BT	Mean AT	% of change	V value	P value	Significance
1.	Nasa srava	2.13	0.27	87.3↓	91	0.001	Significant
2.	Nasavarodha	1.6	0.33	79.4↓	91	0.001	Significant
3.	Kshavatu	1.6	0.13	91.9↓	91	0.001	Significant
4.	Galatalu shushkata	0.93	0.13	86↓	78	0.0006	Significant
5.	Shirashoola	0.87	0.13	85.1↓	55	0.002	Significant
6.	Swaropaghata	0.13	0	100↓	1	1	Not Significant
7.	Shirogaurava	0.8	0.07	91.2↓	55	0.002	Significant
8.	Mucosal edema	0.9	0.2	77.8↓	66	0.001	Significant
9.	Congestion/paleness of nasal mucosa	1	0.27	73↓	66	0.001	Significant
10.	Post nasal drip	0.2	0.07	65↓	3	0.3	Not Significant

Group B: The parameters Nasa srava showed 87.3% reduction and significant at $P=0.001$, Nasavarodha showed 79.4% reduction and significant at $p=0.001$, Kshavathu showed 91.9% reduction and significant at $p=0.001$, Galatalu shushkata showed 86% reduction and significant at $p=0.0006$, Shirashoola showed 85.1% reduction and significant at $p=0.002$, Swaropaghata showed 100% reduction and was statistically insignificant at $p=1$, Shirogaurava showed 91.2% reduction and significant at $p=0.002$, Mucosal edema showed 77.8% reduction and significant at $p=0.001$, Paleness/Congestion of nasal mucosa showed 73% reduction and significant at $p=0.001$, Post Nasal Drip showed 65% reduction and was statistically insignificant at $p=0.3$ after treatment.

Showing statistical analysis before treatment and on the day of Follow up (21st day)

Sl. No.	Variables	Mean BT	Mean at FU	% of change	V value	P value	Significance
1.	Nasa srava	2.13	0.93	56.3↓	91	0.001	Significant
2.	Nasavarodha	1.6	0.87	45.6↓	36	0.01	Not Significant
3.	Kshavatu	1.6	0.93	41.9↓	30.5	0.08	Not Significant
4.	Galatalu shushkata	0.93	0.2	78.5↓	66	0.001	Significant
5.	Shirashoola	0.87	0.2	77↓	45	0.004	Significant
6.	Swaropaghata	0.13	0.07	46.1↓	2	1	Not Significant
7.	Shirogaurava	0.8	0.13	83.7↓	55	0.001	Significant
8.	Mucosal edema	0.9	0.4	55.6↓	36	0.005	Significant
9.	Congestion/paleness of nasal mucosa	1	0.3	70↓	55	0.001	Significant
10.	Post nasal drip	0.2	0	100↓	6	0.1	Not Significant

Group B: The parameters Nasa srava showed 56.3% reduction and was significant at P=0.001, Nasavarodha showed 45.6% reduction and was statistically insignificant at p=0.01, Kshavathu showed 41.9% reduction and was statistically insignificant at p=0.08, Galatalu shushkata showed 78.5% reduction and significant at p=0.001, Shirashoola showed 77% reduction and significant at p= 0.004, Swaropaghata

showed 46.1% reduction and was statistically insignificant at p=1, Shirogaurava showed 83.7% reduction and significant at p= 0.001, Mucosal edema showed 55.6% reduction and significant at p=0.005, Paleness/Congestion of nasal mucosa showed 70% reduction and significant at p=0.001, Post Nasal drip showed 100% reduction and was statistically insignificant at p=0.1 during follow up.

Group-C

Showing statistical analysis before and after treatment

Sl. No.	Variables	BT	AT	% of change	V value	P value	Significance
1.	Nasa srava	2.46	0.53	78.5↓	105	0.0007	Significant
2.	Nasavarodha	1.6	0.26	83.1↓	66	0.0020	Significant
3.	Kshavatu	2.13	0.26	87.3↓	120	0.0006	Significant
4.	Galatalu shushkata	0.73	0.06	90.4↓	55	0.001	Significant
5.	Shirashoola	0.8	0.06	92.5↓	36	0.01	Not Significant
6.	Swaropaghata	0.2	0	100↓	3	0.37	Not Significant
7.	Shirogaurava	0.8	0.06	92.5↓	36	0.008	Significant
8.	Mucosal edema	0.8	0.27	66.2↓	45	0.003	Significant
9.	Congestion/paleness of nasal mucosa	0.87	0.47	46↓	28	0.01	Not Significant
10.	Post nasal drip	0.93	0.07	92.5↓	10	0.07	Not Significant

Group C: The parameters Nasa srava showed 78.5% reduction and significant at P=0.0007, Nasavarodha showed 83.1% reduction and significant at p=0.002, Kshavathu showed 87.3% reduction and significant at p=0.0006, Galatalu shushkata showed 90.4% reduction and significant at p=0.001, Shirashoola showed 92.5% reduction and was statistically insignificant at p= 0.01, Swaropaghata showed 100% reduction and was

statistically insignificant at p=0.3, Shirogaurava showed 92.5% reduction and significant at p= 0.008, Mucosal edema showed 66.2% reduction and significant at p=0.003, Paleness/Congestion of Nasal mucosa showed 46% reduction and was statistically insignificant at p=0.01, Post Nasal Drip showed 92.5% reduction and was statistically insignificant at p=0.07 after treatment.

