WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.084
Volume 10, Issue 13, 1883-1914. Review Article ISSN 2277– 7105

A COMPARATIVE CLINICAL EFFICACY OF SHWADAMSHTRADI TAILA NASYA AND MASHA TAILA NASYA IN MANAGEMENT OF VATAJ PRATISHYAYA W.S.R ALLERGIC RHINITIS

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Article Received on
16 Sept. 2021,
Revised on 06 October 2021,
Accepted on 26 October 2021
DOI: 10.20959/wjpr202113-22111

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ABSTRACT

Shalakya tantra is one of the major branches of ashtanga ayurveda in which nasagatavikara and its chikitsa reserves a separate place. Nasa being "Shiraso Dwaram"[1] and one among panchagyanendriya adhistana, when it vitiated leads to Urdhwa jatrugata rogas in general and nasa roga in particular. In chikitsa of vataja pratishyaya includes[2], sneha paana or nasyadi karma as per ardit roga chikitsa. Nasya karma is an effective treatment for vataja pratishyaya. The oils to be selected for this purpose are told to be taken from ardit roga chikitsa of vaatvyadi. Both the shwadamshtradi taila and masha taila have properties of vatahar, hence administration of these tailas in the form of nasya.

KEYWORDS: Vataja pratishaya, allergic rhinitis, shwadamshtradi taila, masha taila.

INTRODUCTION

In the present scientific era, people are fed up with the side and after effects of the most effective and fast acting modern drugs, which are lowering the human immunity at the same time when they are suppressing disease. The use of naturally available substances to relieve the ailment by human as well as animals is as old as beginning of life.

Ayurveda is an age-old science of health, which emphasizes on the maintenance of health rather than to cure the disease. So, now a days people are coming back to the nature from synthetics, hence, the Ayurveda will be the future medicinal science not only of India, but of the world. In Ayurveda, Ayu is defined as conjunction of body, soul, mind and senses. Each has been given due importance in the maintenance of health, prevention and cure of disease. Asatmendriyarthasamyoga, prajnaparadha and parinama are the root causes of all diseases. The above three factors are very important in preventive and curative aspects. Ashta vidha pareekhsa, dashavidha pareeksha, panchendriya pareeksha, etc are unique contribution of Ayurveda to assess the severity of disease and condition of patient. Importance of Ayurveda in global scenario is because of its holistic approach towards positive life style. Shalakya is an important branch of Ayurveda, which deals with the diseases manifesting above the clavicular region. Acharya nimi is considered as the acharya of shalakya. Acharya susrhuta has explained the ENT and Ophthalmology in a systematic manner. Sushruta samhita – a treatise on Ayurvedic surgery has been subdivided in two main volumes, one deals with all the general surgical diseases whereas,the other named the uttara tantra deals with the diseases of supraclavicular region.

In uttaratantra, Acharya sushrutha has devoted a whole chapter on pratishyaya after explaining nasagata rogas. This shows importance of the disease pratishyaya in ancient era. pratishyaya is classified into 5 types- vataja, pittaja, kaphaja, sannipataja and raktaja pratishyaya. Vataja pratishyaya explained by acharya vagbhata is characterized by repeated sneezing, nasal blockage, watery discharge, headache dryness of the throat and lips, and hoarseness of voice. It is first & foremost among the Pratishyaya rogas in which there is vitiation of vata and kapha doshas this can be correlated with allergic rhinitis which shows similar symptoms.

‘Allergy’ is an individual's sensitivity towards harmless foreign substances in the environment. In ayurveda 'Allergy' is an age old concept, it can be considered as asatmya / anurja ama i.e substances that are non-conducive to the body, reduced immunity and metabolic waste respectively. These are the factors responsible for development of this particular disease, increased level of environmental pollutants combined with decreased immunity have subjected the human to innumerable modern health hazards. One such condition is allergic rhinitis. The pathology described in modern science, also centers around IgE mediated immune response.

Allergic rhinitis occurs commonly in those who are exposed to dust, mites, pollen and other fine substances etc. Hereditary factors also play an important role in this disease. Some people suffer from this disease during rainy season followed by flowering of plants which distributes the pollen around the area. But some have the disease throughout the year. Allergic rhinitis' is a major chronic upper respiratory disease and has impact on quality of life, work and economy. It is quite difficult to treat and if neglected for a longer period will lead to more serious problems like sinusitis, bronchitis, asthma, or such other respiratory tract infections. According to AAAAI (American Academy of Allergy, Asthma and Immunology), Allergic rhinitis affects somewhere between 10 and 30% of the population worldwide.

The treatment modalities mentioned in modern science include avoidance of allergens, administration of antihistamines, nasal decongestants, corticosteroids etc. Though they relieve symptoms, their continuous use may lead to certain side effects like drowsines, mucosal atrophy, rebound congestion and prolonged use of corticosteroids suppreses the immune system. In spite of these treatments, recurrences are quite common putting the patients to a lot of agony. Effective management of Allergic Rhinitis should aim at minimizing the symptoms, optimizing the quality of life and reducing the risk of developing comorbidities.

In Modern medicine, Allergic rhinitis is difficult to treat and is seldom cured, but it may improve and is never a fatal illness. However Allergic rhinitis may act as the forerunnerof Asthma.

In Ayurveda (Cha.Chi.7) three types of treatment are described for each & every disease they are:

1) Samshodhana
2) Shamshamana
3) Nidana parivarjana

Here prime importance is given to Shodhana followed by other treatments. Pratishyaya is well known for its recurrence & chronicity. Recurrence of the disease occurs when the vitiated Doshas have not been evacuated completely. Such Doshas reside in their latent stage (predisposing stage) & give rise to the same disease when they come in contact of aggravating factors. (Cha.Chi.3/333,334). Allergic rhinitis is recurring frequently & attaining the jeerna avastha & as per the charaka (Ch.Chi.30/294), nasya is the line of treatment. Due

to vitiated vata seen in vataj pratishyaya. Therefore shwadamshradi taila and masha taila for nasya therapy has been selected, which is given in Ardit Roga Chikitsa of Vata Vyadhi.

Many preparations have been mentioned in the Ayurvedic texts for the treatment of pratishyaya. In the present study main formulation for controlling the allergic condition, which acts on immunity. In this study same importance has been given to disease alleviation as well as increasing the resistance power of the patient. S**hwadamshtradi Taila Nasya and Masha Taila Nasya in management of Vataj Pratishyaya** can be used for clinical study.

AIMS & OBJECTIVES OF STUDY

1. To evaluate the efficacy of Shwadamshtradi Taila Nasya in the management of Vataj Pratishyaya.
2. To evaluate the efficacy of Masha Taila Nasya in the management of VatajPratishyaya.
3. To compare the efficacy of Shwadamshtradi Taila & Masha Taila Nasya karma in the management of Vataj Pratishyaya.

MATERIALS AND METHODS

Table. No: 01. Shwadamshtradi Taila.

Sl.No	Name Of The Drugs	Quantity
01	Shwadanshtra swarasa(Gokshura)	13 PARTS
02	Ardraka kalka	1 PART
03	Guda	4 PART
04	Ksheera	13 PARTS
05	Tilataila	6 PARTS

Table.no: 02. Masha Taila.

Sl.No	Name Of The Drugs	Quantity
01	Masha	8 PARTS
02	Tila taila	4 PARTS
03	Jala	64 PARTS
04	Saindhav lavana	1 PARTS

SOURCE OF DATA

Clinical Source

Patients with signs and symptoms of Vataja Pratishyaya were selected from OPD & IPD of Shalakya Tantra, SVM College and RPK Hospital, Ilkal.

Total 34 cases were taken, in which 4 cases were dropped out due to their personal issues.

Literary Sources

The description of the disease Vataja Pratishyaya is collected from all classical references, allied medical science references, Research papers and Medical journal indetails.

Selection of Drug

Shwadamshtradi Taila and Masha Taila were used for the study.

Collection of Drug

The trial drug required for the preparation of the medicine were made in R.S & B K dept. of SVAMC and RPK Ayurvedic hospital Ilkal.

METHOD OF PREPARATION

Method of preparation of shwadamshtradi tailam

Procedure

All drugs were identified and collected. Preparation was done as per the method mentioned in classics references in the department of R.S. & B.K of SVM Ayurvedic medical college and hospital, Ilkal.

