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# **CONJUCTIVITIS IN CHILDREN: A CAUSE OF CONCERN**

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## **ABSTRACT**

Humans are blessed with five sense organs, eye being the most important amongst them. Conjunctivitis is the commonest complaint in ophthalmology practice. Allopathic medications are highly preferred for such conditions although *Ayurveda* is equally promising and effective with lesser side effects. Clinical picture of conjunctivitis nearly replicates with the term *Abhishyanda* mentioned in *Ayurvedic* texts. This paper highlights the picture of conjunctivitis as well as critically analyses the vast treatment options in *Ayurveda*. Each treatment modality is discussed separately with special reference to their relation with conjunctivitis. The material for this paper was searched at PubMed, Google scholar, *Ayurvedic* texts and cross referencing of previous articles was done. Articles published in English language within last 20 years were referred to write this review article

**KEYWORDS:** *Abhishyanda, Ayurveda,* Conjuctivitis.

#### INTRODUCTION

Conjunctivitis is an inflammation of the conjunctiva, a clear membrane that covers the outermost layer of the eye and the inner surface of the eyelids. Conjunctivitis or pink eye is amongst the most common eye infections which is contagious and may present as a seasonal epidemic. It is associated with potentially dangerous complications and a long-term sequela, and seen as a significant public health issue. Conjunctivitis is more likely to occur in children with a comparatively weakened immune system, immature lacrimal ducts, exposure to external environment and frequent colonisation of the conjunctivae by bacteria and viruses. As a result, many outbreaks of conjunctivitis have been documented to develop in children worldwide. Allergic conjunctivitis is thought to be the commonest allergic condition, with a

surprisingly high prevalence. Approximately 20% of individuals have allergic conjunctivitis annually, with around 50% of those afflicted having a personal or familial history of atopy.<sup>[1]</sup>

The causative factors include bacteria, viruses, allergens, dust, chemicals, foreign body etc. It is characterized by itching, pain, swelling, burning sensation, congested blood vessels and watery eyes. Acute infectious conjunctivitis is a common childhood illness and the role of antibiotics still remains unclear. The mainstream management advocates avoidance of the allergen or foreign body and treatment with topical or systemic antibiotics/steroids/mast cell stabilizers/anti- inflammatory/antihistaminic agents. Side effects always mimic allopathic medicines and its quick fix aspect declines the efficacy eventually also, the condition of drug resistance cannot be disregarded. This management is highly preferred but seems to be temporary whereas *Ayurveda* in this regard is equally promising with lesser side effects. [2]

Acharyas have given prime importance to eyes by quoting Sarvendriya nayam pradhanam.<sup>[3]</sup> The clinical picture of Abhishyanda is almost identical to conjunctivitis. The term Abhishyanda is considered as the root cause of all eye diseases by Acharya Sushrut in context of Sarvagata roga. Also, Acharya Sushrut has enumerated it under communicable diseases.<sup>[4]</sup> Abhishyanda is derived from two words Abhi (profuse) and Syandana (discharge or secretion). It is characterised by itching, redness, irritation in eyes, excessive lacrimation, discharge from eyes, burning sensation in eyes and difficulty in opening eyes in the morning.

## **MANAGEMENT**

Acharya Sushrut describes definition of health as *Prasann*, *Aatma*, *Indriya*, *Mana* emphasising the significance of the sense organs, particularly the eyes. Various *Dravyas* and other related formulations like *Rasayanas* alone or in combination have been described in *Ayurvedic* texts for the treatment of *Abhishyanda* and associated conditions.

Ayurveda offers variety of approaches such as Aschyotana, Anjana, Tarpana, Putpaka, Parisheka, Sweda etc. for the management of various Netraroga. These procedures offer several health advantages in case of Abhishyanda. Kaphaghna Dravyas also play important role in Abhishyanda Chikitsa since there is Kapha dominance in Abhishyanda.

## Therapeutic management

Snigdha and Ushna dravyas can be used for Vataj Abhishyanda, Mridu and Sheeta therapy for Pittaja Abhishyanda, Tikshna, Ruksha and Vishada dravyas can be used for Kaphaja

Abhishyanda. Local application of paste of drugs to eyelids externally like Rasanjan, Shunthi, Vacha, Haridra and Murungi, etc. can be used in case of Abhishyanda. Tikshna Gandusha and Nasya is also advised when symptoms are manifested, Snehana with Ghee, Sneha virechana, Snehana nasya and Shirobasti, etc. also advocated to relives symptoms of Abhishyanda. [5]

