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A REVIEW ARTICLE ON VATAJA PRATISHYAYA W.S.R ALLERGIC RHINITIS

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ABSTRACT

Allergic rhinitis is an inflammation of the nasal mucosa that is characterized by sneezing, nasal congestion, nasal itching, and rhinorrhea in any combination. Allergic rhinitis is the most common cause of rhinitis. It is an extremely common condition, affecting approximately 20% of the population. Allergic rhinitis can affect people of any race. Allergic rhinitis involves inflammation of the mucous membranes of the nose, eyes, eustachian tubes, middle ear, sinuses, and pharynx. The nose invariably is involved. Inflammation of the mucous membranes is caused by a complex interaction of inflammatory mediators but ultimately is triggered by an immunoglobulin E (IgE)—mediated response to an extrinsic protein and causes sneezing, rhinorrhea in modern often treated with oral antihistamines, decongestants, or both regular use of an intranasal steroid, these medicines have only symptomatic relief and have more side effects Allergic rhinitis is described as *vataja pratishyaya* in Ayurvedic literature. The best treatment for this illness is panchakarma, and *Nasya* is the top option. Maximum medications of *Mutadi taila Nasya* have, katu, tikta rasa, ushna virya, katu vipaka, and vatahara properties and also have anti-inflammatory qualities that can help reduce swelling and inflammation in the nasal passages, relieving congestion and sinus-related discomfort.

KEYWORDS: Allergic rhinitis, Vataja Pratishyaya, Pratishyaya.

INTRODUCTION

Environmental stressors such as pollution, chemicals, pesticides, genetically modified foods, smoke, irregular meals, overeating, cold beverages, ice creams, and other factors continuously affect the human body and cause respiratory tract disorders. These elements reduce the nasal mucosal membrane's immunity. Among these diseases, allergic rhinitis is very common. [1] Additionally, co-morbid disorders including asthma, atopic dermatitis, and nasal polyps can be connected to it. An estimated 20-30% of Indians get allergic rhinitis, neither an age nor a sex preference exists. Infants as early as six months old or older may develop it. Usually, the onset is at 12-16 years of age. [2] According to Ayurveda allergic rhinitis is correlated with Vataja pratishyaya. After describing 31 different varieties of Nasagatroga, Acharya Shushruta devotes a distinct chapter in the Uttartantra to Pratishyaya. The three doshas Vata, Pita, and Kapha, individually or collectively, as well as Rakta, which have gathered in the area of the head and become vitiated due

to several aggravating causes, cause sickness, or Pratishyaya, in humans. [3]

Disease Review

According to WAO(world allergy organization) a symptomatic disorder of the nose results from an IgE-mediated immunological reaction following exposure to the allergen. The major symptoms are rhinorrhea, nasal itching, obstruction, and sneezing which are reversible either spontaneously or with treatment Intermittent (seasonal): when symptoms show up for no more than 28 days at a time or less frequently than four days a week. Persistent (perennial): If symptoms persist for more than 28 days and on the majority of the weekdays.

Idiopathic(Cause not known): Seasonal and perennial are the two categories that are traditionally used, but in practice, the situation is less clear.^[4]

The tendency to develop allergic, or IgE-mediated, reactions to extrinsic allergens (proteins capable of

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causing an allergic reaction) has a genetic component. In susceptible individuals, exposure to certain foreign proteins leads to allergic sensitization, which is characterized by the production of specific IgE directed against these proteins. [5] This specific IgE coats the surface of mast cells, which are present in the nasal mucosa. When the specific protein (eg, a specific pollen grain) is inhaled into the nose, it can bind to the IgE on the mast cells, leading to the immediate and delayed release of several mediators. [6,7] The mediators that are immediately released including histamine, tryptase, chymase, kinins, and heparin. [7,8] The mast cells quickly synthesize other mediators, including leukotrienes and prostaglandin D2. [9,10,11] These mediators, via various interactions, ultimately lead to the symptoms of rhinorrhea (ie, nasal congestion, sneezing, itching, redness, tearing, swelling, ear pressure, and postnasal drip). Mucous glands are stimulated, leading to increased secretions. Vascular permeability is increased, leading to plasma exudation. Vasodilation occurs, leading to congestion and pressure. Sensory nerves are stimulated, leading to sneezing and itching. All these events can occur in minutes; hence, this reaction is called the early, or immediate, phase of the reaction.^[12]

The management of allergic rhinitis consists of the following 3 major treatment strategies:

Environmental control measures and allergen avoidance: These include keeping exposure to allergens such as pollen, dust mites, and mold to a minimum.