The drugs required for Shwadamshtradi Taila preparation namely, Shwadamstra, Adrak, Guda, Ksheera Water and Till taila.

Shwadamstra, Adrak, Guda, Gokshree and Till were purchased from local area and market of Ilkal after proper identification.

MATERIALS USED

1. Weighing machine
2. Measuring Glass
3. Steel vessels of sufficient size
4. Khalva yantra
5. Kora cloth
6. Gas stove
7. Porcelain Jar with air tight lid.

Shwadamshtradi Taila is prepared as per the classical taila paka vidhi mentioned in shadangdhara samhita.

Decoction of gokşura 2.56 litre, tila oil 1.28 kg, milk 2.56 kg. paste of ardrake (green ginger) 200 gm, jaggery 800 gm should be cooked together till oil remains.

All the Kalka Dravyas were made into fine powder form then prepared Kalka by adding drava dravya. Tila Taila was taken in a steel vessel and heated over madhyama Agni till complete evaporation of moisture content, at that time temperature was around 160 ^{0}C.The Kalka (balls) was added to the taila after slight cooling, after that drava dravya wasadded in tila taila. Again heat was applied with intermediate stirring. Heating duration isadjusted so as to complete the snehapaka by two nights.

METHOD OF PREPARATION OF MASHA TAILAM

All drugs will be identified and collected. Preparation has been done as per the method mentioned in classics references in the department of R.S. & B.K of SVM Ayurvedic medical college and hospital, Ilkal.

Procedure

The drugs required for Masha taila preparation namely, Masha, Saindhava Lavana, and Till taila.

Masha, Saindhava Lavana, and Till taila were purchased from local area and market of Ilkal after proper identification.

Preparation: Masha taila was prepared as per the classical tailapaka vidhi mentioned in Shadangdhara samhita.

Heating duration is adjusted so as to complete the Snehapaka by 1nights.

- Water (12.288 liters)
- **Masha** – Phasleolus Mungo (1.536 kg)
- Tila **taila** – oil of Sesamum indicum (768 ml)
- Saindhav lavan

METHODS OF COLLECTION OF DATA

Patients who are fulfilling the criteria of diagnosis, inclusion & exclusion criteria were selected for the present study irrespective of Gender, Socio economic status.

DIAGNOSTIC CRITERIA

Diagnosis were made on the basis of signs and symptoms of Vataja Pratishyaya.

Nasa srava, Kshavathu, Shirashoola, Galataluostha shosha and Swaropaghata.

INCLUSION CRITERIA

- The cases of Vataja Pratishyaya with the features mentioned in classicaltext.
- Patients between the age group of 18 to 50 years of either sex.
- Patients who are fit for Nasya karma.

EXCLUSION CRITERIA

- Suffering from any systemic diseases and receiving medication.
- Contraindicated for Nasya Karma.
- Patients with Nasal Polyps and complications are excluded.
- Infectious diseases of nose.

STUDY DESIGN

This is a randomized comparative clinical trial.

SA MPLE SIZE

30 patients who fulfill the inclusion criteria were randomly divided into two groups of 15 each as **Group 'A'** and **Group 'B'.**

Procedure under Group A

The patients under this Group were treated by nasya karma with 8 drops in each nostril by Shwadamshtradi taila once a day in evening for 7 days.

Procedure under Group B

The patients under this Group were treated by nasya karma with 8 drops in each nostril by masha taila once a day in evening for 7 days.

Duration of study: 7 days

Follow up study: 8^{th}, 15^{th} & 21^{st} day of treatment.

Total Duration of study: 21 DAYS

ASSESSMENT OF CRITERIA

Assessment was done on the basis of improvement in the following subjective parameters.

SUBJECTIVE PARAMETERS

NASA SRAVA (Rhinorrhea)

Grade -0: No discharge

Grade -1: Occasional nasal discharge with a feeling of running nose without visible fluid.

Grade -2: Occasional with visible fluid

Grade -3: Discharge which needs moping but controllable

Grade -4: Severe discharge with copious fluid needs repeated mopping

KSHAVATHU (Sneezing)

Grade -0: No sneezing.

Grade – 1: 1 to 10 sneezing.

Grade – 2: 10 – 15 sneezing.

Grade -3: 15 – 20 sneezing

Grade -4: > 20 sneezing

GALATALUOSTHA SHOSHA (dryness of throat)

Grade -0: No.

Grade -1: Mild dryness.

Grade -2: Moderate dryness.

Grade -3: Sever dryness.

SHIRAH SHOOLA (Headache)

Grade -0: No headache.

Grade -1: Mild headache does not hamper routine work and need no medication.

Grade -2: Moderate headache interferes with routine work and analgesic needed.

Grade -3: Severe headache restless, patients carries routine work with difficulty.

Grade -4: Severe headache patient need to rest.

SWARABHEDA (hoarseness of voice)

Grade -0: No change of voice.

Grade -1: Occasional hoarseness of voice.

Grade -2: Frequent hoarseness of voice more in morning hours.

Grade -3: Frequent hoarseness of voice throughout the day.

Grade -4: Cannot speak due to hoarseness of voice.

OBJECTIVE PARAMETERS

ABSOLUTE EOSINOPHIL COUNT.

Grade -0: Nill count –Normal (40-440)

Grade -1: ACE 441-500 count

Grade -2: AEC-501-550Count

Grade -3: AEC-551-600Count

Grade -4: AEC more then 600

INTERVENTION

30 patients included were randomly divided into two groups of 15 each as Group 'A' and Group 'B'.

Nasya is admistrated once under all aseptic precautions and it was carried with consideration of Purva, Pradhana and Paschat karmas as mentioned in classic references.

Table. No: 03.

GROUP	TREAT MENT	DRUG	DOSAGE & DURATION			TOTAL DURATION
				1st	2nd	3rd	
A	Nasya karma	Shwada mshtradi tailam	8 Drops in each nostrilsfor 7 days at evening	8th day	15th day	21st day	21 DAYS
B	Nasya karma	MashaTaila	8 Drops in each nostrilsfor 7 days at evening				
				8th day	**15th day**	**21st day**	**21 DAYS**

Table. No: 04. Assessment of Result.

ASSESSMENT OF RESULT	
GRADING	**RELIEF IN PERCENTAGE**
No Improvement	**0-25%**
Mild Improvement	**26–50 %**
Moderate Improvement	**51 – 75%**
Marked Improvement	**76 – 100 %**

In this study we have selected the Marsha Nasya of Madhyama Matra i.e. 8 Bindus.

CONTRA INDICATIONS

Contra indicated below 7 yrs. and above 80 yrs.

Navajvara, Nava Pratishyaya, Ajirna, Trishnarta, Anuvasita, Person who had taken& who has desire to take Pana, Madhya, Toya, Sneha, Drava., Astapita, Kasapeedita, Garbhini, Krdha, Bukta.

Sootika, Abakta, Raktasravitha, Bala, Virikta, Sramarta, Vriddha, Madamurchita, Vegavarodhita, Vyavayaklanta, Swarapeedita, Shirasnata, Kshudarta, Snatukama, Sokabhitapa etc.

COURSE OF NASYA KARMA

According to Sushruta, Nasya can be done repeatedly in the interval of 1, 2, 7 and 21 days depending upon the condition of the patient and severity of the disease.

SAMYAK YOGA LAKSHANA

Samyak yoga is due to removal of vitiated doshas from shira and due to srothovishuddhi.

Ura Laghuta, Sukha Swapna Prabodhana, Shiro Laghuta, Indriyabala, Netra Laghuta, Palita Nashana, Srotovishuddha, Medha, Vaktra Vishuddhi, Bala, Chitta Prasadana, Twak Prasannata, Vikaropashmana.

ACTION OF THE NASYA KARMA

The mode of action of Nasya Karma can be explained as follow:

Ayurvedic Point of View

In Ayurvedic classics, the mode of action of Nasya Karma is explained indirectly. According to Charaka Samhita, the drug administered through the nose enters in theUttamanga and eliminates the morbid Doshas residing there. (Cha.Si.2/22)

In this context Sushruta has clarified that Shringataka marma is a Siramarma formed by the union of Siras (blood vessels) supplying to nose, ear, eye and tongue. Thus we can say that drug administered through Nasya may enter the above Sira and purifies them. (SU.Su.6/27).

