



A COMPARATIVE CLINICAL STUDY OF VYOSHADI CHURNA AND GOJIHWADI KWATH IN PRATISHYAYA (ALLERGIC RHINITIS)

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ABSTRACT **Aim:** Evaluation of efficacy of the compounds Vyoshadi syrup and Gojihwadi syrup in Pratishyaya. **Study Design:** Open label, Randomized, Parallel arm study. **Material and Methods:** The study was conducted on 40 children of Pratishyaya for a period of 14 days. Subjective and objective parameters were documented before and after the completion of treatment. **Statistical Analysis Used:** In this study Wilcoxon Signed Rank test, Mann Whitney U-test, Paired t-test, unpaired t-test and SPSS software was used. **Results:** Marked improvement was seen in 12 (60%) patients of Group A and 08 (40%) in group B. Moderate improvement was seen in 5 (25%) patients of Group A & 11 (55%) patients of Group B. Complete relief in 3 (15%) patients of Group A & 01 (5%) patients in Group B. Group A showed better result based on percentage relief and mean rank. The overall effect of Group A was better than Group B in relieving all the symptoms. **Conclusion:** It is concluded from the result that there is significant effect of Vyoshadi syrup and Gojihwadi syrup on sign and symptoms of Pratishyaya. Vyoshadi syrup shows better result than Gojihwadi syrup.

KEYWORDS : Pratishyaya, Ayurvedic management of Allergic Rhinitis, Vyoshadi syrup, Gojihwadi syrup.

Introduction

People all over the world suffer from respiratory disorders due to climatic changes, infections and air pollution. *Pratishyaya* being one of them, it is an important disease among the respiratory disorders. Different classification of *Nasagata roga* (Nasal disorders) are given by different *Acharayas*. *Acharya Shusruta* has described 31 *nasagata roga*. Among them *Pratishyaya* is one of the most important diseases. *Acharya Shusruta* described the disease very elaborately including its complication. On the basis of same sign and symptoms of *Pratishyaya* can be compared with Allergic Rhinitis in modern medicine¹.

Allergic and non-allergic: In Allergic Rhinitis, the immune system takes body's own cells/tissues as an intruder and starts to work against it resulting in increased sensitivity to inhalants. This is called an allergen. Immune system's response to an allergen is releasing histamine and chemical mediators that usually cause symptoms in the nose, throat, eyes, ear, skin, and mouth and cause inflammation of nasal lining. Non allergic rhinitis: - Non Allergic Rhinitis differs from Allergic Rhinitis as the immune system is not involved. This condition commonly affects the adults and causes year-round symptoms, mainly runny nose and nasal congestion.²

The prevalence of AR in Indian study was 11.3% in children aged 6-7 years, and 24.4% in children aged 13-14 years. In school going girls (4-17 years) the prevalence of AR was found 21.27%. Another study in Delhi village area, prevalence of AR was found 27.1%, 33.3% and 28.6% in lower class, middle class and upper class respectively.³ The worldwide prevalence of AR varied between 0.8 to 14.9% in 6-7 years old and 1.4 to 39.7% in 13-14 years as per ISAAC. In Asia 27% in South Korea and 32% in the United Arab Emirates is affected by AR.⁴ In modern medical science anti-histamines and steroids are prescribed for the treatment of *Pratishyaya* but this treatment does not give a permanent cure, is costly and with side effects. The present study was carried out to study the efficacy of *Ayurvedic* formulations *Vyoshadi syrup* and *Gojihwadi syrup* with the aim that herbal compounds may be effective to manage *Pratishyaya* without any side effects by assessing subjective and objective parameters.

