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# A CLINICAL STUDY ON EFFECT OF PATHYADI ANJANA VARTI IN THE MANAGEMENT OF KAPHAJA ABHISHYANDA W.S.R. TO ALLERGIC CONJUNCTIVITIS

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ABSTRACT

Dr. Satya Dev Lecturer, Department of Shalakya Tantra, MMM Govt. Ayurveda College, Mahawat Wari Marg, Moti Chohatta, Inside Hathipole, Silawatwari, Udaipur, Rajasthan 313001. *Kaphaja Abhishyanda* have been explained under the heading '*Sarvagata Roga'*. *Abhishyanda* is considered as root cause of all most all the eye diseases. If it is not treated in time it leads to severe complication like *Adhimantha* and *Hatadhimantha*. The symptomatology of *Kaphaja Abhishyanda* can be correlated with allergic conjunctivitis. Allergic conjunctivitis is the most common type of eye allergy and is widely experienced by global population. Having a prevalence rate of 5-22% in general population and a recurrence rate of 41- 62%. *Acharya Sushruta* has recommended '*Kriya Kalpas*' such

as *Aschyotana, Anjana* etc. for the management of *Abhishyanda,* along with other therapeutic interventions. In the present study, total 15 patients were subjected to *Pathyadi Varti* for *Anjana*. Clinical study carried out under designed protocol and results of study were assessed in terms of effect on various clinical feature of *Kaphaja Abhishyanda* (Allergic conjunctivitis). The present study shows highly significant reduction in clinical feature of *Kaphaja Abhishyanda* with local application of *Pathyadi Anjana Varti* 

KEYWORDS: - Kaphaja Abhishyanda, Pathyadi Anjana Varti, allergic conjunctivitis.

#### **INTRODUCTION**

The eye is the "window of soul" and holds special importance among all the sense organs. Without vision the day and night are same and this beautiful world is useless even if one possess plenty of wealth.<sup>[1]</sup>

*Abhishyanda* is one among the *Sarvagata Netra Rogas*, which affects all parts of the eye, having good prognosis.<sup>[2]</sup> It is of four types depending upon the predominant *dosha* viz-*Vataja, Pittaja, Kaphaja* and *Raktaja Abhishyanda*. In each type of *Abhishyanda* nature of pain, discharge, congestion, oedema etc. varies. On analysing the signs and symptoms predominant *Dosha* can be assessed. If these *Abhishyanda* are not treated in time it leads to a hemi cranial painful condition of eye called *Adhimantha*.<sup>[3]</sup>

Description of four types of *Abhishyanda* is found amongst 76 diseases of eye in *Ayurveda* texts. Out of four *Abhishyanda, Kaphaja Abhishyanda* where itching and grittiness of the eye, foreign body sensation of eyes, watering, congestion, eye lid oedema, scanty & ropy discharge from eyes, heaviness of eyes, etc. are quite similar to allergic conjunctivitis is a common ocular ailment of childhood and adolescent age group as described in modern ophthalmology text.

Exposure to allergen like dust, smoke, pollens, dandruff, animal dander etc. gives immediate reaction. Avoidance of the allergen is quite difficult. So distressing signs and symptoms may cause extreme discomfort to the patient and it can disturb patient's routine life.

No such an effective drug is available in the modern ophthalmology which can cure the disease Allergic Conjunctivitis completely. Moreover after stopping the treatment symptoms of the disease re-occur.

*Acharya Sushruta* has recommended '*Kriya Kalpas*' such as *Aschyotana, Anjana* etc. for the management of *Abhishyanda*, along with other therapeutic interventions.<sup>[4]</sup>

Keeping all these points in mind it is decided to evaluate the effect of *Anjana* on *Kaphaja Abhishyanda*-Allergic Conjunctivitis.

The present study entitled "A clinical study on effect of Pathyadi Anjana Varti in the management of Kaphaja Abhishyanda w.s.r. to allergic conjunctivitis" was carried out with the aim of searching better remedy for the disease.

#### MATERIALS AND METHODS

The study was carried out in these sections viz.