Sushruta has mentioned that excessive eliminative errhine may cause Mastulunga Srava (flow of cerebrospinal fluid out to the nose). Su.Chi.40/40, which suggest the direct relation of Nasal pathway to brain. Indu, the commentator of Ashtanga Samgraha, opined that Shringataka is the inner side of middle part of head i.e. “Shiraso Antar Madhyam.”

Drug administered through nose -the doorway to sheera.

⬇

Reaches the shringataka marma of head (Sheera), which is a sira marma andformed by the siras of nose, eyes, kantha and shrotra.

⬇

The drug spreads by the same route.

⬇

Scrapes the morbid doshas of urdhwajatru and extracts them from the uttamanga.

(A.S.29/2), (SU.Ut.24/34-41, A.H.Ut.20/14)

NASYA VIDHI

The procedure of giving Nasya therapy may be classified into the following threeheadings:

1) Purvakarma (Pre-measures)
2) Pradhanakarma (Nasya therapy)
3) Paschatkarma (Post measures)

PURVA KARMA

The patient who is to be administered nasal therapy should be relieved of the urges of the body, his face washed both inside and outside, head anointed with oil and fomented mildly; the head having been cleared by inhalation of prayogika dhuma (inhalation of smoke); he should not be very hungry, he should be made to lie on a cot comfortably, inside a room devoid of heavy breeze, with the head stretched slightly sides). The parts above the shoulders should be fomented often by warmed palms of the hands.

PRADHANA KARMA

The physician should stand behind the head of the patient, cover the patient's eyes with a clean cloth folded in four layers, holding it firmly in position and also the head of the patient with his left hand. The medicine to be used is taken in a small crucible made of gold, silver, copper or any other such metal, slightly warmed by placing in hot water. The nostrils of the patient are widened with the index and little fingers, his head slightly raised up and the medicine poured into each nostril in a continuous stream, by the right hand of the physician, or by using a tube or a wad of cotton wool. The medicine is to be poured into both the nostrils, one after the other, keeping one nostril closed while pouring the medicine to the

other. During the period of pouring the medicine (into the nostrils) or even later he should avoid anger, laughter, too much of talk, shaking the head, sneezing and such other violent activities.

PASCHAT KARMA

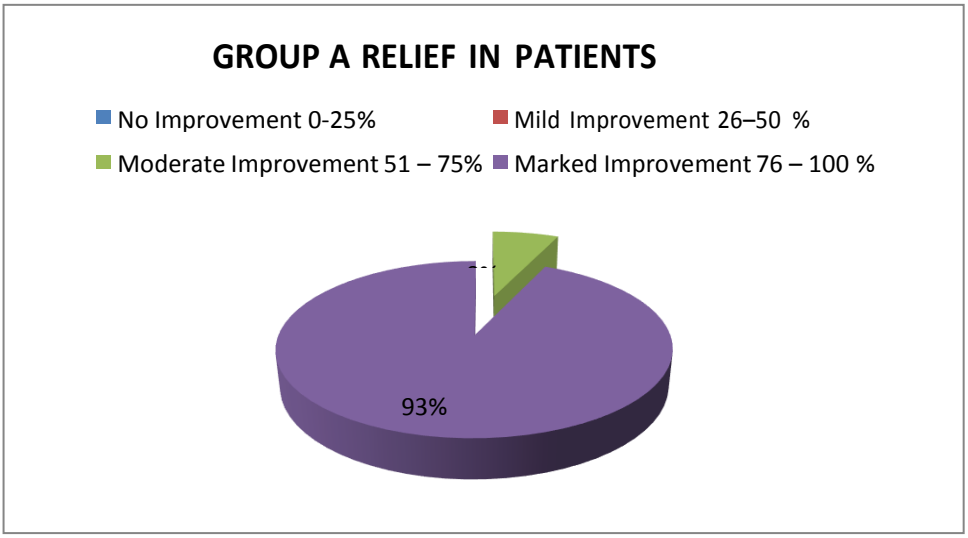
After pouring the medicine, the region of the ears, forehead, skin of the scalp, cheeks, nape of the neck, shoulders, palms and soles should be massaged comfortably. The patient should be instructed to suck the medicine up into the head, and spit it out through the right and left sides and not allow it to get into the stomach. He should be given fomentation again and again till all the medicine is brought out by repeated sucking and spitting. After the administration of nasal medication, the patient should lie on the bed with face upwards and without sleeping for duration of one hundred matras (syllables). Next he should be given a vairechanika dhuma (purgative smoke) or other suitable therapy to bring out any residue of the medicines or of the increased dosas, and then gargle the mouth with hot water.

Table. No: 05. Overall effect of sign and symptoms in both group.

Signs & Symptoms	GROUP A 21ST DAY	Overall effect out come	GROUP B AT 21 DAYS	Overall effect out come
Kshavathu	93.38%	100%	86.71%	86.71%
NasaSrava	86.67%	86.67 %	80.04%	86.71 %
Galataluostha shosha	93.38%	86.67 %	80.04	86.71 %
ShirahShoola	86.71%	86.71%	66.7%	86.71%
SwaraBheda	100%	100%	66.7%	86.71%
AEC	100%	100%	66.7%	86.71%
TOTAL	78.90%	93.38%	74.48%	86.71 %

Table. No: 06. Overall effect of treatment in Group A.

Overall effect of treatment Group A		
Grading	**Relief in Percentage**	**Relief in Patients**
No Improvement	0-25%	0
Mild Improvement	26–50 %	0
Moderate Improvement	51 – 75%	1 (6.67 %)
Marked Improvement	76 – 100 %	14 (93.38%)

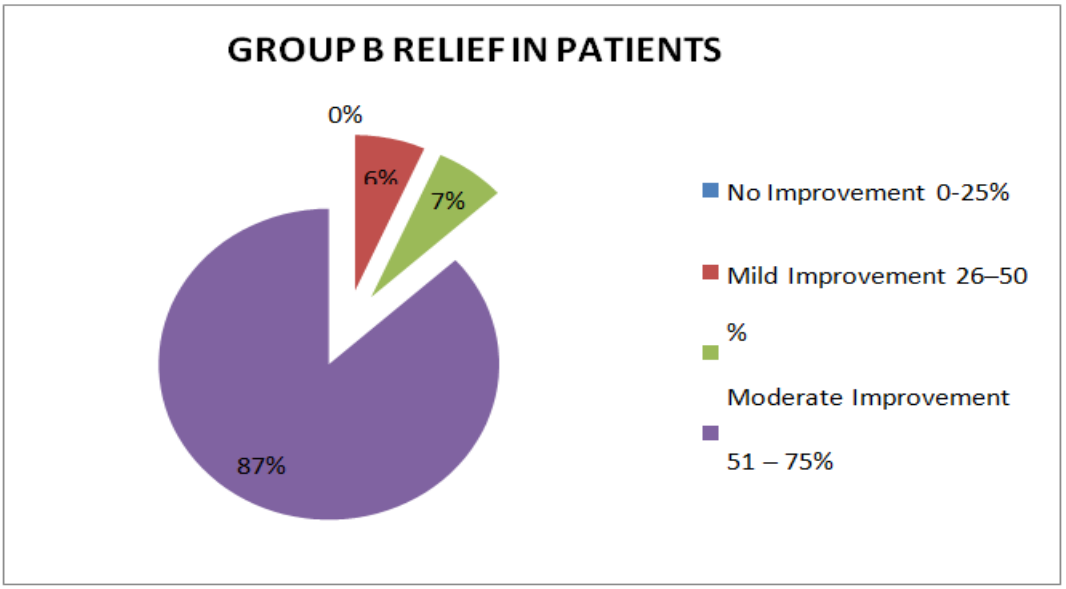


Graph. No: 01. Group A Relief In Patients.

In Overall effect of treatment in Vataja Pratishyaya, **Group A** out of 15 patients in these study 1 patients (6.67%) was getting Moderate Improvement and 14 patients (93.38%) were getting Marked Improvement.

Table. No: 07. Overall effect of treatment in Group B.

