

APPLICATION OF BIDALAKA IN ALLERGIC CONJUNCTIVITIS: A CASE STUDY

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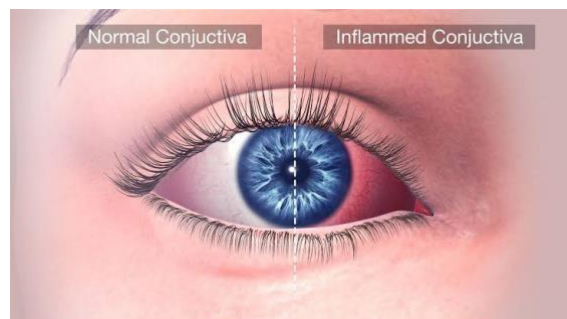
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ABSTRACT

Conjunctivitis is a common eye disease seen worldwide. It may be due to allergy, micro-organisms, infectious or due to any other inflammatory process affecting the ocular tissues. If not treated on time, infections can spread all over the eye, affecting also the adjacent eye at the same time and can reach its sporadic epidemic phase. Complications such as corneal involvement, sight threatening, severe pain in and around the eyes, etc. can occur over a period of time. Physical examination reveals eye lids swelling, redness, itching, sticky discharge pseudo-membrane formation. Here, local conjunctival tissues get inflamed as well as secondary infections take place. An Ocular therapeutic called Bidalaka is the one which consists of applying medicated paste over the eyelids except eyelashes. Bidalaka is indicated in inflammatory conditions of the eyes. A 50 years old Female patient diagnosed with Allergic conjunctivitis on clinical presentation was advised Bidalaka for five days using Mustak, Agaru, Chandan powders and Madh. The signs & symptoms were reduced to mild degree but the disease did not subside completely. The result proved to be effective on the basis of clinical assessment.

KEYWORDS: Allergic Conjunctivitis, Bidalaka, Kaphaja Abhishyanda, Kriyakalpa.**INTRODUCTION**

In Ayurveda, it is said that many types of Netraroga is due to Abhishyanda.^[1,2] There are various types of Abhishyanda, but in practice Vataj and Kaphaj Abhishyanda are more likely seen. As per signs & symptoms, Kaphaj Abhishyanda is more or less can be compared with Allergic conjunctivitis. It is characterized by intense Shotha, Snigdha, Sweta, Pichila, Ashrusrava, Alpa vedana, Nidra, Kandru, etc.^[3] Acharya Charaka has indicated Bidalaka in eye diseases with Raga, Sopha, Daha, Upadeha, Asru.^[4] Hence, Bidalaka is line of treatment for Kaphaj Abhishyanda. In Modern texts, inflammations of the conjunctiva refer to as conjunctivitis.^[5] Allergic conjunctivitis is inflammation of conjunctiva due to allergy. However in developing countries, it still continues to be the commonest type of conjunctivitis.^[5] Symptoms occurs ocular itching, eyelid swelling, tearing, watery discharge, photophobia and foreign body sensation.^[6] The allergic response is a cascade of events that is coordinated by 'mast cell'. When histamine is released from mast cell, it binds to H1 receptors on nerve endings and causes the ocular symptoms and symptoms of itching. Histamine also binds to H1 receptors of conjunctival vasculature and causes Vasodilation.^[7]



Treatment consists of anti-histamine, mast cell stabilizers, dual mechanism anti allergens agents or topical anti histamines.^[8] Strictly no eye pads, no steroids, use of dark goggles.^[9]

Aim and objective

1. To manage allergic conjunctivitis with Ayurvedic oculartherapeutics (*Bidalaka*).
2. To evaluate the anti-inflammatory & analgesic effects of drugs which are used for *bidalaka*.

MATERIALS AND METHODS**Case history**

A 50 years old female patient came to outpatient department of Shalakyatantra, SVNHT's Ayurved college, Rahuri on 1 Dec 2020. with complaints of swelling both eyes, redness, itching, discharge with mild

to moderate pain. He had acute onset of the above symptoms since 4-5 days. On ocular examination, visual acuity for both eyes were found to be 6/6 & 6/6p, eye ball movements were normal, conjunctival congestions were observed, other all sclera, cornea, iris, pupil & anterior chamber were found to be normal. On the basis of clinical signs & symptoms patient was diagnosed with Allergic conjunctivitis and advised Bidalaka for five days using Mustak, Agaru, Chandan powders and Madh.

Bidalaka^[10,11]

Bidalaka is one of the ocular therapeutic of Ayurveda in which drugs are made into paste form and applied to the outer surface of the eyelids leaving the eye lashes. The paste is left on site until it starts drying (for 20-25 minutes).