#### Selection of patients

Patients attending the O.P.D. and I.P.D. of department of *Shalakya*, eye unit N.I.A. Hospital with signs and symptoms of *Kaphaja Abhishyanda* – Allergic Conjunctivitis, between age of 15–70 were selected for the present study. A total number of 15 patients were selected randomly, irrespective of their sex, religion, occupation, education etc. the written consent of the patients were taken before starting the clinical study.

#### **Criteria of Diagnosis**

The diagnosis of *Kaphaja Abhishyanda* – Allergic Conjunctivitis was done on both the modern and *Ayurveda* basis. For this purpose a special research proforma was prepared as per the modern and *Ayurveda* 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**

All patients in the age group of 15 to 70 years presenting with signs and symptoms of Allergic conjunctivitis and *Kaphaja Abhishyanda* as mentioned in classical text were be taken into account.

#### **Exclusion Criteria**

- I. Patients not willing for trial.
- II. Abhishyanda associated with infections and Corneal Ulcers.
- III. Abhishyanda associated with Trachoma.
- IV. Allergic conjunctivitis with other forms of allergy like skin rash and allergic Asthma.
- V. Any individual above 70yrs and below 15yrs of age either of any sex.

#### Investigations

For the purpose of assessing the general condition of the patient and to exclude other pathologies, the following investigations were performed in all the selected patients.

#### **Routine Examination**

- I. Complete blood count.
- II. Erythrocyte Sedimentation Rate.

#### Method of study

All patients selected for clinical trial were explained the nature of the study and their consent was obtained on the proforma before inclusion in the study.

In total 15 patients were selected for present study who fulfilled the criteria of diagnosis and consented for study. They all were treated with *Pathyadi Anjana Varti* for local application.

Drug: Pathyadi Anjana Varti
Dose: 1 Harenu once daily in morning for local application in lower cul- de- sac.
Duration: 15 days

#### **Duration of the Trial**

The trial of the therapy was carried for 15 days.

Follow Up: A minimum period of one month was planned for the follow up study.

#### **Criteria for Assessment**

In this study, the results were assessed with regards to the clinical sign and symptoms (on the basis of grading and scoring system) and overall improvement.

#### **Clinical Assessment**

The signs and symptoms were assessed by adopting suitable scoring method.

- 1) Kandu (itching)
- 2) *Guruta* (heaviness in eyes)
- 3) Muhurmuhursrawa (lacrimation)
- 4) Foreign body sensation
- 5) Akshishopha (swelling of eye lids)
- 6) *Raga*(congestion of conjunctiva)

## **OBSERVATIONS AND RESULTS**

• In the present study maximum numbers of patients were between15-30years age group

S.	Clinical features	Mean Score		% 0f	S.D.	S.E.	D	Results	
No.	Chinical leatures	BT	AT	Diff.	Relief	5.D.	<b>5.E</b> .	r	Results
1	Kandu	2.667	0.267	2.400	89.99%	0.498	0.091	< 0.0001	ES
2	Guruta	1.267	0.267	1.000	78.93%	0.831	0.152	< 0.0001	ES
3	Muhurmuhur Srawa	0.933	0.200	0.733	78.56%	0.450	0.082	< 0.0001	ES

#### Table No.I: Showing effect of therapy on clinical features.

4	Foreign body sensation	1.400	0.467	0.933	66.64%	0.583	0.107	< 0.0001	ES
5	Akshishopha	0.400	0.066	0.333	83.25%	0.711	0.130	< 0.0313	S
6	Raga	1.267	0.400	0.867	68.43%	0.629	0.115	< 0.0001	ES

The effect of drug reveals that maximum percentage of Relief was observed in the parameter of *Kandu* (89.99%) followed by *Akshishopha* (83.25%), *Guruta* (78.93%), *Muhurmuhur Srawa* (78.56%), *Raga* (68.43%), and foreign body sensation (66.64%) relief. Percentage of Relief is statistically highly significant in *Kandu, Guruta, Muhurmuhur Srawa, Raga,* Foreign body sensation and it is significant in case of *Akshishopha*.