OVERALL EFFECT OF TREATMENT GROUP B		
Grading	**Relief in Percentage**	**Relief in Patients**
No Improvement	0-25%	0
Mild Improvement	26–50 %	01 (6.67%)
Moderate Improvement	51 – 75%	01 (6.67%)
Marked Improvement	76 – 100 %	13 (87%)



Graph. No: 02. Group B relief in patients.

In Overall effect of treatment in Vataja Pratishyaya, Group B out of 15 patients in this study, mild improvement 1 patient 6.67%, moderate improvement 01 patient 6.67% and marked improvement 13 patient 87 %.

DISCUSSION

Discussion on selection of topic

Vataja pratishyaya is mentioned as one of the nasa rogas by our acharyas. It is characterized by **kshavathu, nasa srava, kasa, shirah shoola and swara bheda**. Most of the features can be correlated to allergic rhinitis. Allergic manifestation is common among all age groups. Allergy and its complications are one of the major causes of hospital visits worldwide. Allergic rhinitis is a disease which hampers the quality of life and disturbs the daily activities of the person and sometimes demands for change of job or place of stay. The incidence rate of this disease is increasing day by day due to the increased environmental pollution, It occurs when an allergen, such as pollen, dust or animal dander is inhaled by an individual with a sensitized immune system. Allergic rhinitis if not treated, may lead to complications like asthma, nasal polyposis, sinusitis etc.In modern science, the treatment for allergic rhinitis includes avoiding the allergen, administration of antihistamines, nasal decongestants, corticosteroids etc. In spite of these many treatments, the recurrence rate is more and has their own side effects. So it becomes a need to derive a treatment protocol which helps the patients to overcome this pathetic condition. By considering the above facts present study was taken up to evaluate **"A COMPARATIVE CLINICAL EFFICACY OF SHWADAMSHTRADI TAILA NASYA AND MASHA TAILA NASYA IN MANAGEMENT OF VATAJ PRATISHYAYA W.S.R ALLERGIC RHINITIS".**

DISCUSSION ON DRUG REVIEW

Shwadamshtradi taila and masha Taila was selected which is having vata shamak qualities.

In the production of the complete aetio patho genesis of the disease pratishyaya the agni, the dhatus, the doshas and vyadhiksamatva shakti of the person is involve so the ultimate aim of the treatment is to correct at all the stages. Disturbance of agni lead to the formation of ama in turn which impact the process of absorption and assimilation. Rasayana concept in Ayurvedic system of medicine brought a broad spectrum in human physiology. By putting these into consideration shwadamshradi taila and masha taila had been selected for the treatment protocol.

PROBABLE MODE OF ACTION OF DRUGS USED

Almost all the drugs used in preparation of shwadamshradi taila and masha taila are having Vata-Kapha doshahara action, hence these drugs does the vata and kapaha shaman which is responsible for disease vataja pratishyaya.

In shwadamshradi taila, gokshura having madhura rasa, guru and snigdha guna, has vatahara and brumhana qualities.

Adraka having katu rasa, snigdha, laghu and ruksha guna, madhura vipaka, does kapha vata shaman also does deepan and pachan.

Guda being snigdha, vata pittaghna, balya and vrushya.

Goksheera having madhura rasa, murudu, snigdha, guru guna, does vatta doshahara. Gives rasayana, jeevaniya and ojavardhan karma.

Hence these dravyas produce liquefaction and expulsion of the vitiated doshas. Moreover Taila is known to pacify vata dosha, here the chronicity of the disease as well as the nature of the disease indicates aggravation of vata dosha, so oil based preparation may be the best form to administer.

Masha taila, which is told in bhaishajya ratnavali and chakradatta contains masha, saindhava lavana and tila taila. Masha having guru and snigdha properties helps in vatashamana and brumhana; tila taila and saindhava lavana being vatakapha shamaka anddepan pachana.

So the taila here is having, vatahara, kaphahara and brumhana properties.

PROBABLE MODE OF ACTION OF NASYA KARMA

Nasya is the chief shodhana, shaman procedure selected because this is the one and only procedure, which can perform uttamanga shuddhi. Snehana and swedana, which are performed during nasya procedure, liquefy the doshas and can be expelled by nasya.

According to vagbhata, the medicine that is put into nostrils, moves up the channels upto the srungataka, spreads to the whole of the interior of the head, the channels of the nose, eyes, ears, throat and their veins and cures the diseases affecting the parts above the shoulders quickly by removing the accumulated doshas localized in the head. The topical nasal administration delivers drug directly to the target organ and increases topical bioavailability.

The relatively large surface area, the porous epithelial membrane, and the extensive vascularization are factors favoring transmucosal absorption of drugs. Mucociliary clearance in the nasal cavity is 15-20 mins, therefore residence time of the drugs in nasal mucosa is increased and hence permeation is enhanced. Nasally absorbed compounds circumvent the first-pass elimination in the liver, avoiding gastrointestinal drug degradation; therefore therapeutic concentrations in the blood circulation are reached within few minutes. Topical nasal administration helps in desensitizing the nasal mucosa to allergens. Studies show that the aqueous part of the active principle in the drug will be easily absorbed through mucous membrane (Nasal mucosa, olfactory mucosa) and fat soluble active principles will be easily assimilated through nerve endings 90 (trigeminal and olfactory). Cell membranes are made of lipids. A molecule with high lipophilicity will easily cross cell membranes. Hence the drug taken for the study whichis in taila form can be easily absorbed.

GENERAL DESCRIPTION OF THE PATIENT

DISCUSSION ON OBSERVATION

The observations obtained on the demographic data are discussed below.

Age: The age wise distribution of the patients showed the higher incidence of the disease Vataja pratishyaya in Out of 30 patients, in **Group A,** 1 (6.67 %) patient was in the age group of 18-26 years, 3 (20.0%) patients were in the age group of 27-34 years, 10 (66.67%) patients were in the age group of 35-42 years, 1(6.67%) patient was in the age of 43-50 years. In **Group B** 01 (6.67 %) were in the age group of 18-26 years, 01 (6.67%) were in the age group of 27-34years, 10 (66.67%) were in the age group of 35-42 years, 3(20%) were in the age of 43-50 years.

Gender: The Gender wise distribution of the patients showed that incidence of the disease Vataja Pratishyaya in Out of 30 patients, in **Groups A,** Gender wise Male 12 patients with 80%, Female 3 patients with 20% patients. In **Group B,** Gender wise Male 10 patients with 67 %, Female 5 patients with 33% patients.

Religion: Out of 30 patients, Group A 14 patients [93.33%] were Hindus and only one patient was Muslim [6.67%].and Group B14 patients [93.33%] were Hindus and only one patient was Muslim [6.67%].

Education: Education Wise distribution in vataja pratishyaya - Out of 30 patients, in **Group A,** 3 patients with 20 % uneducated, 03 patients 20% [53.33%] were having high school

education, followed by 3 each [20%] were having primary Education and uneducated respectively and only one patient [6.67%] were graduate. In **Group B,** 3 patients with 20 % un educated 03 patients 20% [53.33%] were having high school education, followed by 3 each [20%] were having primary Education and uneducated respectively and only one patient [6.67%] were graduate.

SOCIO-ECONOMIC STATUS: Socio economical - Higher incidence of disease was seen in Out of 30 patients, in **Group A**, 13 patients [86.67%] were from middle class and 2 patients [13.33%] were from poor class. In **Group B**, 4 patients (26.7%) were from poor class, 8 patients (53.3%) were from middle class and 03 patients (20%) were from rich class.
OCCUPATION: The chief occupations of the patients noted in this study, exposure to dust while working can be the reason for increased attacks of allergic rhinitis in these groups, this observation supports the statement saying "The development of allergy, in addition to genetic predisposition, depends up on exposure to environmental allergens".

Out of 30 patients, in **Group A**, 5 patients [33.33%] were business men, 4 patients each [26.67%] were doing agriculture and private service and 2 patients [13.33%] were government employees. In **Group B**, 1 patient [6.67%] were business Men, 5 patients [33.33%] were doing agriculture and 4 patients (26.67%) were in private service and 5 patients [33.33%] were government employees.

MARITAL STATUS: Ratio of marital status, maximum in married (57.0%). Here no direct co-relation of marital status with disease can be obtained.