- > Sahacharadi ghrita or Taila can be administered orally
- Sneha Virechana by Tilwak Ghrita or Kashaya
- > Nasya with Shatavari, Dashmoola, Balamoola Siddha Tail
- Anuvasana basti to eliminate vitiated Doshas
- Chandi milk provides soothing effect
- Rose-paste mixed with *Navneet* relieves symptoms of conjunctivitis
- ➤ Tulsi leaves helps in reducing inflammation
- Triphala Churna is good for curing allergic inflammation and burning sensation
- > Chandrodaya Vati improves allergy resistance, thus can be advised for conjunctivitis
- > Saktu pindika is used for Vataj Abhishyanda
- Granny leaf paste relieves pain and swelling
- > Chirchite paste reduces inflammation

In *Ayurvedic Samhitas*, the local treatment procedures of *Netra* are explained as *Netra Kriyakalpa*. The word '*Kriya*' means therapeutic action and '*Kalpa*' means specific formulations. These are the therapeutic procedures indicated in various ocular conditions.

*Tarpana*- it is pouring of *Sneh Dravya* like *Ghrita* or *Tail* in the eye through a specially prepared border. Indicated in visual disturbances, *Abhishyanda*, *Adhimantha*, *Krichronmilana*, *Timira*, *Anyatovata*, *Vataparyaya* and inflammatory conditions of the eyes, *Vataj* and *Pittaj* diseases of eyes as well as injured eyes due to *Abhighata*. <sup>[6]</sup> Tarpana with Eranda, *Ksheerparni* and *Nagarmotha* can reduce the symptoms of *Abhishyanda*.

Aschyotana -Instillation of few drops of medicines to the open eye from a height of two Angula (inches) is called as Aschyotana. Aschyotana of goat's milk made with the bark of Tagara, Manjishta and Hribera relives symptoms of Abhishyanda.

Anjana- is a procedure of applying medicinal paste or powder to the lower lid from inner canthus to outer canthus, by fingertip or with Anjana Shalaka. Anjana formed by the mixture of Haridra, Jeshtamadha and Haritaki with goat's milk can be beneficial in Abhishyanda.

Anjana formed by mixture of *Prajmoda* juice when applied externally helps in reliving symptoms of conjunctivitis.

*Vidalaka*- it is the application of medicated paste to the outer surface of the eye lids except eye lashes.<sup>[7]</sup> It is indicated in *Daha*, *Updeha*, *Ashru*, *Sopha*, *Raga*, *Toda*, *Bheda*, *Kandu*, *Gharsha*. Drugs like Rasanjan, Shunthi, Vacha, Haridra and Murungi, etc. can be used for the purpose of local application in case of Abhishyanda.

**Padabhyanga**- Application of oil on the feet as massage is called *Padabhyanga* and it is useful for eye disorders due to its *Drishtiprasadan*a effect. Padabhyanga has also been considered one among *Chakshushya varga* by Chakradutta, hence it is useful for maintaining good eyesight and other diseases of eyes. According to Vagbhata there are four important nerves in sole of feet which connect to eyes, and it helps in reliving eyestrain and maintain good vision. [9]

Acharya Kashyap has advocated the use of six plants for eye diseases in children like-Chakshushya, Pushpak, Haritaki, Gorochan, Rasanjana and Katak.<sup>[10]</sup> These can be used alone or in combination with Dugdha, Madhu or Rasanjan for treating eye diseases in children.

## **Prophylactic management**

- 1. Avoid rubbing and touching the eyes
- 2. Clean your hands frequently with soap and water
- 3. Use cool compresses
- 4. Do not share towels or washcloths, contact lens with others
- 5. Avoiding wearing contact lenses until symptoms resolve or consider using daily disposable lenses
- 6. Allergen avoidance is often tricky but should be the primary aim
- 7. Artificial tears can be helpful in mild cases
- 8. home from school, swimming pool or public places until the eye drainage has resolved
- 9. Wear sunglasses if light bothers your eyes<sup>[11]</sup>

## **CONCLUSION**

Conjunctivitis is the most common type of eye disease widely experienced by global population. Due to increased incidence of allergens world-wide and environmental pollution.

Allopathic medications cover the maximum market as they give quick results and are easy to use. But side effects and condition of resistance cannot be ignored. *Ayurveda* brings a ray of hope in this regard as it is treats the disease in purely natural way with lesser side effects. Clinical picture of conjunctivitis mimics *Abhishyanda* in *Ayurveda*. *Ayurveda* offers vast treatment options such as *Netra kriyakalpa*, *Panchkarma* procedures, according to *Doshas*, single *Dravyas* or in combination for managing *Abhishyanda*. Need of the hour is to develop a holistic approach to address the problem of conjunctivitis and its treatment as per *Ayurveda* to avoid future health hazards and for a healthy life.

#### **Conflicts of interest:** none.

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