

A PILOT STUDY ON THE EFFECT OF *BILVADI ASHCHYOTANA* IN THE MANAGEMENT OF *VATAJA ABHISHYANDA* W.S.R. TO SIMPLE ALLERGIC CONJUNCTIVITIS

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ABSTRACT

In the current era human beings are highly exposed to pollution and this introduces contaminants to environment. Ultimately this entire polluted environment leads to decreased immunity in human body and causing allergic reaction in human body easily. Allergic conjunctivitis is the most common type of eye allergy. It has a prevalence rate of 5-22% in general population. In *Ayurveda* probably it can be correlated with *Abhishyanda* which is one among the *Sarvagata Netra Rogas*. If these *Abhishyanda* are not treated in time it leads to a hemi cranial painful condition of eye called *Adhimantha*. *Acharya Sushruta* has recommended *Kriyakalpa* for the management of *Vataja Abhishyanda*, along with other forms of treatment. *Bilvadi Yoga* is indicated as *Ashchyotana* formulation in the treatment of *Vataja Abhishyanda*. So, in this study it was planned to evaluate the efficacy of *Bilvadi Yoga* as *Ashchyotana* in *Vataja Abhishyanda*.

Key words: *Abhishyanda*, *Ashchyotana*, Allergic conjunctivitis

INTRODUCTION

Ayurveda is the first and the oldest medical science, existing since or before the human creation. *Ayurveda* postulates the unique principle of *Tridosha*, *Dhatu* and *Mala* for homeostasis of the body¹. *Abhishyanda* is one among the *Sarvagata Netra Rogas*, which affects all parts of the eye, having good prognosis. If these *Abhishyanda* are not treated in time it leads to a hemi cranial painful condition of eye called *Adhimantha*².

Abhishyanda is derived from two words viz. “*Abhi*” and “*Syandana*”. “*Abhi*” means profuse or more and “*Syandana*” means discharge or secretion, combined meaning is profuse discharge from all parts of eye. Out of all these diseases *Netra Abhishyanda* is

considered as ‘Root Cause’ for almost all affections of the eyeball.³ *Netrabhishyanda* is classified into four types according to *Dosha* predominance viz. *Vataja*, *Pittaja*, *Kaphaja* and *Raktaja Abhishyanda*⁴. *Vataja Abhishyanda* is characterized by *Nistoda* [Pricking pain], *Sangharsha* [Foreign body sensation], *Shishirashruta* [Watery discharge/ Cold lacrimation], *Alpa Shopha* [Mild chemosis], *Vishushka Bhava* [Feeling of dryness], *Parushya* [Dryness]⁵ etc which are very similar to the most of signs and symptoms of the Allergic Conjunctivitis. So, *Vataja Abhishyanda* can be co-related with Allergic Conjunctivitis. In the current era human beings are highly exposed to pollution

and this introduces contaminants to environment that causes instability, disorder and harm to the ecosystem. Ultimately this entire polluted environment leads to decreased immunity in human body and causing allergic reaction in human body easily and it ends in a single word- Allergy. The basic reason behind the allergic reaction in the body is altered immunity or hypersensitivity. Among the common allergic reaction, one of the common manifestations is ocular allergy because of its constant exposure to external environment. It is proved that conjunctival mucous membrane is nearly ten times more exposed in comparison to other parts of the body. Allergic conjunctivitis is the most common type of eye allergy. It has a prevalence rate of 5-22% in general population and a recurrence rate of 41-62%.⁶ Due to increased incidence of allergens world-wide and environmental pollution, it stands to be an unsolved mystery of modern medicine. Hypersensitivity of the body's immune system to these allergens is the main etiological factor and also it is common in people who have other signs of allergic diseases such as asthma, eczema, hay fever and rhinitis. In today's day to day routine activities allergy sufferers experience reduction of quality of life in general health and well being and specific aspects of vision as a result of their Allergic conjunctivitis⁷.

The drugs having multiple pharmacological mechanism of action like histamine H1 receptor antagonist, mast cell stabilizer, inhibits infiltration, activation and degranulation of eosinophils and other late phase reaction such as the effect of platelet activating factors are useful in the treatment of Allergic Conjunctivitis, but they are very costly and not safe in all patients. Allergic Conjunctivitis is one of such conditions in which all the patients do not respond equally to available anti allergic drugs. After stopping

the treatment there may be chances to re-occur the symptoms of Allergic conjunctivitis. More over these drugs are to be used for longer period to keep the condition under control. Hence there is scope to search for better remedy from our *Ayurveda* preparations for the conditions like Allergic Conjunctivitis.