MATERIALS AND METHODS

A randomized, open level and parallel arm clinical study was conducted in children suffering from *Pratishyaya* (Allergic Rhinitis). For the clinical study the patients having the clinical features of *Pratishyaya* were selected from O.P.D/I.P.D of PG department of Kaumarbhritya, Gurukul campus, Uttarakhand Ayurved University, Haridwar. Patients were included between the age group of 2-12 years irrespective of gender having classical symptoms of *Pratishyaya*. Children below 2 years and above 12 years, known case of systemic

diseases like- T.B, D.M, Pneumonia, Asthma, D.N.S, Nasal polyps and Tumors of nose were excluded. In this study *Vyoshadi churna* and *Gojihwadi kwath* were selected as trial drugs. *Vyoshadi churna* is an *Ayurvedic* herbal formulation mentioned by *Acharya Chakrapani* in *Chikitsa Sangraha* under *Nasa gata roga*. *Gojihwadi kwath* is a collection of *Ayurvedic* and Unani drugs described in '*Siddha yoga Sangraha*' under *Jwara rog adbhikara* written by *Acharya Yadavji Trikamji*, one of the legends of *Ayurveda* of modern era. Ethical clearance was obtained from Institutional Ethics Committee prior to patient's enrolment vide letter no. UAU/GC/IEC/2020/10. The trial was registered in the clinical trial registry of India before commencement of patient enrolment. Registration number for the trial is CTRI/2020/05/025105. Trial drug was prepared and manufactured from a GMP Certified *Ayurveda* pharmacy (Hans pharmacy Sidkul, Haridwar). It was prepared in syrup form in order to enhance its palatability and for easy administration in children. Reference number 17/HH/2020/ Date- 20/06/2020. Cases registered for the study were divided into 2 groups using lottery method. *Vyoshadi syrup* was administered in (Group A) and *Gojihwadi* syrup was administered in (Group B).

Composition of medicine: Vyoshadi churna:- *Shunthi*⁵, *Pippli*⁶, *Marich*⁷, *Chitrak*⁸, *Taleesh*⁹, *Tintideek*¹⁰, *Amlavetas*¹¹, *Chavya*¹², *Ajaji(jeerak)*¹³, *Ela*¹⁴, *Twak*¹⁵.

Gojihwadi kwatha:- *Gojihwa*¹⁶, *Draksha*¹⁷, *Yashtimadhu*¹⁸, *Vasa*¹⁹, *Hansraj*²⁰, *Khatmi*²¹, *Gulbanaffsa*²², *Mishreya*²³, *Anjeer*²⁴, *Unnav*²⁵, *Jufa*²⁶, *Sapistan*²⁷, *Khubkalan*²⁸, *Alasi*²⁹, *Maricha*³⁰, *Kantakari*³¹.

Preparation of Vyoshadi syrup: (Group A)

Kwatha of the recommended drugs of *Vyoshadi* syrup was prepared according to the instructions given in *Sharangdhara Samhita*. The drugs were taken in *Yavakuta* form (150gm each) and ¼ *Twaka*, *Pattri* and *Ela* (350 gm each) were added and boiled with 16 times water (30 litres) on low heat and reduced to 1/8th and filtered. 5 kg *Guda* (gaggery) by weight was added to the decoction and again boiled. The process was continued until the syrup became one – third. Again it was filtered and sodium benzoate was added at the rate of 0.3%. Then syrup was packed in 200 ml sterile bottles and labeled.

Preparation of Gojihwadi syrup: (Group B)

Kwatha of the recommended drugs of *Gojihwadi* syrup was prepared according to the instructions given in *Sharangdhara Samhita*. The drugs were taken in *Yavakuta* form (200gm each) and boiled with 16 times water (45 liter) on low heat and reduced to 1/8th and filtered. 5 kg sugar by weight was added to the decoction and again boiled. The process was continued until the syrup became one – third. Again it was

filtered and sodium benzoate was added at the rate of 0.3%. Then syrup was packed in 200 ml sterile bottles and labeled.

Dose of drug in each group was divided according to age: Age of 2-5 years – 1TSF BD, 6-9 years – 1.5 TSF BD and 10-12 years – 2 TSF BD.

