



CLINICAL STUDY OF NAG GUTIKA & ANU TAIL NASYA IN THE MANAGEMENT OF ALLERGIC RHINITIS

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ABSTRACT

Allergic rhinitis is an allergic inflammation of the nasal membrane. The characteristic symptoms are rhinorrhea (excess nasal secretion), itching, and nasal congestion and obstruction. The symptoms of *Vata Kaphaj Pratishaya* resemble most of Allergic rhinitis. In *Ayurveda* the concept of allergy is widely elaborated under concept of *Ama*, *Asatmya*, *Viruddh aahara* & *Dushi visha*. Principal treatment of Allergic rhinitis includes avoid allergens causing reaction (*nidan parivarjan*), Management of *Ama* (*Ama pachana*), Detoxification (*shodhana*) & *Rasayana* (to increase immunity). So *Anu tail Nasya* & *Nag Gutika* is used for the study. For the clinical study 30 clinically diagnosed cases of Allergic rhinitis were selected from OPD of *Kayachikitsa* & OPD of *Panchakarma* of J.A.M.C. Nagpur. Selected patients were randomly divided into two groups each of 15 patients. Group A- was given *Nag Gutika* 1 tablet twice a day with water. Group B- was given *Nag Gutika* 1 tablet twice a day with water & *Nasya* with *Anu tail* in dose of 6 to 8 *Bindu* daily for 7 days. After 1st course of *Nasya*, 2nd course of *Nasya* was done again for 7 days with an interval of 3 weeks. For a statistical analysis of the data the standard statistical package stataver 11.2 is used. Although satisfied result obtained on various parameters with *Nag Gutika* but *Nasya* therapy with *Nag Gutika* is more significant.

KEY WORDS: Allergic rhinitis, *Nag Gutika*, *Anu tail*, *Nasya*.

INTRODUCTION

Allergic rhinitis is an allergic inflammation of the nasal membrane. It occurs when an allergen, such as pollen, dust or animal dander (particles of shed skin and hair) is inhaled by an individual with a sensitized immune system. The characteristic symptoms of allergic rhinitis are rhinorrhea (excess nasal secretion), itching, and nasal congestion and obstruction. In such individuals, the allergen triggers the production of the antibody immunoglobulin E (IgE), which binds to mast cells and basophile containing histamine. IgE bound to mast cells are stimulated by allergens, causing the release of inflammatory mediators such as histamine (and other chemicals). This usually causes sneezing, itchy and watery eyes, swelling and inflammation of the nasal passages, and an increase in mucus production. Symptoms vary in severity between individuals.

The symptoms of *Vata Kaphaj Pratishaya* resemble most of Allergic rhinitis. In *Ayurveda* the concept of allergy is widely elaborated under concept of *Ama*, concept of *Asatmya*, concept of *Viruddha aahara* & concept of *Dushi visha*. From an *Ayurvedic* perspective, the primary cause of allergies is due to the accumulation of *ama* (toxins, or metabolic waste products) caused by an

imbalance of the *agni* (Digestive fire).^[1] *Agni* governs the metabolic system, associated transformation & biochemical changes. *Ama* is an accumulated *Visha* (toxins) material produced at different stages of digestion.^[2] Here, toxins can be viewed as foreign material by the body and can react by body forming antibodies to it giving rise to antigen-antibody complexes resulting in immune disorders^[3] which in turn leads to low immunity.

All those *Ahara* & *Vihara* which are having *viruddha guna* of particular *desha* or *roga* of that individual are considered as *satyma*^[4] (which is Tolerate to body) & which is not *satyma* is *Asatyma*. Towards this *Asatyma* body gives different response which may contribute to allergic manifestation. In *Ayurveda* an interesting concept of *Oka satyma* i.e. acquired *satyma* was explained by *Acharyas*. *Oka satyma* is a use of *asatyma ahara* & *vihara* in very small dose for long period so that *asatyma* become *satyma* for that particular individual.^[5] The concept of *Oka satyma* resembles with Allergy shots (Allergen immunotherapy) given by modern medicine. *Viruddh aahara* means combination of two or more food material having antagonist properties which may lead to allergic response.^[6]