CHRONICITY OF DISEASE: Chronicity of the disease varied from 4 month to 1 year.The highest incidence (50.0%) was in the duration from 8 month to 1 year. The disease as such occurs at an interval with recurrence during seasonal variations and exposure to allergen. The negligence of the patient in taking treatment continuously, during this low phase of the disease may be one of the reasons behind its increased incidence of chronicity.

Out of these 30 patients, in **Group A** 7 patients [46.67%] were of 6 months to 1 year chronic after diagnosing the Vataja Pratishyaya, followed by 6 patients [40.00%] were having chronicity in between 0 to 6 months and only 2 patients [13.33%] recorded chronicity of 1 to 2 years. In **Group B**, 4 patients [26.67%] were of 6 months to 1 year chronic after diagnosing the Vataja Pratishyaya, 05 Patients 33.33 %, followed by 6 patients [33.33%] were having

chronicity in between 1 to 2 months and 6 patients [13.33%] recorded chronicity of 1 to 2 years.

DIET: Out of 30 patients, in **Group A**, 10 patients [66.67%] were taking Vegetarian diet and 5 patients [33.33%] were taking mixed diet. In **Group B,** 10 patients [66.67%] were taking Vegetarian diet and 5 patients [33.33%] were taking mixed diet.

HABIT: Out of 30 patients, in **Group A**, 10 patients [66.67%] were from rural Area, followed by 5 patients [33.33%] were from urban area. In **Group B,** 10 patients [66.67%] were from rural area, followed by 5 patients [33.33%] were from urban area.

ADICTION WICE Out of 30 patients, in **Group A**, 4 patients [26.67%] were addicted to Tobacco, 5 patients [33.33%] were addicted to pan, 4 patients [26.67%] were addicted to smoking and 2 patients (13.33%) were addicted to alcohol. In **Group B**, 4 patients [26.67%] were addicted to Tobacco, 5 patients [33.33%] were addicted to pan and 4 patients [26.67%] were addicted to smoking and 2 patients (13.33%) were addicted to alcohol.

NIDANA SEVANA: In this study, maximum patients are exposed to more than one exposure pathway, and maximum 20 above patient are having exposure to dust followed by multiple exposure of cool, moist, smoke. This indicates that dust and other factors are responsible for disease manifestation.

PRAKRUTI: Among 30 patients, 16 patients (53%) were vata pitta prakriti, 10 (33%) patients were vata-kapha prakruti, and (13%) 4 patients were vata-pittaja prakriti. Patients with all prakritis are susceptible to Vataja Pratishyaya. This shows that not only prakriti but vyadhi kshamatva of an individual also plays an important role in the manifestation ofallergic rhinitis.

DISCUSSION ON RESULTS

In order to evaluate the comparative efficacy of the treatment in both the groups, "two-sample t-test" was applied to **kshavathu, nasa srava, kasa, shirah shoola, swara bhedaand absolute eosinophil count**. Paired t-test was applied to evaluate the efficacy of treatment on the parameters within the group and unpaired t-test was applied to compare the efficacy between the 2 groups.

Chief complaints of 30 patients of vataja pratishyaya.

Kshavathu (Sneezing)

Interpretation: This shows that Group A showed better results in this parameter compared to Group B. Kshavatu is caused because of vitiated vata dosha, here both trial drugs that helps in vata shamana.

Out of these 30 patients, in **Group A** 1 patient (6.67 %) was in the Grade 1, 3 patients with (20.0%) grade 2, 10 patients with (66.67%) grade 3, 1 patient with (6.67%) grade 4.

In **Group B**, 1 patient (6.67 %) was in the Grade 1, 1 patient (6.67%) was in grade 2, 10 patients with (66.67%) grade 3, 3 patients with (20%) grade 4.

Nasa srava

Interpretation: Nasa srava causes due to vitiated vata & kapha doshas, all most all drugs of shwadamshradi taila and masha taila are having vata kapha doshahar property. So in present study both the groups are highly significant and there is more improvement of nasa srava in group-A than group B.

Out of these 30 patients, in **Group A,** 7 patients [46.67%] were of Grade 2 Vataja Pratishyaya, 6 patients [40.00%] were having grade 3 and only 2 patients [13.33%] recorded grade 4. In **Group B**, 4 patients [26.67%] were of grade 2 of Vataja Pratishyaya, 05 Patients 33.33 %. Followed by 6 patients [33.33%] were having grade 3 and only 6 patients [13.33%] recorded grade 4.

Galataluostha shosha

Interpretation: It causes due to vitiated vata doshas, so in present study both the groups are highly significant and there is more improvement in groupA than group B.

Out of these 30 patients, in **Group A,** 2 patients [**13.34**%] were of Grade 2 Vataja Pratishyaya, 10 patients [66.7%] were having grade 3 and only 3 patients [20.01%]. In **Group B**, 2 patients [**13.34**%] were of Grade 2 Vataja Pratishyaya, 10 patients [66.7%] were having grade 3 and only 3 patients [20.01%].

Shirah shoola

Interpretation: It could be hypothesized that Nasya acts in both local as well as general levels, by the direct contact with nerve terminals or uptake of the drugs by the nasal mucosa. It is

currently known in the literature that the trigeminal nerve through its trigeminal vascular system is deeply involved in the genesis and maintenance of pain in headache syndromes. So the group A and group B, in present study showed almost equal relief. However both the group are having significant effect as both group drugs are having vata dosahara property and vata is responsible for pain.

Out of these 30 patients, in **Group A**, 7 patients [46.67%] were of Grade 2 of Vataja Pratishyaya, 6 patients [40.00%] were having grade 3 and only 2 patients [13.33%] recorded grade 4. **In Group B**, 4 patients [26.67%] were of grade 2 of Vataja Pratishyaya, 5 Patients [33.33 %] were in grade 3 and 6 patients [33.33%] were having grade 4.

Swara bheda

Interpretation: Due to increase vata dosha and kapha dosha patient getting swara beda so drug of group A and group B act like vata kapha shamaka to relive swara beda here in this study group A shows better result than group B as below.

Out of 30 patients, group A 3 patients with 20 % un grade 1,03 patients 20% grade 2.08 patient grade 3,[53.33%], followed by 3 patient grade 4with 6.67%.

Out of 30 patients, group B 3 patients with 20 % un grade 1,03 patients 20% grade 2.08 patient grade 3,[53.33%], followed by 3 patient grade 4with 6.67%.

Absolute eosinophil count

Interpretation: there is no drug effect on ACE here no significant result by group A and Group B.

Out of 30 patients of AEC, in **Group A,** grade 0, 05 patients [33.35%] were in grade 1, 09 patients [60 %] were in grade 2. 1patients [6.67%] were in grade 3 and 0 patient [00%] were in grade 4,00 patient. **In Group B,** grade 0,05 patients [33.35%] were in grade 1, 09 patients [60 %] were in grade 2. 1patients [6.67%] were in grade 3 and 0 patient [00%] were in grade 4, 00 patient.

OVERALL ASSESSMENT OF RESULT

Statistical analysis was performed in order to study the effect of Shwadamshtradi Taila Nasya and Masha Taila Nasya in Vataja Pratishyaya. Paired t-test was performed to studythe effect of medications within the group and Two-Sample t-test was performed to studythe effect of

medications between the groups Based on the statistical analysis, the effect of medications within each group are significant and effective since the p-values are less than the significant value (0.05). With respect to the effect of medications between the groups, both the groups are equally significant stating that Shwadamshtradi Taila Nasya or Masha Taila Nasya in Vataja Pratishyaya has similar effect between the groups before and after the treatment. Even though both the group are equally significant, patients in Group A has greater improvement on medications when compared to Group B. In addition, the change in percentage before and after final follow-up displayed there is no recurrence of the Vataja Pratishyaya within the groups. Assessment of result in follow up period:

EFFECTS OF THE THERAPIES

In this series 30 patients of vataja pratishyaya were treated in 2 groups each comprisingof 15 patients. The patients of one group were **Shwadamshtradi Taila** (Group A), **Masha Taila** (Group B). The results obtained are being described under the heading of each group.