Showing statistical analysis before treatment and on the day of Follow Up (21st day)

Sl. No.	Variables	Mean BT	Mean at FU	% of change	V value	P value	Significance
1.	Nasa srava	2.46	0.27	89↓	105	0.0008	Significant
2.	Nasavarodha	1.6	0.2	87.5↓	66	0.001	Significant
3.	Kshavatu	2.13	0.13	93.8↓	120	0.0006	Significant
4.	Galatalu shushkata	0.73	0.07	90.4↓	55	0.001	Significant
5.	Shirashoola	0.8	0.133	83.7↓	36	0.008	Not Significant
6.	Swaropaghata	0.2	0	100↓	3	0.3	Not Significant
7.	Shirogaurava	0.8	0.133	83.7↓	36	0.008	Significant
8.	Mucosal edema	0.8	0.27	66.5↓	45	0.003	Significant
9.	Congestion/paleness of nasal mucosa	0.87	0.27	66.5↓	55	0.001	Significant
10.	Post nasal drip	0.93	0.07	92.5↓	10	0.07	Not Significant

Group C: The parameters Nasa srava showed 89% reduction and significant at $P=0.0008$, Nasavarodha showed 87.5% reduction and significant at $p=0.001$, Kshavathu showed 93.8% reduction and significant at $p=0.0006$, Galatalu shushkata showed 90.4% reduction and significant at $p=0.001$, Shirashoola showed 83.7% reduction and significant at $p=0.008$, Swaropaghata showed 100% reduction and was statistically

insignificant at $p=0.3$, Shirogaurava showed 83.7% reduction and significant at $p=0.008$, Mucosal Edema showed 66.5% reduction and significant at $p=0.003$, Paleness/Congestion of nasal mucosa showed 66.5% reduction and significant at $p=0.001$, Post Nasal Drip showed 92.5% reduction and was statistically insignificant at $p=0.07$ during follow up.

Table showing Statistical analysis in between the Groups

Sl. No	Features	Mean 1 Gr- A	Mean 2 Gr- B	Mean 3 Gr - C	Comparison of mean values of groups	Kruskal vallis chi- squared value	P value	Result
1.	Nasa srava	0.49	0.826	0.84	M3>M2>M1	10.414	0.005	S
2.	Nasaavarodha	0.6	0.732	0.508	M2>M1>M3	5.1997	0.07	NS
3.	Kshavatu	0.56	0.678	0.586	M2>M3>M1	10.333	0.005	S
4.	Gala taalu shushkata	0.2	0.304	0.202	M2>M3=M1	0.21154	0.8	NS
5.	Shirashoola	0.187	0.292	0.252	M2>M3>M1	0.26772	0.8	NS
6.	Swaropaghata	0.08	0.04	0.04	M1>M2=M3	2.8248	0.2	NS
7.	Shirogaurava	0.187	0.252	0.252	M2=M3>M1	0.51498	0.7	NS
8.	Mucosal edema	0.387	0.372	0.376	M1>M3>M2	0.176	0.9	NS
9.	Congestion or paleness of mucosa	0.36	0.4	0.44	M3=M2>M1	0.18966	0.9	NS
10	Post nasal drip	0.094	0.068	0.122	M3>M1>M2	0.17386	0.9	NS

From the above statistical analysis, based on mean we can conclude that Group B has given slightly better result than Group A and C. It shows there is equal significance in all three groups in regards to Nasa avarodha, Galatalu

shushkata, shirashoola, swaropaghata, shirogaurava, mucosal edema, congestion/paleness of mucosa, post nasal drip. And there is difference between parameters in nasa srava and kshavathu.

Overall assessment

	Group A		Group B		GROUP C		Total	
	No.	%	No.	%	No.	%	No.	%
Marked improvement	10	66.7%	8	53.3%	11	73.3%	29	64.4%
Moderate improvement	4	26.7%	3	20%	3	20%	10	22.2%
Mild improvement	1	6.66%	4	26.7%	1	6.66%	6	13.3%
Unchanged	0	0%	0	0%	0	0%	0	0%

DISCUSSION

Pratishyaya one among Nasa Roga explained by Acharyas in detail in all classical books. Among the types of Pratishyaya mentioned by Acharyas Vataja Pratishyaya can be co-related with Allergic rhinitis because of its similarities in aetiopathogenesis and symptomatology. The current therapeutic options available in the treatment of Allergic Rhinitis aims at relieving the symptoms. Therapeutic options available to achieve this goal include avoidance of allergens, oral antihistamines, intranasal corticosteroids, leukotriene receptor antagonists and allergen immunotherapy. Other therapies that may be useful are nasal decongestants and oral corticosteroids. Novel drug delivery system is an ongoing field of research. In that context, nasal drug delivery system has a great potential in treating diseases like allergic rhinitis.