Pharmacologic management: **Patients** are successfully treated with oral antihistamines, decongestants, or both; regular use of an intranasal steroid spray may be more appropriate for patients with chronic symptoms Immunotherapy: This treatment may be considered more strongly with severe disease, poor response to other management options, and the presence conditions comorbid complications; or immunotherapy is often combined with pharmacotherapy and environmental control.[13]

PRA+SHYENG+GATAU=PRATISHYAYA The word Pratishyaya developed from the Sanskrit root 'SHYENG'

Dhatu, which means to move. The prefix '*PRATI*' and the suffix '*GATAU*' were given to get the word *Pratishyaya*, which signifies form. It refers to a situation where the flow is constant.^[14]

Heaviness in the head, sneezing, and body ache are diverse symptoms or pronominal features of *pratishyaya*⁶ Acharyas explain different types of *Pratishayaya i.e.* Acharya *Charaka* and Acharya *Kashaypa* – 4 types *Vataja, Pitaja, Kaphaja, Sannipataja. Rasratna samuchya* explains 6 types *Vataja, Pitaja, Kaphaja, Raktaja, Sannipataja* and *Malsanchay janya. Acharya Sushruta* explains 5 types, *Vataja, Pitaja, Kaphaja, Raktaja, Sannipataja.*^[15]

Nidanas of Pratishyaya are split into two categories by Acharya Sushruta: Sadhyojanaka and Kalantarajanaka. [16]

Sadhyojanaka Nidanas: Excessive indulgence in sexual inters course, heating of the head, the entrance of the minute particles of dust or smoke into the nostrils, excessive application of cold or heat, voluntary retention of stool and urine Are the cause that may instantly usher in an attack of nasal catarrh (*Pratisyaya*). [17]

Kalantarajanaka: Heaviness of the head, sneezing and aching in the limbs, the appearance of goose-flesh upon the body, as well as many other different kinds of supervening symptoms are seen to precede an attack of nasal catarrh (*Pratisyaya*). [18]

Nasya karma is the first choice of treatment especially in Urdhwajatrugat roga's among panchakarma procedures. This means the vitiated doshas which have stayed in the head are purged out by this process. Type of Nasya used in Vataja Pratishyaya is Virechnika nasya. According to Acharya Sushruta, Nasya prepared with the taila of mustaadi Dravya, and gargles prepared with decoction of Mustadi Dravya i.e.Bhadradaru, Katphala, Katuka, Vacha, Sarsapa, Pippali, Mula, Pippali, Tejovati, Patha, Saindhava, Agnika, Tuttha, Karanj seeds, Salt and Bhadra daru should be prescribed. [20]

S. NO	NAME	FAMILY	BOTANICAL NAME	RASA	GUNA	VIRYA	VIPAKA	PART	CHEMICAL COMPOSITION
1	MUSTAKA	Rutaceae	Cyperus rotundus	Tikta, Katu Kashaya	Laghu Ruksha	Sheeta	Katu	1PART	Cyperene 1 Cyperen 2 βselinene
2	TEJOVHA	Rutaceae	Zanthoxylum armatum	Katu Tikta	Laghu Ruksha Tikshan	Ushna	Katu	1PART	Berberine Magnofluorine
3	РАТНА	Menispermaceae	Cissanpelus pareira	Tikta	Laghu Tikshna	Ushna	Katu	1PART	Alkaloids Flavonol Sterol
4	KATHPALA	Myricaceae	Myrica esculenta	Kashaya Tikta, Katu	Laghu Tikshan	Ushna	Katu	1PART	Tannin Myricitrin
5	VACHA	Araceae	Acorus calanus	Katu Tikta	Laghu Ushna	Ushna	Katu	1PART	Alkaloids Tannins Saponins
6	SARSHAP	Cruciferae	Brassica campestris	Katu Tikta	Tikshana Ushna	Ushna	Katu	1PART	Alkaloids Sinapine
7	PIPPALI	Piperacae	Piperlongum	Katu	Laghu	Anuushanashita	Madhur	1PART	Piperidine