Allergic rhinitis is well known for recurrence & chronicity. It has no effect on life expectancy but it may cause number of health problem like sinusitis, otitis media & asthma. It can also affect your quality of life. In *Ayurveda* basic treatment of disease is of three types i.e. *Samshodhana*, *Samshamana* & *Nidan parivarjana*. In *Ayurveda* there is wide scope of research to find out a safe treatment for management of Allergic rhinitis. Principal treatment of Allergic rhinitis includes avoid allergens causing reaction (*nidan parivarjan*), Management of *Ama* (*Amapachana*), Detoxification (*shodhana*) & *Rasayana* (to increase immunity). So *Anu tail Nasya* & *Nag Gutika* is used for the study. In present work a comparative study has been made to see the effect of *Nag Gutika* & *Anu tail Nasya* in the management of Allergic rhinitis.

AIM & OBJECTIVE

1. To find out safe & effective treatment for Allergic rhinitis.
2. To assess the effect of *Anu Tail Nasya* & *Nag Gutika* in the management of Allergic rhinitis.

MATERIALS AND METHODS

Inclusion Criteria

1. Patients between the Age group of 16 years to 45 years.
2. Patients suffering from *Kshavathu* (Sneezing), *Nasavrodha* (Nasal congestion) *Nasakandu* (nasal itching), *Nasastrava* (Nasal discharge), *Shirogaurava* (heaviness in head) & *Swaskashita*

(difficulty in breathing) were selected irrespective of sex, education, socio-economic status & religion.

Exclusion Criteria

1. Patients suffering from bacterial or viral Rhinitis and acute illness such as severe hypertension, malignancy, diabetes mellitus, heart disease & bronchial asthma.

Selection of Cases

For the clinical study 30 clinically diagnosed cases of Allergic Rhinitis were selected from OPD of *Kayachikitsa* & OPD of *Panchakarma* of J.A.M.C. Nagpur. This work was done after the permission of Ethical Committee of J.A.M.C. Nagpur. For the subjective assessment of results following symptoms were observed before the treatment and after the treatment. Detail history & clinical examination of cases was done in every 15 days in 60 days of trial.

Grouping

Selected patients were randomly divided into two groups each of 15 patients.

Group A- was given *Nag Gutika* 1 tablet twice a day with water.

Group B- was given *Nag Gutika* 1 tablet twice a day with water & *Nasya* with *Anu tail* in dose of 6 to 8 bindu daily for 7 days. After 1st course of *Nasya* for 7 days, 2nd course of *Nasya* was done again for 7 days with an interval of 3 weeks.

INGREDIENTS OF DRUG USED

INGREDIENTS OF NAG GUTIKA^[7]

Sr. No.	Name of Medicine	Quantity
1	<i>Suddha Bastnav</i> (<i>Acooritum ferox</i>)	1 tola
2	<i>Lavang</i> (<i>Syzygium aromaticum</i>)	1 tola
3	<i>Pippali</i> (<i>piper longum</i>)	1 tola
4	<i>Pippali mula</i> (<i>piper longum radix</i>)	1 tola
5	<i>Jayphal</i> (<i>croton tiglium</i>)	1 tola
6	<i>Dal chini</i> (<i>Cinnmonum zeylanicum</i>)	1 tola
7	<i>Javitri</i> (<i>myristica fragrans</i> hautt.)	1 tola
8	<i>Sunthi</i> (<i>Zingiber officinale</i>) (dry)	1 tola
9	<i>Akarkara</i> (<i>Anacyllus pyrethrum</i>)	1 tola
10	<i>Kali mircha</i> (<i>piper nigrum</i>)	1 tola
11	<i>Suddha Hingul</i>	1 tola
12	<i>Suddha Tankan</i>	1 tola
13	<i>Keshar</i> (<i>crocus sativus</i>)	3 masha
14	<i>Kasturi</i>	1 ratti
15	<i>Adrak Swaras</i> (<i>Zingiber officinale</i>) (wet)	12 hrs. mardan
16	<i>Pan Swaras</i> (<i>Piper battle</i>)	from each swaras.