EFFECTS OF SHWADAMSHTRADI TAILA (GROUP A)

As mentioned above a group of 15 patients suffering from Vataja Pratishyaya were treated (Group A) by 8 drops in each nostril for seven days. Its effect on the various signs and symptoms were as follow:

1. Effect of shwadamshradi taila treatment Group A

Assessment of sign & symptoms before treatment and after treatment

Kshavathu: The initial mean score of the symptom Kshavathu was 3.00 which were reduced to 1.75 at the end of 8th day. Its statistical analysis shows highly significant result at <0.001 level.

Nasa srava: The initial mean score of the symptom Nasa Srava was 2.00. This were reduced to 1.15 at the end of 8th day. It was statistically highly significant result at <0.001level.

Galataluostha shosha: The initial mean score of the symptom **Galatalu shosha** was 3.00. This was reduced to 1.85 by 38% at the end of 8th day. It was statistically highly significant result at <0.001 level.

Shirah shoola: The initial mean score of the symptom Shirah Shoola was 2.0 This was reduced to 1.0 by 50 % at the end 8th day. It was statistically highly significant result at <0.001 level.

Swara bheda: The initial mean score of the Swara bheda was 2.00 which was reducedto 0.80 (60%) at the end of 8th day. Its statistical analysis shows highly significant result at <0.001 level.

Absolute Eosinophil Count: The initial mean score of the symptom Absolute Eosinophil Count Was 1.00 which was after treatment to1.0 by 00 %. It shows statistically non significant result at >0.1 level.

2. Assessment of sign & symptoms before treatment and after 1st follow up

Kshavathu: The initial mean score of the symptom **Kshavathu** was 3.00 which reduced to 1.67 at the end of the follow up. This 44.33% reduction was statistically highly significant at P<0.001 level.

Nasa Srava: The initial mean score of the symptom **Nasa Srava** was 2.00. This was reduced to 1.40 by 30% at the end of follow up. It was statistically highly significant result at <0.001 level.

Galataluostha shosha: The initial mean score of the symptom **Galatalu shosha** was 3.00. This was reduced to 1.50 by 50% at the end of follow up. It was statistically highly significant result at <0.001 level.

Shirah shoola: The initial mean score of the symptom **Shirah shoola** was 2.00. This was reduced to 1.40 by 30% at the end of follow up. It was statistically highly significant result at <0.001 level.

Swara bheda: The initial mean score of the **Swara bheda** was 2.00 which was reduced to 1.13 (33.5%) at the end of follow up its statistical analysis shows highly significant result at <0.001 level**.**

Absolute eosinophil count: The initial mean score of the symptom Absolute Eosinophil Count Was 1.00 which was after 1st fallow up 1.0 by 00 % at. It shows statistically non significant result at >0.1 level.

3. Assessment of sign & symptoms before treatment and after 2nd follow up

Kshavathu: The initial mean score of the symptom **Kshavathu** was 3.00 which reduced to 1.67 at the end of the 2nd follow up. This 44.33% reduction was statistically highly

significant at P<0.001 level.

Nasa srava: The initial mean score of the symptom **Nasa srava** was 2.00. This was reduced to 1.40 by 30% at the end of 2nd follow up. It was statistically highly significant result at <0.001 level.

Galataluostha shosha: The initial mean score of the symptom **Galataluostha shosha** was 3.00. This was reduced to 1.50 by 50% at the end of 2nd follow up. It was statistically highly significant result at <0.001 level.

Shirah shoola: The initial mean score of the symptom **Shirah shoola** was 2.00. This was reduced to 1.40 by 30% at the end of 2nd follow up. It was statistically highly significant result at <0.001 level.

Swara Bheda: The initial mean score of the **Swara bheda** was 2.00 which was reduced to 1.13 (33.5%) at the end of 2nd follow up its statistical analysis shows highly significantresult at <0.001 level**.**

Absolute Eosinophil Count: The initial mean score of the symptom Absolute Eosinophil Count Was 1.00 which was after 2nd t fallow up 1.0 by 00 %. It shows statistically non significant result at >0.1 level.

EFFECTS OF MASHA TAILA GROUP B

- **Assessments of sign & symptoms before treatment and after treatment (GroupB).**

Kshavathu: The initial mean score of the symptom **Kshavathu** was 3.00 which were reduced to 1.8(40%) after treatment. Its statistical analysis show significant result at <0.001 level.

Nasa srava: The initial mean score of the symptom **Nasa srava** was 2.00. This was reduced to 1.40(30%) after the treatment. It was statistically significant result at <0.01 level.

Galataluostha shosha: The initial mean score of the symptom **Galataluostha shosha** was 3.00. This was reduced to 0.1 by 96 % at the end of after the treatment. It was statistically highly significant result at <0.05 level.

Shirah shoola: The initial mean score of the symptom **Shirah shoola** was 3.00. This was

reduced to 1.85 by 38% at the end of after treatment. It was statistically highly significant result at <0.001 level.

Swara bheda: The initial mean score of the **Swara bheda** was 2.00 which was reduced to 0.9 (55%) at the end of after the treatment. Its statistical analysis shows highly significant result at <0.001 level.

Eosinophil Count: The initial mean score of the symptom AEC Was 1.00 which was end of treatment up 1.0 by 00 %. It shows statistically non significant result at >0.1 level.

1. Assessment of sign & symptoms before treatment and after 1st follows up

Kshavathu:: The initial mean score of the symptom **Kshavathu** was 3.00 which were reduced to 1.67 (44.33%) at the end of follow up. Its statistical analysis shows significant result at <0.001 level.

Nasa srava: The initial mean score of the symptom **Nasa srava** was 2.00. This was reduced to 1.40 (30%) at the end of follow up. It was statistically significant result at <0.001 level.

Galataluostha shosha: The initial mean score of the symptom **Galataluostha shosha** was 3.00. This was reduced to 0.1 by 96 % at the end of follow up. It was statistically significant result at <0.05 level.

Shirah shoola: The initial mean score of the symptom **Shirah shoola** was 2.00. This was reduced to 1.40 by 30% at the end of follow up. It was statistically highly significant result at <0.001 level.

Swara bheda: The initial mean score of the **Swara bheda** was 2.00 which was reduced to 1.13 (30%) at the end of follow up. Its statistical analysis shows highly significant result at <0.001 level.

Eosinophil Count: The initial mean score of the symptom Absolute Eosinophil Count Was 1.00 which was end of 1ST follow up 1.0 by 00 %. It shows statistically non significant result at >0.1 level.

2. Assessment of sign & symptoms before treatment and after 2nd follow up

Kshavathu: The initial mean score of the symptom **Kshavathu** was 3.00 which were reduced to 1.67 (44.33%) at the end of **2nd** follow up. Its statistical analysis shows significant result at <0.001 level.

Nasa srava: The initial mean score of the symptom **Nasa srava** was 2.00. This was reduced to 1.40 (30%) at the end of **2nd** follow up. It was statistically significant result at <0.001 level.

Galataluostha shosha: The initial mean score of the symptom **Galataluostha shosha** was 3.00. This was reduced to 0.1 by 96 % at the end of **2nd follow** up. It was statistically significant result at <0.05 level.

Shirah shoola: The initial mean score of the symptom **Shirah shoola** was 2.00. This was reduced to 1.40 by 30% at the end of **2nd follow** up. It was statistically highly significant result at <0.001 level.

Swara bheda: The initial mean score of the **Swara bheda** was 2.00 which was reduced to 1.13 (30%) at the end of **2nd follow** up. Its statistical analysis shows highly significant result at <0.001 level.

Eosinophil Count: The initial mean score of the symptom Absolute Eosinophil Count Was 1.00 which was end of **2nd** fallow up 1.0 by 00 %. It shows statistically non significant result at >0.1 level.

OVER ALL EFFECT

1. Evaluation of Kshavathu between two groups

Group A showed a Complete relief in **Kshavathu** during therapy at the end of 21st day 93.38 %patients got relieved, Overall effect 100% and which was statistically highly significant at the level of p <0.001. **Group B** showed relief in **Kshavathu** during therapy at the end of 21th day 86.71 % patient got relieved, over all out come 86.71 %was statistically significant at the level of p <0.001.

2. Evaluation of *Nasa srava* two groups

Group A showed a Complete relief in **Nasa srava** during therapy at the end of 21st day 86.71 % patients got relieved, over all out come 86.71% which was statistically highly

significant at the level of p <0.001. **Group B** showed relief in **Nasa Srava** during therapyat the end of 21th day patient got 66.71% relieved. over all out come 86.71% which was statistically not significant at the level of p <0.001.