General line of treatment explained by our *Acharyas* for *Vataja Abhishyanda* are *Purana Sarpi*, *Snigdha Aanapana*, *Snehavirechana*, *Siravedhana*, *Tarpana*, *Putpaka*, *Dhoompana*, *Nasya*, *Aschyotana* and *Sneha Parisheka*⁸. *Acharya Sushruta* has recommended '*Kriyakalpa*' for the management of *Vataja Abhishyanda*, along with other forms of treatment. The term *Kriyakalpa* refers to the treatment, which can be applied for almost all types of eye diseases; and it comprises of *Tarpana*, *Putapaka*, *Anjana*, *Ashchyotana* and *Seka*. Among these *Ashchyotana* is a simple, safer, most economical procedure, which is indicated in the initial stage of the eye diseases. The drugs having *Vatashamaka*, *Vedanasthapana*, *Vranaropana* and *Chakshushya* properties may be helpful in the treatment of the disease *Vataja Abhishyanda* – Simple Allergic Conjunctivitis.

Bilvadi Yoga is indicated as *Ashchyotana* formulation in the treatment of *Vataja Abhishyanda*. Ingredients of the *Bilvadi Yoga* are *Bilva*, *Agnimantha*, *Shyonaka*, *Patala*, *Gambhari*, *Erand*, *Brihati*, and *Madhu Shigru*. But due to some limitations, like time consuming procedure, dose variation, chance of infections due to not following aseptic precautions by the patients, *Ashchyotana* formulation is not much in practice. So, in this study it was planned to evaluate the efficacy of *Bilvadi Yoga* as *Ashchyotana* in *Vataja Abhishyanda* – Allergic Conjunctivitis.

MATERIALS AND METHODS

Selection of patients: Patients attending the O.P.D. and I.P.D. of *Panchakarma* department of N.I.A. Hospital with signs and symptoms of *Vataja Abhishyanda*, between the age group of 15– 70 years were selected for the present study. A total number of 15 patients were selected for this study.

Statistical method: Wilcoxon test

Patient Consent: The treatment procedure with its different steps and the outcome was properly explained in detail to the patients and a written consent from the patients was obtained before enrolling in the clinical study.

Criteria for Diagnosis: The diagnosis of *Vataja Abhishyanda* was done on basis of the modern and *Ayurvedic* science. For this purpose a special research proforma was prepared as per the modern and *Ayurvedic* view. After taking ophthalmic and systemic history, a detailed conjunctival examination was carried out by torch light and slit lamp examination before and after study. Routine blood investigations were done to rule out any systemic disease.

Inclusion Criteria:

Patients in the age group of 15 to 70 years presenting with signs and symptoms of *Vataja Abhishyanda* as mentioned in classical text were included in the trial.

Exclusion Criteria:

1. Patients not willing for trial.

2. *Abhishyanda* associated with Corneal Ulcer.
3. *Abhishyanda* associated with Trachoma.
4. Allergic conjunctivitis with other forms of allergy like skin rash and allergic Asthma.
5. Any individual above 70 years and below 15years of age either of any sex.
6. Cases complicated with Dacryocystitis.
7. Patients suffering from other systemic disorders.

Bilvadi Yoga Ashchyotana:

Drug: *Bilvadi Yoga*

Dose: 2 drops five times daily in Eyes.

Duration: 15 days

Duration of Follow up period: every 15 days for 1 month after completion of treatment

Criteria for Assessment:

In this study, the results were assessed with regards to the clinical sign and symptoms like *Nistoda* [Pricking sensation], *Stambha* [Stiffness of lid], *Sangharsha* [Foreign body sensation], *Vishuskabhava* [Feeling of Dryness], *Shishirashruta* [Cold lacrimation], *Kandu* [Itching], *Raga* [Congestion].

RESULTS:

In the present trial total 17 patients were enrolled at the beginning but 2 patients discontinued the trial before its completion and therefore had to be excluded from the trial. The pattern of clinical improvement in various subjective and objective parameters were recorded and measured statistically, by using Graph pad instat 3.