Method of Preparation: as per *Ayurved sarsangrah*.^[8]

INGREDIENTS OF ANU TAIL^[7]

Sr. No.	Name of Medicine	Quantity
1	<i>Jeevanti</i> (<i>Holostemma add-kodien</i>)	1 part
2	<i>Usheer</i> (<i>Vetiveria zizanioides</i>)	2 part
3	<i>Devdaru</i> (<i>Cednus dcodara</i>)	1 part

4	<i>Musta</i> (<i>Cyperus rotundus</i>)	1 part
5	<i>Twak</i> (<i>Cinnamomum zeylanicum</i>)	1 part
6	<i>Anantmool</i> (<i>Hemidesmus indicus</i>)	1 part
7	<i>Chandan</i> (Swet) (<i>Santalum album</i>)	1 part
8	<i>Daruharidra</i> (<i>Berberis aristata</i>)	1 part
9	<i>Talispatra</i> (<i>Abies webbiana</i>)	1 part
10	<i>Yestimadhu</i> (<i>Glycyrrhiza glabra</i>)	1 part
11	<i>Triphala</i> <i>Teruminalia chebula</i> <i>Terminalia belerica</i> <i>Embic officinalis</i>	1 part
12	<i>Kamal</i> (Keshar) (<i>Nelumbo nucifera</i>)	2 part
13	<i>Balbilwa</i> (<i>Aegle Marmelos</i>)	4 part
14	<i>Kantkari</i> (<i>Solanum xanthocarpum</i>)	1 part
15	<i>Brahati</i> (<i>Solanum indicum</i>)	1 part
16	<i>Rasna</i> (<i>Vanda roxburghii</i>)	1 part
17	<i>Shalparni</i> (<i>Pseudarthria viscida</i>)	1 part
18	<i>Prushanapurni</i> (<i>Hedysarum pictum</i>)	1 part
19	<i>Tamalpatra</i> (<i>innamomum tamala</i>)	1 part
20	<i>Ela</i> (<i>Elettaria Cardamomum</i>)	1 part
21	<i>Nagkeshar</i> (<i>Mesua Ferrea</i>)	1 part
22	<i>Jala</i> (Mahendra) (Rain water drops collected in a pot)	100 part
23	<i>Til Tail</i> (<i>Sesamum Indicum</i>) oil (<i>Sesamum seeds</i>)	10 part

Method of preparation- as per *Ayurved sarsangrah*.^[8]

DURATION OF TRIAL

Clinical trial was done for 60 days. In both group patients were advised mental & physical rest and light diet.

CRITERIA OF ASSESSMENT

Subjective symptoms were taken in to consideration for the assessment of results. Following symptoms were observed before treatment followed by every 15 days and after completion of trial. Intensity of symptoms was indicated by Grade 0 – Normal, Grade 1 – Mild, Grade 2 – Moderate & Grade 3 – Severe.

OBSERVATION

The following were the observation of the study. Total 30 patients, 15 patients in each group A and B were registered. It was found that maximum number of patients 15 (50%) were between the age group 26 to 35 years (Table No. 1); Male patients were obtained higher i.e. 20 (66.67%) (Table No. 2). As per socioeconomic group middle class patients were obtain more i.e. 14 (46.67) (Table No. 3) As per occupation service class patients were registered more i.e. 17 (56.67%) (Table No. 4). Maximum no. of patients were of *Kaphavataj prakruti* i.e. 15(50%) (Table No. 5), Maximum no. of patients were suffering from *mandagni* i.e. 17 (56.67%) followed by *vishmagni* 7 (23.33%). 12(40%) patients had *krura koshtha* followed by *madhyam koshtha* 11(36.67) (Table No. 6). Out of 30 patients in 13 patients (43.33%) aggravating factor was dust (Table No. 7).