Medicine applied on the outer surface of lids is absorbed by the skin to a greater extent reaching to subcutaneous tissues and local temperature there by relieves inflammation, imparting soothing effect and reduces the relieving pain. Since tissue contact time is more, bidalaka helps in large absorption of drugs and bioavailability will be enhanced. Since the drugs have anti-infective, analgesic & anti-inflammatory properties, patient could get quick relief from the symptoms.

The Ayurvedic scientists Acharya Charaka (200 BC) and Acharya Vagabhata (600 AD) have mentioned about this therapy. They were aware of drug delivery through skin of eyelids. The skin of eye lids is extremely thin, subcutaneous fat is very sparse and stratum corneum layer of skin which acts as barrier is a single layer in eye lids, so absorption of drugs through skin of eye lids will be very fast. In Bidalaka the paste of drugs is left for 20 minutes which provides more tissue contact time that accelerates the absorption.

The advantages of transcutaneous drug delivery are avoidance of the gastrointestinal tract and hepatic first-pass biotransformation and metabolism, control of absorption, avoidance of local irritation and toxicity, and improved patient compliance.^[12] local temperature there by relieves inflammation, imparting soothing effect.

OBSERVATIONS AND RESULT



Before Treatment.



Bidalak.



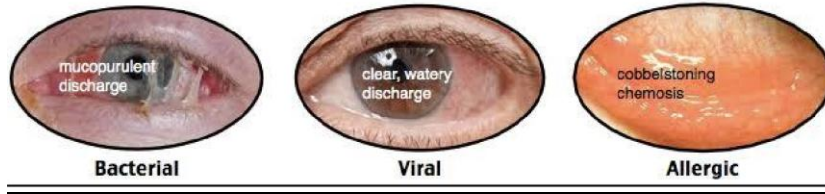
After Treatment.

On complete treatment of 5 days, it was noted that eyelid swellings were subside, redness were slightly reduced in both the eyes which were clearly seen in the photographs.

DISCUSSION

Allergic conjunctivitis is a inflammation of conjunctiva due to allergy. As per modern science, Treatment consists of anti-histamine, mast cell stabilizers, dual mechanism anti allergens agents or topical anti histamines. Whereas, in Ayurveda, Bidalaka is the line of treatment for Kaphaj Abhishyanda (Allergic conjunctivitis). So, the patient was included for Bidalaka for 5 days. No doubt the drugs which were used for Bidalaka in this case have anti-infective, anti-inflammatory properties and Bidalaka provides quick absorption of the drugs along with soothing effects, so it becomes very useful to overcome this clinical condition. Since, the above drugs have anti-inflammatory with anti-infective properties, patient could get quick relief from the symptoms. Bidalaka mentioned by Acharya Charaka and Acharya Vagbhata as one of the seven Kriyakalpa. The skin of eyelids are thin also bulbar & palpebral conjunctiva both act as a safe route for the drugs to get absorbed fast into the eye. In Bidalaka, the paste of drugs is left till it gets completely dried which takes atleast 20-25 minutes & provides more tissue contact time that accelerates the absorption.

Conjunctivitis			
Clinical Finding	Bacterial	Viral	Allergic
Bilateral involvement	50%	25%	Mostly
Discharge	Mucopurulent	Watery	Rare
Redness	Yes	Yes	Yes
Pruritus	Rare	Rare	Yes



Differential diagnosis.

CONCLUSION

Allergic conjunctivitis is a very common allergic infection of the eye. Source of allergic infection can be local, systemic or external environment. Also, in Ayurveda, Abhishyanda is mentioned in Sanshargaja Vyadhi.^[13] Clinical assessment and diagnosis of the same is very essential through history taking. In Ayurveda, Bidalaka with the selected drugs provide anti-infective, analgesics, anti-inflammatory and soothing effect to some extent which Shothaghna, Kandughna, Kaphaghna dravya which helps in reducing shotha vedana and raga.



1. Mustak.



2. Agaru Kaphaghna dravya.

Chandan is kandughna, kaphaghna dravya. It reduces itching and burning sensation.



3. Chandan.



4. Madh.

Madh is Tridoshghna, is similar to the line of management for topical drugs in modern science. The tissue contact time and bioavailability of the drugs used in procedure like Bidalaka is more, so large absorption of drugs take place therefore, it provides quick relief in subsiding the symptoms.

The study showed slight relief in the patient’s symptoms therefore Bidalaka is one among the other Kriyakalpa for Allergic conjunctivitis as per Ayurveda science.

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