Table No.1: Showing effect of therapy on Clinical Features (Wilcoxon matched paired signed ranked test)

S. No.	Clinical Features	Mean Score			% Of Relief	S.D.	S.E.	P	Results
		BT	AT	Diff.					
1	<i>Nistoda</i>	1.467	1.000	0.466	31.81%	0.639	0.165	0.05	S
2	<i>Stambha</i>	0.533	0.333	0.200	37.50%	0.414	0.106	>0.05	NS
3	<i>Sangarsha</i>	2.000	1.200	0.800	40%	0.560	0.144	0.001	ES

4	<i>Vishushkbhava</i>	0.666	0.133	0.533	79.99%	0.743	0.191	0.05	S
5	<i>Shishirashruta</i>	1.467	0.666	0.800	54.53%	0.560	0.144	0.001	ES
6	<i>Kandu</i>	1.933	1.133	0.800	41.38%	0.560	0.144	0.001	ES
7	<i>Raga</i>	2.267	1.133	1.133	49.97%	0.915	0.236	0.001	ES

Analysis of subjective parameters as per table no.1

- Extremely significant statistically (p 0.001) results were found in *Sangarsha*/Foreign body sensation (40%), *Shishirashruta* / Cold lacrimation (54.53%), *Kandu* / Itching (41.38%) and *Raga* / Congestion (49.97%).
- Statistically significant (p 0.05) results were found in *Nistoda* / Pain (31.81%), *Vishushkbhava* / Feeling of Dryness (79.99%).

- Statistically Non significant (p>0.05) results was fund in *Stambha* / Stiffness of lids (37.50%).

DISCUSSION

Among the various formulations prescribed for the treatment of *Vataja Abhishyanda* by different *Acharyas*, the *Bilvadi Yoga* which is indicated in the treatment of *Vataja Abhishyanda* by *Chakradatta* was selected. All the ingredients are having *Vata Shamaka* effect. Moreover all the ingredients are known for antibacterial and anti inflammatory activity.

Table No. 2. Showing Ras Panchaka of Bilvadi Yoga Aschyotana

Name	Rasa	Guna	Veerya	Vipaka	Part Used	Dosha Karma
<i>Bilva</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Kapha-Vatashamaka</i>
<i>Agnimantha</i>	<i>Tikta, Katu, Kashaya, Madhura</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Kapha-Vatashamaka</i>
<i>Shyonaka</i>	<i>Madhura, Kashaya, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Kapha-Vatashamaka</i>
<i>Gambhari</i>	<i>Kashaya, Tikta, Madhura</i>	<i>Guru</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Tridoshshamaka</i>
<i>Patla</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Tridoshshamaka</i>
<i>Eranda</i>	<i>Madhura Anurasa- Katu, Kashaya</i>	<i>Snigdha Tikshna, Sukshama</i>	<i>Ushna</i>	<i>Madhura</i>	Root	<i>Kapha-Vatashamaka</i>
<i>Brihati</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksha,</i>	<i>Ushna</i>	<i>Katu</i>	Root	<i>Kapha-</i>

		<i>Tikshana</i>				<i>Vatashamaka</i>
<i>Shigru</i>	<i>Katu, Tikta</i>	<i>Laghu, Ruksha, Tikshana</i>	<i>Ushna</i>	<i>Katu</i>	Seed	<i>Kapha-Vatashamaka</i>