Table 1 The distribution of patients according to their age-

Age groups	No. of patients	Percentage (%)
15 -25 Years	7	23.33
26 -35 Years	15	50
36 -45 Years	8	26.67
Total	30	100

Table 2 Distribution of patients according to their sex

Sex	No. of patients	Percentage (%)
Male	20	66.67
Female	10	33.33
Total	30	100

Table 3 Distribution of patients according to their socio-economic status

Income Status	No. of patients	Percentage (%)
Upper class	6	20
Middle class	14	46.67
Lower middle class	10	33.33
Total	30	100

Table 4 Distribution of patients according to their occupation

Occupation	No. of patients	Percentage (%)
Working	17	56.67
Student	7	23.33
Housewife	6	20
Total	30	100

Table 5 Distribution of patients according to their *deha prakruti*

Deha prakruti	No. of patients	Percentage (%)
Vatapittaja	9	30
Vatakaphaja	15	50
Pittakaphaja	6	20
Total	30	100

Table 6 Distribution of patients according to their *Koshtha parikshan*

Koshtha	No. of patients	Percentage (%)
Mradu	7	23.33
Madhyam	11	36.67
Krura	12	40
Total	30	100

Table 7 Distribution of patients according to the aggravating factors

Aggravating factors	No. of patients	Percentage (%)
Unknown	10	33.33
Dust	13	43.33
Food(known)	7	23.33
Total	30	100

RESULT

Bar diagram No. 1 showing relief in % in patients of Group A & Group B.

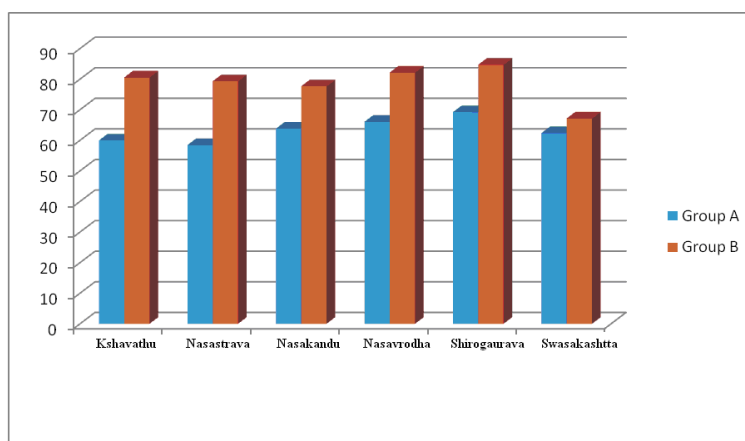


Table No. 8 Effect of therapy on subjective parameters of Group A

Sr.No.	Parameters	N	Mean score		Mean diff	% of relief
			BT	AT		
1	Kshavathu	15	2	0.8	1.2	60
2	Nasastrava	15	1.71	0.71	1	58.47
3	Nasakandu	14	1.66	0.63	1.06	63.85
4	Nasavrodha	14	1.68	0.57	1.11	66.07
5	Shirogaurava	10	1.3	0.4	0.9	69.23
6	Swasakashtta	6	1.33	0.5	0.83	62.40

Table No. 9 Effect of therapy on subjective parameters of Group B

Sr. No	Parameters	N	Mean score		Mean (diff)	% of relief
			BT	AT		
1	Kshavathu	15	2.06	0.4	1.66	80.58
2	Nasastrava	13	1.84	0.38	1.46	79.34
3	Nasakandu	14	1.57	0.35	1.22	77.70
4	Nasavrodha	15	1.46	0.26	1.2	82.19
5	Shirogaurava	11	1.18	0.18	1	84.74
6	Swasakashtta	7	1.28	0.42	0.86	67.18

For a statistical analysis of the data the standard statistical package Stataver 11.2 is used. In the following we apply the two sample t-test for testing the equality of means assuming equal variances and two tailed critical

region with level of significance at 5%. Thus we reject the hypothesis of equality if $p\text{-value} < 0.05$ i. e. we conclude that the difference in means is significant.

Table No. 10 Statistical Analysis of Subjective Parameter of Group A which was treated by Nag Gutika.