Procedure:

Group A was administered with *Vyoshadi churna* and group B was administered with *Gojihwadi kwath* which was prepared in *syrup* form to make administration easy for children. The drug was manufactured from a GMP Certified *Ayurveda* pharmacy (Hans pharmacy Sidcul, Haridwar). Ref.no. 17/HH/2020 on dated 20/06/2020.

Endpoints: Relief in signs and symptoms of *Pratishyaya* mentioned in *Ayurvedic* classical texts were the primary endpoints. Improvement in the T.L.C, D.L.C, E.S.R and A.E.C. were the Secondary endpoint

FOLLOW UP

The assessment of the patients was done at the interval of 7 days i.e. At registration (R), First follow up (F1-at 7th day), Second follow up (F2-at 14th days) and third follow up (F-3 at 21days) - one week after completion of treatment.

Criteria for assessment- The assessment of the trial was done on the basis of subjective and objective parameters. Subjective parameters included assessment of clinical features of *Pratishyaya* (rhinitis). *Shirashool* (Headache), *Nasavrava* (Rhinoirrhoea), *Nasakandu* (Nasal itching), *Kasa* (Cough), *Ghranaviplava* (Anosmia), *Kshavthu* (Sneezing) and *Nasaavrodha* (Nasal congestion). Objective Parameters were Hb%, T.L.C, D.L.C, E.S.R and A.E.C.

Table. No. 1 Grading Of Subjective Parameters

Parameters	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
1. Headache (Sirahshoola)	No headache	Mild headache, occasionally, with low intensity.	Moderate headache, frequently, but not disturbing the daily routine work.	Severe headache with restlessness, able to carry out routine work with great difficulty	Severe headache which makes patient bedridden, often associated with nausea, vomiting, etc.
2. Rhinoirrhoea (Nasavrava)	No discharge	Occasional rhinoirrhoea with mild watery running nose.	Rhinoirrhoea with occasional running nose with moderate watery fluid.	Rhinoirrhoea with heavy running nose, requires moping but controllable.	Severe rhinoirrhoea, with copious fluid, requires continuous moping
3. Nasal Itching (Nasakandu)	No itching	Mild	Moderate	Severe	Unable to speak/can not produce any sound
4. Cough (Kasa)	No cough	Occasional cough (dry or unproductive)	Moderate Cough (productive with scanty sputum)	Continuous cough with throat & chest pain (productive with moderate amount of sputum)	Severe continuous cough with throat & chest pain (productive with large amount of sputum).
5. Anosmia (Ghranaviplava)	Sense of smell intact	Smells mild odour from 1 feet distance.	Smell mild odour only when close by.	Smells strong odour sometimes.	Total loss of smell even for strong odour.

6. Sneezing (khavthu)	No sneezing	1 – 10 sneezing per day	10 – 15 sneezing per day	16 – 20 sneezing per day	>20 sneezing per day
7. Nasal congestion (Nasaavrodha)	No obstruction	Partial, occasional and unilateral. Inhalation-exhalation with effort and with feeling of mild obstruction	Partial, frequently and bilateral. Inhalation-exhalation with effort and with feeling of moderate obstruction.	Partial, frequently and bilateral. Inhalation-exhalation with effort and with feeling of severe obstruction.	Complete blockage, bilateral, followed by mouth breathing.

- Investigations: Hb%, T.L.C, D.L.C, E.S.R and A.E.C
- ADR: No ADR was observed in any of the participants during this study.

OBSERVATIONS AND RESULTS

The study on *Vyoshadi* syrup and *Gojihwadi* syrup was done on 40 patients of *Pratishyaya* with a trial duration of 14 days in each patient. The demographic profile of each patient and following observations were recorded in case record proforma. Total 40 patients of *Pratishyaya* participated in this research study. 40 patients were divided into two groups (group A and group B) i.e.; 20 patients in each group. 40 patients had completed the trial for the period of 14 days.