					Snigdha Tikshana				Piperlongumine
8	PIPPALIMOOL	Piperacae	Piperlongum	Katu	Laghu Snigdha Tikshana	Anuushanashita	Madhur	1PART	Piperidine Piperlongumine
9	CHITRAK	Plumbaginacae	Plumbego zylanica	Katu	Laghu Ruksha Tikshana	Ushna	Katu	1PART	Plumbagin Plumbagic acid Glucose Fructose
10	NEELEE	Papilionace	Indigofera tinictora	Tikta	Laghu Ruksha	Ushna	Katu	1PART	Indigotin Indican
11	KARANJA	Leuminosae	Pongamia pinnata pierrae	Tikta Katu Kashyaya	Laghu Ushna	Ushna	Katu	1PART	Toxic flavonoids Pongamol
12	DEVDARU	Pinaceae	Cedrus deodara	Tikta	Laghu Snigdha	Ushna	Katu	1PART	Linalool Limonene
13	SANDHAV LAVANA				Laghu Snigdh	sheeta		1PART	Sodium chloride Iodine Lithium

DISCUSSION

Ayurvedic practitioners refer to *Vataja Pratishyaya*, also known as allergic rhinitis with a *Vata* imbalance, as having symptoms like dryness, congestion, sneezing, and headache. *Mustadi Taila Nasya* is one of the therapeutic options available to treat this illness in the Indian traditional medical system known as Ayurveda. *Bhadradaru, Katphala, Katuka, Vacha, Sarsapa, Pippali Mula, Pippali, Tejovati, Patha, Saindhava, Agnika, Tuttha, Karanj seeds, Salt, and different herbs with <i>vata*-soothing effects are all components of the Ayurvedic herbal oil mixture known as *Mustadi Taila. Nasya*, a typical Ayurvedic treatment for a variety of diseases, is the administration of medication through the nasal passages.

The following are some factors to consider when using *Mustadi Taila Nasya* to treat *Vataja Pratishyaya*:

Vata dosha, according to Ayurveda, regulates the neurological system and is in charge of movement. When Vata is out of balance, the nasal passages can become dry and irritated, which can result in symptoms like congestion and sneezing. These signs decrease and the Vata dosha is balanced by Mustadi Taila Nasya.

Some of the herbs in Mustadi Taila may have antiinflammatory qualities that can help reduce swelling and inflammation in the nasal passages, relieving congestion and sinus-related discomfort.

Local Action: *Nasya* is a local application technique that enables targeted treatment of the afflicted area by delivering oil to the nasal passages. This has benefits in *Vataja Pratishyaya* since it deals with the problem's root cause.

Musta is the main herb of Mustadi taila Because the terpenoid obtain from the PE extract of C.rotundus revied highly potent anti-inflammatory activity which was found to be 8 times greater than that of hydrocortisone. Pippali has Kasahara properties Karanja the oil of p pinnata showed antibacterial activity against several organisms. saidhav lavana has kapha

vilayana, and *kapha chedan* it helps to dissolve/disintegrate *kaph*.

With the help of *Mustadi taila Nasya*, we can lower the inflammation of nasal mucosa due to the anti-inflammatory property of Musta.

CONCLUSION

The publications outline the evidence-based knowledge that is now available about the usefulness, safety, and efficacy of a variety of Ayurveda formulations in the treatment of allergic rhinitis most of the research papers in the articles under examination, *Nasya* have been chosen as the intervention. As a result, *Mustadi Taila Nasya* can be a valuable and effective Ayurvedic treatment for *Vataja Pratishyaya*, helping to alleviate symptoms and restore balance to the body. Properly integrated into healthcare with the guidance of a qualified practitioner, Ayurvedic treatments can complement conventional medicine and contribute to overall well-being.