S.No	Parameter	N	BT Scores		AT Scores		Student's t	SE (t)	P-value	Remark
			Mean	SD	Mean	SD				
1	Kshavathu	15	2	0.53	0.8	0.77	-4.94	0.24	0.00003	Significant
2	Nasastrava	15	1.67	0.62	0.6	0.51	-5.17	0.21	0.00002	Significant
3	Nasakandu	14	1.64	0.74	0.57	0.65	-4.07	0.26	0.00039	Significant
4	Nasavrodha	14	1.64	0.63	0.71	0.73	-3.61	0.26	0.0013	Significant
5	Shirogurava	10	1.3	0.48	0.4	0.52	-4.02	0.22	0.00079	Significant
6	Swaskashtata	6	1.33	0.52	0.5	0.55	-2.71	0.31	0.02187	Significant

Table No. 11 Statistical Analysis of Subjective Parameter of Group B which was treated by Nag Gutika and Anu tail Nasya.

S.No	Parameter	N	BT Scores		AT Scores		Student's t	SE (t)	P-value	Remark
			Mean	SD	Mean	SD				
1	Kshavathu	15	2.07	0.7	0.4	0.63	-6.82	0.24	0.00001	Significant
2	Nasastrava	15	1.47	0.52	0.33	0.49	-6.18	0.18	0.00001	Significant
3	Nasakandu	15	1.47	0.52	0.33	0.49	-6.18	0.18	0.00001	Significant
4	Nasavrodha	13	1.85	0.69	0.38	0.51	-6.16	0.24	0.00001	Significant
5	Shirogurava	11	1.18	0.4	0.18	0.4	-5.8	0.17	0.00001	Significant
6	Swaskashtata	7	1.29	0.49	0.43	0.53	-3.13	0.27	0.00864	Significant

DISCUSSION

Nasya is term to be applied generally for medicines or medicated oils administered through the nasal passage.^[9] *Nasya* called as *Urdhava Jatrugata Vikareshu Visheshanyabhimishate*.^[10] It has dual action i.e. *Shamana & Shodhana*, It has wide area of action (it acts on all organ of *Urdha vajatrugata Pradesh*). It promote the strength of *Indriyas*. *Anu Tail Nasya* is specially recommended by *Charkakacharya* as preventive measures for *Urdhava Jatrugata Vikara* (diseases which occurs above the Neck region) & also for the management of *Peenasa*. *Anu Tail* has *Tridosha-nashana, balya, brihana* and *rasayana* properties which may help to increase local immunity. *Laghu & Vyavayi guna* possess a property of spreading into minute channels.^[11] Allergic rhinitis (*Vata kaphaj Peenasa*) is occur due to vitiation of *Vatadosha & Kaphadosha*. Therefore *Anu tail* is used as *Nasyadravya*. *Nag Gutika* has *Jawarhar, pratishyay har, Aruchi Nashak, Shiroshoolhar, Ajjernaahar & Shoof nashak* properties which indirectly increase the immunity. Various ingredients of *Nag Gutika* having *Vata Kapha Shamaka* (34%), *Tridosha Shamak* (33%) properties which help to bring the affected *doshas* in normal level.

The effect of *Nag Gutika* and *Nasya* with *Nag Gutika* in Allergic rhinitis patients was evaluated. The Studies conducted on symptomatic parameters showed over all significant improvement in the allergic rhinitis. Although satisfied result obtained on various parameters with *Nag Gutika* but *Nasya* therapy with *Nag Gutika* is more significant. Following observation were found during the study period.

- 1 Overall result with *Nasya & Nag Gutika* in group B was comparatively better than Group A.
- 2 Early response to treatment was observed in Group B.

- 3 In Group B patient reported much better physical fitness, alertness & confidence after the treatment.
- 4 Overall there life style become well organized & can do day to day activity smoothly.

CONCLUSION

So it can be concluded that *Nasya* and *Nag Gutika* is a safe and effective treatment for the management of Allergic Rhinitis patients. It was observed that Tolerance of *Nasya & Nag Gutika* was very well and no adverse reactions were observed in any patient. It is safe and effective treatment. More research work with longer duration is encouraged this study as the results are promising.

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