Considering the inclusion and exclusion criteria the whole study was divided under following headings, as follows:

- Demographic profile
- Clinical profile

Demographic profile

According to sex wise distribution, out of 40 patients, 42.5% of the patients were males and 57.5% of them were females. The patients were registered were ranging “between” 2-12 of age. Maximum patients (50%) were found in the age group of 10-12 years, maximum no. of patients 57.5% were Hindu, whereas 42.5% were Muslim, 80% patients belonged to Middle class, 20% from lower class of the society. In this study maximum percentage of patients were from urban area (55%) and rest were from rural area (45%). Immunization history was completed in 62.5% of patients and in the rest 37.5% patients, was not completed. The result of the study showed that maximum no. of patients i.e., 50% patients had average appetite, 27.5% patients had good appetite and 22.5% patients had less appetite. The present study reveals that mix dietary habits (55%) were found more than Vegetarian diet. Out of 40 patients, maximum no. of patients i.e. 57.5 % born at hospital, 17.5% patients born at home and 25% patients born with LSCS. Most of the patients had regular bowel (52.5%), 20% patients had irregular bowel habit, 27.5 % patients had constipated bowel habit. Maximum no. of patients had sound sleep (60%) and 40% patients had disturbed sleep. Out of 40 patients of this study 6 patients (15%) were taking previous treatment while 85 % patients were newly diagnosed. In this study, 18 (45%) patients had symptoms of *Sirahshoola* (headache), 39 (97.5%) patients had symptoms of *Nasavrava* (rhinoirrhoea), 11 (27.5%) patients had symptoms of *Nasakandu* (Nasal itching), 27 (67.5%) patients had symptoms of *Kasa* (cough), 11 (27.5%) patients had symptoms of *Ghranaviplava* (Anosmia), 28 (70%) patients had symptoms of *Kshavthu* (sneezing) and 18 (45%) patients had symptoms of *Nasaavrodha* (Nasal Congestion). In clinical presentation A.E.C and E.S.R was found elevated in 40 patients (100%). HB% was found in 8-10 gm/dl of 16 patients (40%) and 24 patients (60%) have HB% between 11-12 gm/dl.

RESULTS

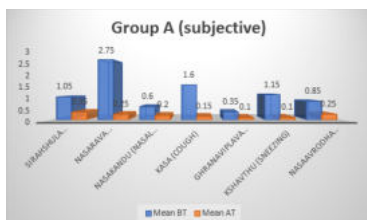
Group A

Table.no. 2 Effect of therapy on subjective parameters: -

Group A	Mean		Median		Std deviation		% effect	Wilcoxon test	P-value	Result
	BT	AT	BT	AT	BT	AT				
SIRAHSHULA (HEADACHE)	1.05	0.35	1	0	0.945	0.489	66.67	281.5	<0.05	SIG
NASASRAVA (RHINOIRRHOEA)	2.75	0.25	3	0	0.716	0.444	90.91	387.5	<0.001	HS

NASAKANDU (NASAL ITCHING)	0.6	0.2	0	0	0.94	0.41	66.67	232	<0.05	SIG
KASA (COUGH)	1.6	0.15	2	0	0.995	0.366	90.63	342.5	<0.001	HS
GHRANAVIP LAVA (ANOSMIA)	0.35	0.1	0	0	0.745	0.308	71.43	223	<0.05	SIG
KSHAVTHU (SNEEZING)	1.15	0.1	1	0	1.137	0.308	91.3	308	<0.001	HS
NASAAROD HA (NASAL CONGESTION)	0.85	0.25	0	0	1.04	0.55	70.59	260	<0.05	SIG