Discussion on Nasya Karma: Locally Nasya may act as Sravahara, Shothahara and Srotoshodahana. The pre-operative procedures like snehana, swedana pacify vata

dosha. The Pradhana karma that is instilling medicine into the nostril acts as srotoshodhana and a way of Vyadhi pratyaniya Chikitsa. The *oushadha* instilled increases the general blood circulation, after absorption through mucous membrane. According to modern science any lipid soluble substance has greater chance for passive absorption directly through the olfactory cell of lining membrane.

Many nerve endings which are arranged in the peripheral surface of mucous membrane, olfactory, trigeminal etc. will be stimulated by *Nasya dravyas* and impulses are transmitted to the C.N.S which may probably lead to the suppression of mediators of allergic response suggesting the action of drugs at cortical level. This results in better blood circulation and nourishment of the sense organs.

Most of the drugs of *Surasaadi taila* has *Katu, tikta rasa, ushna veerya* and *laghu rookshna, teekshna guna*. This drug by their property dries up *doshas* there by relieving the features of the disease.

As per the above classical description of the drugs, it can be inferred that *Surasadi taila* is having *vatakaphahara*, *snehana*, *shotahara*, *sravahara* properties hence is capable of doing *samprapti vighatana in Vataja Pratishyaya*. *Nasya* with *Surasadi taila* acts as *dosha pratyaniika chikitsa*.

Discussion on nasal spray

Probable mode of action of Nasal spray is similar to that of *Nasya karma*. The only change observed is its fast action when compared with that of oil. It is probably because of alteration in solubility, viscosity, enhancement of absorption by surfactants.

Polysorbate 80 the non-ionic surfactant as well as oil in water emulsifier is used in the preparation of nasal spray is an inactive ingredient as specified by FDA IIG (Inactive Ingredient Guidance). This decreased the viscosity of *Surasadi taila* and thereby probably enhanced its absorption. *Surasadi* nasal spray had shown immediate effect in controlling the sneezing, reducing watery secretion from nose and relieving nasal blockage. There by leading to fast absorption.

Discussion on Shamanoushadhi

In contemporary Science, primary management of Allergic Rhinitis is steam inhalation and use of anti-histamine drugs. This helps in relieving symptoms such as sneezing and congestion in nose and thus helps in relieving the patient from sneezing and watery nasal discharge. *Ghruta bhrushta Haridra* given as *Shamanoushadhi* has helped in getting a good improvement by its properties like *ushna virya*, *katu vipaka*, *laghu rooksha guna*. This pacifies both *vata* and *kapha doshas*. It is also *krimighna*, *kandughna*. The teekshna guna helps in penetration of the drug into *sukshma srotas* and there by clears *sroto avarodha*. The *rooksha guna* helps as *sravahara*. It may act as *vyadhi pratyaniika chikitsa*.

Haridra is proved to be having anti histamine property. This anti histamine property will control the symptoms produced by the histamines that are released when the allergen is inhaled. It directly acts on H1 & H2 receptors which are mainly involved in the Histaminic reactions and prevents the release of a number of inflammatory mediators & inhibit the action of the released mediators on their target cells.

DISCUSSION ON RESULT

In all the three groups improvement was observed regarding the parameters assessed and was significant with P value <0.001 on the 7th day of treatment. Though all the groups showed significant result on the 7th day of treatment, in subjects of Group B response to the treatment in terms of reduction in Nasa srava, nasavarodha, kshavathu, shirashoola, shirogaurava was observed from the 1st day of treatment itself in most of the patients. During follow up few patients in Group A and most of the patients in Group B had recurrence of symptoms. While in Group C there was no recurrence of

symptoms in maximum number of patients suggesting the added effect of *Ghruta bhrushta Haridra*.

CONCLUSION

- Vataja Pratishyaya can be co-related with Allergic Rhinitis based on the similarity in nidanas and lakshanas.
- The present study conducted has shown significant relief in most of the criteria adopted for the assessment. There was not a single case which remained unchanged after treatment and there were no complications observed during the treatment.
- The Patients in Group C had best improvement when compared to Group A and Group B. As the recurrence of symptoms during follow up was less in Group C.
- Patients of Group B had a very good improvement in Nasasrava, Nasavarodha and Kshavathu from the 1st day of treatment suggesting immediate effect of the drug.
- It is concluded that all the three groups are effective in treating Vataja Pratishyaya. To get long term benefit *Nasya* with *Shamanoushdhi Ghruta bhrushta Haridra* and for immediate relief spray is the better option.

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