3. Evaluation of galataluostha shosha between two groups

Group A showed a Complete relief in **galataluostha shosha** during therapy at the end of21st day 86.71 % patients got relieved, over all out come 86.71 % which was statistically highly significant at the level of p <0.001. **Group B** showed relief in **galataluostha shosha** during therapy at the end of 21st day 66.7 % patient got relieved, over all out come 86.71 % which was statistically significant at the level of p<0.05.

4. Evaluation of Shirah shoola between two groups

Group A showed a Complete relief in **Shirah shoola** during therapy at the end of 21stday 86.71 % patients got relieved, over all out come 86.71 %which was statistically highly significant at the level of p <0.001. Group B showed relief in ***Shirah shoola*** during therapy at the end of 21th day 66.7 % patient got relieved, over all out come 86.71 which was p <0.001.

5. Evaluation of Swara bheda between two groups

Group A showed a Complete relief in **Swara bheda** at the end of 21st day 100 % patientsgot relieved, over all out come 100% which was statistically highly significant at the level of p <0.001. **Group B** showed relief in **Swara bheda** at the end of 21st day 66.7 % patient got relieved, over all out come 86.71% which was statistically significant at the level of p <0.001.

6. Evaluation of Absolute Eosinophil count between two groups

Group A showed a no relief in **Absolute Eosinophil count** therapy at the end of 21st day 00 % patients got relieved, over all out come 00% which was statistically not significantat the level of p >0.1. **Group B** showed a no relief in **AEC** therapy at the end of 21st day 00 % patients got relieved, over all out come 00% which was statistically not significant at the level of p >0.1.

Overall effect of treatment Group A

In Overall effect of treatment in Vataja Pratishyaya, **Group A** out of 15 patients in these study 1 patients (6.67%) were getting Moderate Improvement and 14 patients (93.38%) were getting Marked Improvement.

Overall effect of treatment Group B

In Overall effect of treatment in Vataja Pratishyaya, Group B out of 15 patients in this study, mild improvement 1 patient 6.67% moderate improvement 01 patient 6.67 % marked improvement 13 patient 87.

CONCLUSION

In nut cell we can conclude that

The study was aimed at evaluating the efficacy of Shwadamshtradi Taila Nasya, MashaTaila Nasya and to study the Comparative Clinical Effects of both the groups. The following conclusions are drawn after considering the theoretical facts and clinical aspects.

- Allergic Rhinitis is most common worldwide disorder affecting any age group of both sexes, is well known for its recurrence & chronicity.
- Allergic Rhinitis has no direct reference in any of the Ayurvedic classical literature. However almost all signs & symptoms of Vataja Pratishyaya are similar to Allergic Rhinitis. Hence it can be co-related with Vataja Pratishyaya.
- Description of Allergy & allergic disorders can be seen in Brihattrayi under heading of Ritu Sandhi, Virudha Ahara & Dushivisha all of them are the results of an Asatmyaja Vyadhi.
- Shodhana as well as Shamana therapy have been indicated for treating Pratishyaya among which Nasya Karma has been given prime importance.
- Overall assessment of the results showed that the patients of Group A who were treated with Shwadamshtradi Taila Nasya have showed 93% success rate. Patients of Group B who were treated with Masha Taila Nasya have showed 87% success rate.
- **Both the group shows significant result in subjective symptoms, in whichgroup A has given little better result and Significant.**

SUGGESTIONS FOR FURTHER STUDY

In this study due to the time limit, the sample size was small; hence the obtained results cannot be generalized. A larger sample size and longer time of treatment is required so that it may show a varying result and would be more authentic. Therefore an extended clinical study is essential before drawing the final conclusion.

Secondly the assessment criteria can include many more tests and other such objective parameters, which were excluded in this study due to the time and financial limitations. They

would make the study more specific and the judgment of the effect of therapy more accurate. Tests like Total Serum IgE etc. can be preferred here.

ACKNOWLEDGEMET

At this happiest juncture of successful completion of this research work, I bow my head to "LordDhanwantari", with whose showering of blessings this task was ventured without any hindrances.

Words fall short to express my intense love, respect and heartful gratitude to my parents **Late Shri. M Gopalkrishna, Smt .M.Tirupalamma,** my In-laws **Late Shri T.S.Rao** and **Smt. T.Rupa Rao**, with lots of love I extend my gratitude to my kids **Aaryan Rao** and **Aarika Rao** and Special thanks to my husband **DR.. T Naveen Kumar** for their boundless love, encouragement and continuous motivation to achieve my dreams.

I wish to offer my sincere thanks to **Dr. K.C. DAS,** Principal, for their encouragement and support. It is a pleasing privilege for me to express my gratitude with profound grate fullness, indebtedness to my esteemed Guide **Dr.V P NAGANUR**, and Co-guide **Dr.SANTHOSH. S. PUJARI** for there guidance, caring, patience and encouragement throughout the course of this study.

I extend heartfelt gratitude and regards to our teacher **DR. VINOD JADHAV**, HOD Dept. of Shalakya Tantra, SVMAMC, Ilkal, for his guidance, and teaching throughout this study.

I extend heartfelt gratitude to our teacher **DR MANJUNATH**, for his encouragement, necessary support and teaching.

I am also thankful to my P.G. friends **DR.KASIM, DR. SHARADA, DR. KISHORE, DR. SHAMSHUDDIN, DR. YADUKRISHNAN, DR. VINOD, DR. VARUN, DR. VIDYASHREE, DR. SHALINI, DR. PRASHANTH, and DR. BHAVYA,** all for their help during my clinical study.

I express my sincere thanks to Dept. of Dravya guna and, Dept. of Rasashastra S V M Ayurvedic Medical College, Hospital & Research center ilkal. For there valuable guidance, & helped in the preparation of drug.

I express my sincere thanks to hospital unit mainly Hospital pharmacy, library for their kind

co- operation, in completing the work successfully.

I express my profound gratitude to all my seniors and juniors for their co-operation and valuable encouragement all the time.

I pay my humble respect to all the teaching staff, Non teaching staff and hospital staff of my mother institute SVM Ayurvedic Medical College, Ilkal For their kind co-operation in Clinical study.

The co-operation shown by my patients, the foundation bricks of this work is not at all forgettable as they followed up throughout the work.

Last but not the least; I thank all those who have helped me indirectly. Due to lack of space & due to limitation of memory, I might have not named them in the acknowledgement. I see amnesty and apologize for any errors, which might have remained in my work.

BIBLIOGRAPHY

1. Vagbhata – Ashtanga Hrdayam, edited by Pt. Harisadashiva Shahtry Paradakar;2010, Chaukhambha Sanskrit Ssansthan, Sutrasthana 1, shloka 20,page.no 287.
2. Sushruta - Sushrut Samhita ayurveda tatva Sandipika hindi commentary edited byvaidya yadvji trikamji .by Chaukhamba sanskrita sansthan.uttarstan,24th chapter,shloka 25,page no 121.
3. Raja Radhakantadeva. Shabda Kalpa Druma, 3rd ed. Delhi: Naga Publishers;2006. Vol 5.
4. Amarasimha. Amarakosha - Edited by Prof. Ramanathan, Adyar library and research; 1971. Vol 1.
5. Sir Monier Monier-Williams. Sanskrit - English Dictionary - with the collaboration of Prof. E. Leumann and Prof. C. Cappeller, First ed. Reprint. Delhi: Motilal Banarsidas; 1981.
6. Sushruta. SushrutaSamhita - Edited and translated in English by Prof. K.R. Srikantha Murthy, 2nd ed. Varanasi: Chowkhamba Orientalia; 2005. Vol III.pp.609.
7. P. Hazarika, D.R.Nayak, R.Balakrishnan.Textbook of Ear, Nose, Throat and Head& Neck Surgery. New Delhi: CBS Publishers and Distributors; 3rd ed. 2013.920pp.
8. Vagbhata. Ashtangahridayam, English translation by prof. In K.R Srikanthamurthy, 3rd ed. Varanasi: Krishnadas Academy; 2000. vol 3. pp586.
9. Agnivesha. Charaka Samhita- Text with English translation and critical exposition based

on Chakrapanidatta's Ayur Dipika by Ramkaran Sharma and Bhagwan Das, 6th ed. Varanasi: Chowkhambha Publications; 1999. vol. III. 632pp.