Graph. No.1



Group B

Table. no. 3 Effect of therapy on subjective parameters: -

Group B	Mean		Median		Std deviation		% effect	Wicox on test	P-value	Result
	BT	AT	BT	AT	BT	AT				
SIRAHSHULA (HEADACHE)	0.6	0.3	0	0	0.883	0.47	50	287	<0.05	SIG
NASASRAVA (RHINORRHEA)	2.6	0.5	3	0	0.503	0.607	80.77	396	<0.001	HS
NASAKANDU (NASAL ITCHING)	0.45	0.1	0	0	0.826	0.308	77.78	234	<0.05	SIG
KASA (COUGH)	1.4	0.25	2	0	0.995	0.444	82.14	322.5	<0.001	HS
GHRANAVIP LAVA (ANOSMIA)	0.45	0.2	0	0	0.759	0.41	55.56	226	<0.05	SIG
KSHAVTHU (SNEEZING)	1.5	0.25	2	0	1	0.444	83.33	332.5	<0.001	HS
NASAAROD HA (NASAL CONGESTION)	1.2	0.5	1	0	1.281	0.607	58.33	252	<0.05	SIG

Graph. No.2

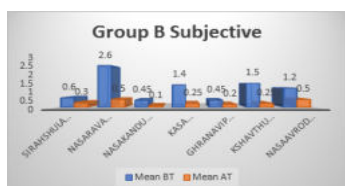


Table. No.4: Comparative effect of Group A and Group B on subjective parameters:

	Group	N	Mean Rank	Sum of Ranks	Mann-Whitney U	P-Value
SIRAHSHULA (HEADACHE)	Group A	20	23.10	462.00	148.000	0.011
	Group B	20	17.90	358.00		
	Total	40				
NASASRAVA (RHINORRHEA)	Group A	20	24.75	495.00	115.000	0.008
	Group B	20	16.25	325.00		
	Total	40				
NASAKANDU (NASAL ITCHING)	Group A	20	20.95	419.00	191.000	0.028
	Group B	20	20.05	401.00		
	Total	40				
KASA (COUGH)	Group A	20	22.40	448.00	162.000	0.026
	Group B	20	18.60	372.00		
	Total	40				

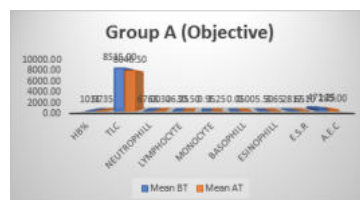
GHRANAVIP LAVA (ANOSMIA)	Group A	20	22.50	450.00	200.000	0.038
	Group B	20	20.50	410.00		
	Total	40				
KSHAVTHU (SNEEZING)	Group A	20	23.25	465.00	175.000	0.025
	Group B	20	21.75	435.00		
	Total	40				
NASAAROD HA (NASAL CONGESTION)	Group A	20	23.25	465.00	186.000	0.027
	Group B	20	21.20	424.00		
	Total	40				

In this study there was significant difference in Group A and Group B and mean rank for Group A is greater than Group B. Hence we concluded that, effect observed in Group A was more than Group B.

Table. No. 5 Effect of therapy on objective parameters: -

Group A	Mean		Std deviation		% effect	T statistic	P-value	Result
	BT	AT	BT	AT				
HB%	10.97	11.35	0.86	0.76	3.51	-3.56	<0.05	SIG
TLC	8515.00	8046.50	551.82	942.83	5.50	2.609	<0.05	SIG
NEUTROPHILL	67.00	63.30	4.62	11.70	5.52	1.932	>0.05	NS
LYMPHO CYTE	26.25	30.50	4.12	10.60	16.19	-2.461	<0.05	SIG
MONOCYTE	0.95	1.25	0.60	1.71	31.58	-1.076	>0.05	NS
BASOPHILL	0.05	0.00	0.22	0.00	NA	1	>0.05	NS
ESINOPHILL	5.50	3.65	0.69	1.27	33.64	5.286	<0.001	HS
E.S.R	28.65	17.10	4.89	8.42	40.31	5.915	<0.001	HS
A.E.C	471.25	285.00	49.69	73.43	39.52	9.226	<0.001	HS