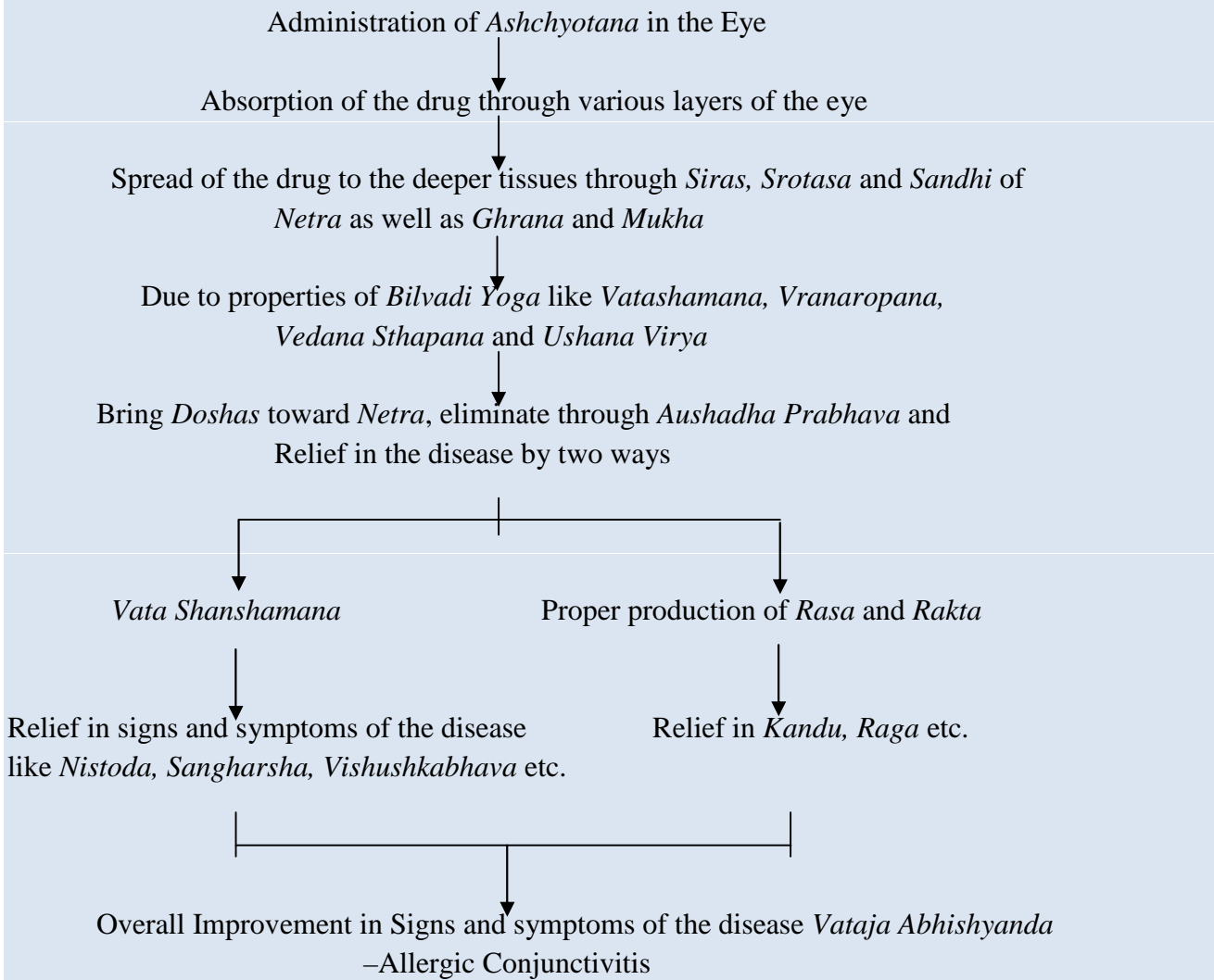
Mode of Action of Drugs:

- All the contents are having *Ushna Veerya* so they possess *Vata Shamaka* property which is the main *Dosha* involved in the disease *Vataja Abhishyanda*. Moreover all the contents also have *Shothahara* property which helps in subsiding features like *Alpa-shopha* (mild chemosis) of *Vataja Abhishyanda*. The *Vednasthapana*

property of the contents helps in relieving *Nistoda* (pricking pain).

- *Laghu, Ruksha guna* of the contents helps in better penetration of the drug.
- *Kashaya rasa* of the contents promotes healing (*Ropana*) and reduces the discharges. So it is helpful in the relief of the symptom *Shishirashruta* i.e. watery discharges.

Mechanism of action of Ashchyotana⁹:



CONCLUSION

- *Vataja Abhishyanda* is one of the most common diseases affecting man in present era.
- On the basis of signs and symptoms the *Vataja Abhishyanda* can be correlated with Allergic Conjunctivitis.
- Management of the Allergic Conjunctivitis in modern has considerable side effects and is also not cost effective.
- *Aschyotana* is the preferred mode of *Kriyakalpa* which is widely practiced when considering the dose maintenance, easy and safe administration.
- *Bilvadi yoga Aschyotana* gave better results in the clinical features like *Nistoda* [Pain in eyes], *Stambha* [Stiffness in lids], *Sangarsha* [Foreign body sensation], *Vishushkabhava* [Feeling of dryness], *Shishirashruta* [old lacrimation] *Kandu* [Itching] and *Raga* [Congestion].
- No adverse effects were observed during the study.
- No recurrence during follow up was observed after completion of trial.
- These are safe, economical and procedure is easy to perform.
- Thus, it can be concluded that *Bilvadi yoga Aschyotana* showed good results in the clinical symptoms of *Vataja Abhishyanda*- Allergic Conjunctivitis.
- The symptomatic improvement was 47.82%. The results were encouraging; hence further studies may be conducted including large population in this direction.

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