REFERENCES

- 1. Dr. Ish Sharma, Article of Ayurvedic literature review of *pratishyaya*; Journal of pharmaceutical research and development sins 2694-5614 16- nov-2020.
- 2. Dr. Braun Wald et. Al Harrison's Principle of internal medicine 20th edition.
- 3. Shastri Ambika Dutta, Sushruta Samhita with Ayurveda-Tattva-Sandipika Hindi commentary published by Varanasi; Chaukhamba Sanskrit Sansthan: Reprint 2014. Uttara Tantra 24/5, p.154.
- 4. WAO White Book on Allergy 2013 Update editors Ruby Pawankar; Stephen T. Holgate; G. Walter Canonica; Richard F. Lockey; Michael S. Blaiss.
- Skoner DP. Allergic rhinitis: definition, epidemiology, pathophysiology, detection, and diagnosis. J Allergy Clin Immunol, 2001 Jul.; 108(1 Suppl): S2-8.
- 6. Walls AF, He S, Buckley MG, McEuen AR. Roles of the mast cell and basophil in asthma. Clin Exp Allergy, 2001; 1: 68.

- 7. Haberal I, Corey JP. The role of leukotrienes in nasal allergy. Otolaryngol Head Neck Surg, 2003 Sep.; 129(3): 274-9.
- 8. Haberal I, Corey JP. The role of leukotrienes in nasal allergy. Otolaryngol Head Neck Surg, 2003 Sep.; 129(3): 274-9.
- 9. Iwasaki M, Saito K, Takemura M, Sekikawa K, Fujii H, Yamada Y. TNF-alpha contributes to the development of allergic rhinitis in mice. J Allergy Clin Immunol, 2003 Jul.; 112(1): 134-40.
- Cates EC, Gajewska BU, Goncharova S, Alvarez D, Fattouh R, Coyle AJ. Effect of GM-CSF on immune, inflammatory, and clinical responses to ragweed in a novel mouse model of mucosal sensitization. J Allergy Clin Immunol, 2003 May.; 111(5): 1076-86.
- 11. Salib RJ, Kumar S, Wilson SJ, Howarth PH. Nasal mucosal immunoexpression of the mast cell chemoattractants TGF-beta, eotaxin, and stem cell factor and their receptors in allergic rhinitis. J Allergy Clin Immunol, 2004 Oct.; 114(4): 799-806. Salib RJ, Kumar S, Wilson SJ, Howarth PH. Nasal mucosal immunoexpression of the mast cell chemoattractants TGF-beta, eotaxin, and stem cell factor and their receptors in allergic rhinitis. J Allergy Clin Immunol, 2004 Oct.; 114(4): 799-806.
- 12. Hansen I, Klimek L, Mosges R, Hormann K. Mediators of inflammation in the early and the late phase of allergic rhinitis. Curr Opin Allergy Clin Immunol, 2004 Jun.; 4(3): 159-63.
- 13. Platts-Mills TA. Allergen avoidance. J Allergy Clin Immunol, 2004 Mar.; 113(3): 388-91.
- 14. Amarasimha, Amarkosh with the Ramashrami (Vyakhyasudha) commentary published by Varanasi, Chaukhambha Sanskrit Sansthan: Reprint 2012. Dvitiya Kanda 2-6/51. p.282.
- 15. Shastri Ambika Dutta, *Sushruta Samhita* with Ayurveda-Tattva-Sandipika Hindi commentary published by Varanasi; Chaukhamba Sanskrit Sansthan: Reprint 2014. *Uttara Tantra* 24.
- 16. Shastri Ambika Dutta, *Sushruta Samhita* with Ayurveda-Tattva-Sandipika Hindi commentary published by Varanasi; Chaukhamba Sanskrit Sansthan: Reprint 2014. Uttara Tantra 24/3.
- 17. Shastri Ambika Dutta, *Sushruta Samhita* with Ayurveda-Tattva-Sandipika Hindi commentary published by Varanasi; Chaukhamba Sanskrit Sansthan: Reprint 2014. Uttara Tantra 24/4.
- 18. Shastri Ambika Dutta, *Sushruta Samhita* with Ayurveda-Tattva-Sandipika Hindi commentary published by Varanasi; Chaukhamba Sanskrit Sansthan: Reprint 2014. Uttara Tantra 24/5.
- 19. Dr.kaviraj Ambikaduttshastri *Sushrut samhita chikitsa sthan chapter40/62*. Ayurvedtatvasandipika hindivyakhya, chaukambha sanskrit sansthan varansi.
- Dr.kaviraj ambikaduttshastri sushrut samhita uttartantra chapter 24/4,8,38.
 Ayurvedtatvasandipika hindivyakhya, chaukambha sanskrit sansthan varansi.