Graph. No.3



Group B

Table. No. 6 Effect of therapy on objective parameters: -

Group B	Mean		Std deviation		% effect	T statistics	P-value	Result
	BT	AT	BT	AT				
HB%	11.15	11.47	0.64	0.71	2.87	-2.491	<0.05	SIG
TLC	8495.00	8185.00	450.12	440.42	3.65	2.635	<0.05	SIG
NEUTROPHILL	67.90	64.05	2.49	12.37	5.67	1.384	>0.05	NS
LYMPHOCYTE	26.55	27.40	2.67	2.68	3.20	-0.928	>0.05	NS
MONOCYTE	0.85	0.75	0.37	0.44	11.76	0.698	>0.05	NS
BASOPHILL	0.00	0.00	0.00	0.00	NAN	NAN	NAN	NS
ESINOPHILL	5.25	3.65	0.64	1.14	30.48	5.287	<0.001	HS
E.S.R	27.60	19.10	5.31	8.63	30.80	5.101	<0.001	HS
A.E.C	453.60	312.10	47.33	103.19	31.19	5.086	<0.001	HS

Graph. No.4

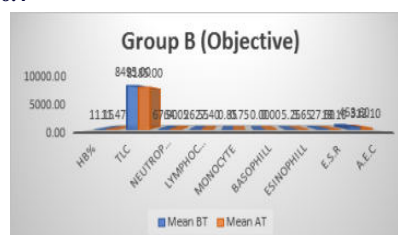
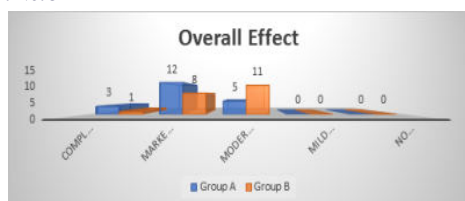


Table no.7: Showing comparison between percent effect on objective parameters of group A and B.

	Group	N	Mean	SD	SE	t-Value	P-Value	Result
HB%	Group A	20	0.51	0.35	0.08	0.041	0.967	NS
	Group B	20	0.50	0.42	0.09			
TLC	Group A	20	701.50	598.46	133.82	1.459	0.153	NS
	Group B	20	470.00	381.27	85.26			
NEUTROPHILL	Group A	20	4.50	8.15	1.82	-0.077	0.939	NS
	Group B	20	4.75	12.11	2.71			
LYMPHOCYTE	Group A	20	5.25	7.05	1.58	1.194	0.240	NS
	Group B	20	3.25	2.53	0.57			
MONOCYTE	Group A	20	0.60	1.57	0.35	0.543	0.590	NS
	Group B	20	0.40	0.50	0.11			
BASOPHILL	Group A	20	0.05	0.22	0.05	1.000	0.324	NS
	Group B	20	0.00	0.00	0.00			
ESINOPHILL	Group A	20	2.15	1.09	0.24	1.032	0.309	NS
	Group B	20	1.80	1.06	0.24			
E.S.R	Group A	20	12.65	6.95	1.55	1.468	0.150	NS
	Group B	20	9.70	5.70	1.28			
A.E.C	Group A	20	189.65	82.50	18.45	0.896	0.376	NS
	Group B	20	165.50	87.91	19.66			