## DISCUSSION

It was found that 70.59% cases of *Kaphaja Abhishyanda* – Allergic Conjunctivitis were in the age group of 15 to 30 years. The possible explanation is that these patients were exposed to polluted and dusty atmosphere as this is the most active phase of life. So they cannot avoid the allergen coming in contact with ocular surface.

## PROBABLE MECHANISM OF DRUG ACTION

Relief in the clinical features of the disease was caused by reduction in inflammation. *Pathyadi Anjana Varti* was effective in controlling the clinical features. The study of literature reveals that there can be many possible mechanisms working individually or in combination to affect the inflammatory process directly or indirectly.

## Probable mode of action of Pathyadi Anjana Varti

*Pathyadi Anjana Varti* acted as a *Lekhana Anjana* and *Lekhana Anjana* can clean the *Srotasas* by its medicinal effects. The *Malas* are drained out through the nostrils and mouth so generally it can be used in *Kapha* predominant diseases.

Pathyadi Anjana Varti contains three drugs-Haritaki, Haridra and Yasthimadhu. Maximum of these having Tikta Katu Rasa, Laghu Ruksha Guna, Ushna Veerya, Madhura Vipaka and Tridosha Shamaka property.

Name	Rasa	Guna	Veerya	Vipaka	Part Used	Dosha Karma
Haritaki	Kashaya, Katu, Tikta, Amla, Madhura	Laghu, Ruksha	Ushna	Madhura	Fruit	Tridosha Shamaka
Haridra	Tikta, Katu	Ruksha, Laghu	Ushna	Katu	Rhizome	Tridosha Shamaka

## Table showing Ras Panchaka of Pathyadi Anjana Varti

Yasthimadhu Madhura		Sheeta	Madhura	Root	Vatapitta shamaka
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## On The Basis of Rasa:

Function of *Katu Rasa* is *Kapha Shamak*, *Agni Deepaka*, *Krimigna*, *Kandu Nasak*, *Chakshu Virechana*, *Abhishyanda Nasak*, *Sroto Vishodhana* which alleviates itching, lid and conjunctival swelling and *Guruta*.<sup>[5]</sup>

*Tikta Rasa* is also present in most of contents of *Pathyadi Anjana Varti*. *Tikta rasa* has *Vishagna, Krimigna* and *Kandu Dahashamaka, Lekhana* properties, alleviates *Abhishyanda* and itching.<sup>[6]</sup>

## On the Basis of Guna

*Laghu Guna* is *Langana* and *Shrotoshodhaka*, which is present in maximum herbs of *Pathyadi Anjana Varti*, which alleviates *kapha*. *Ruksha Guna* is also having *kapha Shamaka* property.<sup>[7,8]</sup>

## On The Basis of Veerya

*Ushna Veerya* drug act as *Agnideepana* and *Pachana karma*. *Sheet Veerya* of *Yasthimadhu* controls excessive effect of *Ushna Veerya* on *Tikshana Anjana*.

## On The Basis Of Vipaka

Regarding *Vipaka*, maximum contents have *Madhura Vipaka* followed by *Katu Vipaka*. *Katu Vipaka* is said to be *Kapha Shamaka* and *Madhura Vipaka* has got *Pitta-Shamaka* and soothing effect on the tissues of eye.

## **Modern properties**

From modern point of view the probable mechanism of action can be as follow:-

- Aqueous extract of dried fruit of *T. chebula* (*Haritaki*) showed anti-inflammatory effect by inhibiting inducible nitric oxide synthesis.<sup>[9]</sup>
- Aqueous extract of *T. chebula* produced an increase in humoral antibody titre and delayed type hypersensitivity (Immunomodulatory effect) in mice.<sup>[10]</sup>
- *Haritaki (Terminelia chebula)* has anti-inflammatory, anti-allergic, immunomodulatory activity.<sup>[11]</sup>
- Turmeric (*Curcuma longa* Linn.) has anti-inflammatory and antioxidant property.<sup>[12]</sup>

• *Yasthimadhu* (*Glycyrrhiza Glabra*) also have anti-inflammatory, anti-allergic, immunomodulatory and anti- oxidant property.<sup>[13]</sup>