10. Vriddhajivakiyatantra-Kashyapa Samhitha with English translation & Commentary by Prof.P.V.Tewarii. 1st ed. Chaukhambha 1996. pp 792.
11. Sushruta. Sushruta Samhita - translated by KavirajKunjalal Bhishagratna. Edited by Dr. Laxmidhar Dwivedi, 2nd ed. Varanasi: Chowkhamba Sanskrit Series office; 2002. Vol II. pp. 788.
12. Shodala. GadaNigraha, Hindi Commentary by Sri Indradeva Tripathi, 3rd ed. Varanasi: Chaukambha Samskrit Samsthan; 1994. part 3. pp.807.
13. Bhavamishra. Bhavaprakasha- Text with English translation, edited by prof. K.R Srikanthamurthy, 3rd ed. Varanasi: Chowkhamba Krishnadas Academy; 2005. Vol2. pp884.
14. Madhavakara. MadhavaNidanam- Translated into English by prof. K.R Srikanthamurthy. 2nd ed. Varanasi: Chaukhambhaorientalia; 1995.pp 329.
15. Charaka. CharakaSamhitha with Ayurveda Dipika Tika, 4th ed. Chaukhambha Sanskrit Prathstana; 1994. pp738.
16. Bhargava KB, Bhargava SK, Shah TM. A short book of E.N.T Diseases, 8th ed. Mumbai: Usha Publications; 2009. pp. 428.
17. Scott-Brown WG. Diseases of the Ear, Nose and Throat, London: Butterwort and Co. (Publishers) Ltd; 1952. Vol 1.
18. Dingra PL. diseases of Ear, Nose and Throat, 4th ed. Reprinted. New Delhi: Elseviar Publications; 2008. Pp 427 17. AstangaSangraha of Vagbhata - translated by Prof. K. R. Srikantha Murthy, Second ed. Varanasi: ChoukhambhaOrientalia; 2005. Vol I. pp 641.
19. Yogaratnakara. Yogaratnakara with Hindi teeka, teekakar - Vaidya Shree LakshmipathyShastry, edited by Brahma Shankar Shastri, reprinted ed. Varanasi: ChaukhambaKrishnadas Academy; 2005. pp504.
20. Chakrapani Dutta. Chakradatta-Sanskrit text with English Translation edited a translated by Priyavath Sharma, 2nd ed. Varnasi: Chaukamba Publisher; nineteen ninety eight.731pp.
21. Sharangadhara. Sharangadhara Samhita - translated in English by Prof. K.R Srikanthmurthy, 4th ed. Varanasi: Chaukhamba orientalia; 2001. pp335.
22. Shastry JLN. Dravya guna vignana, 3rd ed. Varanasi: Chaukhambaorientalia;2008. Vol 2. pp1134.
23. Vagbhata Acharya - Ashtangahrudaya, Sarvangasundara of Arunadatta, Ayurved

rasayanam of Hemadri, collated by Dr. Anna moreshwar Kunte and Krishna Ramachandra Shastri Navre, edited by Pt. Bhishagacharya Harishastri Paradkar Vaidya. Varanasi: Krishnadas Academy; 2009. pp. 956.

24. P.Hazarika, D.R.Nayak, R. Balakrishnan, Testbook of Ear, Nose, bThroat and Head & Neck surgery. New Delihi: CBS Publisher and Distributors; 3rd ed.2013, page 920. Amarasimha – amarakosha, Edited by Prof. Ramanathan, Adyar library and research; 1971, vol 1.
25. Agnivesha. Charaka Samhita, Comm. Chakrapanidatta Ed. R.K. Sharma, Bhagawandash, Chowkhamba Sanskrita Series, Varanasi, 1984, Chikitsa Sthana 8/48.Raja Radhakantadeva. Shabda Kalpa Druma, 3rd ed. Delhi: Naga Publishers;2006. Vol 5.
26. Agnivesha. Charaka Samhita, Comm. Chakrapanidatta Ed. R.K. Sharma, Bhagawandash, Chowkhamba Sanskrita Series, Varanasi, 1984, ChikitsaSthana.26/105-106.
27. Sushruta. Sushruta Samhita Dalhana Comm. - Nibandhasangraha, Chowkhambha Orientalia Varanasi, 2002, Uttara Tantra 22/5.
28. Vagbhata. Ashtanga Hridaya - Sarvanga Sundari Comm. Arunadatta, Choukhambha Krishna Das Academy, Varanasi, 2000, Uttara Sthana 19/3-8.
29. Vriddha Jeevaka. Kashyapa Samhita Ed. P. V. Tiwari, Choukhambhya Vishwabharati, Varanasi, 2000, Chikitsa Sthana 12/6.
30. Sushruta. Sushruta Samhita Dalhana Comm. - Nibandhasangraha, Chowkhambha Orientalia Varanasi, 2002, Uttara Tantra 24/5.
31. Dalhana - Sushruta Samhita, Nibandha Sangraha Sanskrit Commentary, Editc Jadavaji Trikamaji Acharya, Reprint 1999. Chaukambha Surabharati Prakashana and Varanasi. pp824.
32. P. Hazarika, D.R.Nayak, R.Balakrishnan.Textbook of Ear, Nose, Throat and Head Neck Surgery. New Delhi: CBS Publishers and Distributors; 3rd ed. 2013.920pp.
33. Raja radhakantadeva, Shabda Kalpa Druma, 3rd ed, Delhi: Naga Publisher; 2006,vol 5.
34. Vagbhata – Ashtanga Hrdayam, edited by Pt. Harisadashiva Shahtry Paradakar;2010, Chaukhambha Sanskrit Ssansthan, Sutrasthana 1, shloka 20,page.no 287.
35. P.Hazarika, D.R.Nayak, R. Balakrishnan, Testbook of Ear, Nose, bThroat and Head & Neck surgery. New Delihi: CBS Publisher and Distributors; 3rd ed.2013, page 920. Amarasimha – amarakosha, Edited by Prof. Ramanathan, Adyar library and research; 1971, vol 1.
36. Sir Monier Monier-Williams. Sanskrit - English Dictionary - with the collaboration of Prof. E. Leumann and Prof. C. Cappeller, First ed. Reprint. Delhi: Motilal Banarsidas;

1981.

37. Sushruta. SushrutaSamhita - Edited and translated in English by Prof. K.R. Srikantha Murthy, 2nd ed. Varanasi: Chowkhamba Orientalia; 2005. Vol III. pp.609.
38. Vangasena - Vangasena Samhita of English translation and comments by Drnirmal saxena in vol 1 .chaukambha Sanskrit series office Varanasi .Vaatrogadhikar .shloke no. 612,613,614. Page no. 451 & 452.
39. Govindadas - Bhaisajyaratnavali Vidyotini hindi commentary .vimarsha parisishtasahita. commented by Kaviraj shri Ambika dutta Shastri .edition 2002.Chaukhamba sanskrita. sanstana .chapter 26.shloka 555. Page no. 402.
40. P. Hazarika, D.R.Nayak, R.Balakrishnan.Textbook of Ear, Nose, Throat and Head Neck Surgery. New Delhi: CBS Publishers and Distributors; 3rd ed. 2013.920pp.
41. Vagbhata. Ashtangahridayam, English translation by prof. K.R Srikanthamurthy, 3rd ed. Varanasi: Krishnadas Academy; 2000. vol 3. pp586.
42. Agnivesha. Charaka Samhita- Text with English translation and critical exposition based on Chakrapanidatta's Ayur Dipika by Ramkaran Sharma and Bhagwan Das, 6th ed. Varanasi: Chowkhambha Publications; 1999. Vol. III. 632pp.
43. Vriddhajivakiyatantra-Kashyapa Samhitha with English translation & Commentary by Prof.P.V.Tewarii. 1st ed. ChaukhambhaVishvabharati; 1996. pp792.

Web sites

- www.nlm.nih.gov/medlineplus/ence/article
- www.entnet.org/kids ent/ allergic rhinitis.cfm
- www.emeditioncine.com/med/topic