Overall effect:**Graph. No. 5****DISCUSSION**

Pratishyaya (Allergic Rhinitis) is the most common complaint faced in general practices and its incidence and recurrence rate is very high because of day by day increase in environmental pollution. In India a huge population of AR is under diagnosed. These people are not only suffer from the complaints of AR but also spend a poor quality of life. In this study in group "A" statistically highly significant result was found in subjective parameters Nasasrava, Kasa and Kshavthu as value of $p < 0.001$ and significant result was found in Shirashool, Nasa kandu, Ghranaviplava and Nasaavrodha as value of $p < 0.05$ in each. In group "B" Statistically highly significant result was found in subjective parameter Nasasrava, Kasa and Kshavthu as value of $p < 0.001$ and significant result was found in Shirashool, Nasa kandu, Ghranaviplava and Nasaavrodha as value of $p < 0.05$ in each. In group "A" in objective parameters, statistically highly significant result was found in Eosinophil, E.S.R and A.E.C, Statistically significant result was found in HB%, T.L.C and Lymphocyte and statistically non-significant result was found in Neutrophil, Monocyte and Basophil. In group "B" in objective parameters, statistically highly significant result was found in Eosinophil, E.S.R and A.E.C as value of p is found in < 0.001 in each. Statistically significant result was found HB%, T.L.C as value of $p < 0.05$ in each. Statistically not significant result was found in neutrophil, lymphocyte, monocyte and basophil as value of > 0.05 in each.

Discussion on probable Mode of Action

Most of the contents in formulation are Katu rasa, Ushna virya and Laghu-Tikshna guna like:-Pippali, Maricha, Twak etc. Ushna Virya and Laghu-Tikshna guna of the drug like:-Pippali, Maricha, Twak, Shunthi, Kantakari, Alasi, Jufa etc. has Ama pachan, Vaatanuloman and Vata-kapha hara property which pacify the Vata dosh and Kapha dosh which is responsible for disease Pratishyaya. Due to Ama pachan property it digest the free toxins of body. Tikta and Tikshna property of drugs like:-Taleesh, Jufa etc. acts as expectorant and Tikta rasa has the ability to convert Sama pitta into Nirama pitta. Due to Katu rasa and Tikshna property of drugs like:-Pippali, Maricha, Chitrak etc. has Vata-kapha hara, Deepan and Bhedan property. Madhur Vipaka (post digestion) of mostly drugs like:-Shunthi, Pippali, Gojihwa, Draksha, yasthimadhu, hansraj, khatmi etc. has Vata-pitta hara property. Madhur rasa of some drugs like:-Gojihwa, Draksha etc., are Snigdha and Guru in nature which elevate Vata dosha. Madhur rasa have Balya, Jeevanya and Bhinghana properties, which helps in building up tissues and may

increase the Vyadhi-kshamatva and alleviates Kshavathu, Shirashool etc., by its Vata-pitta hara property. Amla rasa of some drugs like:-Tintideek & Amlavetas has potency to reach at cellular level, clear obstruction in the channels and restore function of Dhatwagni. Tikta, Kashaya and Madhur rasa of some drugs like:-Gojihwa, Alasi, Vasa etc. have pitta shamaka properties. Tikta rasa and kashaya rasa of drugs also subsides kapha dosha. Chitrak has Katu vipaka and Ushna virya, these properties helps in digesting the vicious Kapha. The contents of Vyoshadi syrup and Gojihwadi syrup acts as Tridosha hara, corrects Agni mandhya, relieves in Srotodushti (clear obstruction in the channels) and does Vaatanuloman. According to research evidences mostly contents of both trial drugs has Anti-inflammatory, expectorant, respiratory tonic, rejuvenating, mucolytic, antimicrobial, antiviral, antioxidant, antibacterial, digestive, carminative, and antihistaminic properties. Which pacify the symptoms of Pratishyaya (allergic rhinitis) like:- inflammation of nasal mucosa, nasal itching etc.

CONCLUSION

As per discussion in this study both the groups show statistically significant results on the comparison of subjective parameters, in which Group "A" showed better result based on percentage relief and mean rank. The overall effect of Group "A" was better than Group "B" in relieving all the symptoms. During follow up study it was found that maximum number of patients showed no relapse in sign & symptoms. No side effects were observed in patients during & after the course of treatment. So, it can be concluded that the patients of Pratishyaya (Allergic Rhinitis) can be managed effectively through Ayurveda without fear of side effects as seen in other medical science drugs.

FOOTNOTES:

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