### CONCLUSION

After scrutinizing the study regarding *Kaphaja Abhishynda* and its management following conclusions can be drawn:

- On the basis of signs and symptoms Kaphaja Abhishyanda can be correlated with allergic
   conjunctivitis.
- Management of the Allergic Conjunctivitis in modern ophthalmology has considerable side effects and also is not cost effective.
- *E Pathyadi Anjana Varti* formulation gave better results in the clinical features like *Kandu* (Itching), *Guruta* (Heaviness in eyes), *Akshishopha* (Swelling of eye lids), *Muhurmuhur Srawa* (Lacrimation), *Raga* (Congestion of conjunctiva), *Pichchil Srawa* (Ropy discharge), Foreign body sensation.
- Source of 15 patients in Over All Therapy, 02 patients in showed complete cure. Marked improvement was observed in 08 patients. Moderate improvement was observed in 05 patients in.
- Solution No adverse effects were observed during the study in Pathyadi Anjana Varti application.
- & No recurrence during follow up was observed after completion of trial.
- Z These are safe, economical and procedure is easy to perform.

#### REFERENCES

- Gupta Kaviraja Atrideva, Edited By Vaidya Yadunandana Upadhayaya, Astangahrdayam, Vidyotini Hindi Commentary, Uttara sthana 13/98, Published By Chaukhambh Prakashan Varanasi, Reprint edition, 2009; 679.
- 2. Shastri Ambikadutta, Sushruta Samhita, Ayurveda Tattva Sandipika Hindi commentary, part II 6/10, published by Chaukhambha Sanskrit Sansthan Varanasi. Reprint, 2010; 35.
- Gupta Kaviraja Atrideva, Edited By Vaidya Yadunandana Upadhayaya, Astangahrdayam, Vidyotini Hindi Commentary,15/3-4, Published By Chaukhambh Prakashan Varanasi,. Reprint edition, 2009; 682.

- Shastri Ambikadutta, Sushruta Samhita, Ayurveda Tattva Sandipika Hindi commentary, Part II 11/3-4, published by Chaukhambha Sanskrit Sansthan Varanasi. Reprint, 2010; 56.
- 5. Pt.kasinath shastri, 'Vidyotini' Hindi Commenrary of *Caraka Samhita*, *Poorwarardha*, Chaukhambha Bharati academy publication, reprint, *Sutra Sthana*, 2005; 26/43(4): 506.
- 6. Pt. kasinath shastri, 'Vidyotini' Hindi Commenrary of *Caraka Samhita*, *Poorwarardha*, Chaukhambha Bharati academy publication, reprint, *Sutra Sthana*, 2005; 26/43(5): 506
- 7. Prof. p. v. Sharma, Dravya guna vigyana, vol. I, edition, 2007; 163.
- 8. Prof. p. v. Sharma, Dravya guna vigyana, vol. I, edition, 2007; 165.
- Moeslinger T, Friedl R, Volf I, Brunner M, Koller E, Spieckermann PG. Inhibition of inducible nitric oxide synthesis by the herbal preparation Padma 28 in macrophage cell line. Can J Physiol Pharmacol, 2000; 78(11): 861–866.
- Aher VD. Immunomodulatory effect of alcoholic extract of Terminalia chebula ripe fruits. J Pharm Sci Res, 2010; 2(9): 539–544.
- 11. Anwesa Bag et.al., The development of Terminalia chebula Retz. (Combretaceae) in clinical research, Asian Pac J Trop Biomed, 2013 Mar; 3(3): 244–252.
- Krup V, Prakash LH, Harini A. Pharmacological Activities of Turmeric (Curcuma longa linn): A Review. J Homeop Ayurv Med, 2013; 2: 133. doi: 10.4172/2167-1206.1000133
- 13. Korhalkar Anagha et. Al., Pharmacological studies of yashtimadhu (glycyrrhiza glabra l.) In various animal models - a review, Global J Res. Med. Plants & Indigen. Med., | March 2013; 2(3): 152–164, www.gjrmi.com