

## Conjunctivitis (अभिष्यंद)

Conjunctivitis or Pink eye or in hindi "Aankh ka aana" is defined as a swelling or redness of the outer covering (Conjunctiva) of the eye associated with watery, sticky discharges sometimes pus like discharges also seen. The conjunctiva is transparent lubricating layer or covering or lining of outer exposed white part and unexposed inner surface of the eyelids which protects our eyes like defence barrier against bacteria, viruses, allergens, irritants and toxic agents etc.

It is very common and its incidence is more than 10 million cases per year in India. Conjunctivitis affects people at any age but tends to occur most often between the ages of 1 - 25 years of age. Preschoolers and school-age children get it most often because of crowding and lack of good hand-washing, poor hygiene and poor sanitation. Also, it is associated with swimming pools, child's daycare places, day camps, college hostels, and military housing.

Broadly conjunctivitis or pink eye can be of infective origin (like bacterial, viral etc.) or due to allergy. Commonly seen Allergic Conjunctivitis in younger age group and young adults are Vernal (spring catarrh) type. Viral conjunctivitis is the most common eye infection in the world and is highly contagious and is spreads easily by contact with eye secretions from someone who is infected.

Depending on the severity of the causative agents if left untreated may complicate in to many other severe eye diseases or complications.

In *Ayurveda* it is known as *Abhisyanda* (अभिष्यंद) and is said to be highly contagious and if left untreated or neglected may cause other eye diseases.



**Conjunctivitis**

### **Sign and Symptoms:**

- Watery, sticky, sticky pus like, pus like or roapy discharges from the eyes
- Redness, puffiness, swelling of the eyes (outer exposed parts), sometimes localised bled spots visible.
- Sometimes localised painful or painless swelling in front of ear.
- Associated general symptoms including blurred vision, crusts over lid margins, pain in eyes, irritation, grittiness sensation, burning sensation, increased tearing, itching, increased light sensitivity (photophobia), coloured halos, matting or sticky lashes, lid swelling.
- Sometimes fever and increased frequency of sneezing may be associated.

### **Diagnostic tests:**

Usually self diagnosable but sometimes lab tests rarely required

- Routine blood test like Hb, TC, DC, ESR are done
- Specific tests to identify causative bacteria or fungus are performed by examining scrapings from outer covering or layer of the eyes.
- Culture and sensitivity of the discharge materials of the eyes.
- Sometimes in special types of conjunctivitis other tests are required like sputum test for Tuberculosis, X-ray chest, mantoux test, ENT consultation to exclude chronic tonsillitis or adenoids.
- Absolute eosinophil count is required in allergic conjunctivitis.

### **Dos and Don'ts:**

Below some points are mentioned you should keep in mind to avoid conjunctivitis;

- Please avoid allergic substances and exposure to irritants like air pollution, fumes, pollen, grass, animal dandruff, mites and sunlight etc. if sensitive to any of them.
- Please avoid residing in humid, dump, dusty and smoky atmosphere.
- Kindly maintain good hygiene & proper sanitation.
- Avoid sharing of personal belongings.
- Avoid incompatible food intake which you think may precipitate the symptoms.
- If you are a contact lens wearer then avoid wearing it while affected by conjunctivitis.

### Preventive measures:

- Avoid areas of abundant fly population;
- Maintenance of good hygiene and proper sanitation
- Avoidance of hot, dry, dusty climate, overcrowding.
- Avoidance of sharing of personal households e.g. handkerchiefs, towels, cosmetics
- Keep hands away from the eyes as far as possible.
- Washing of hands with soap often at least 5 times a day.
- Avoid consuming incompatible food items (*Viruddhahara*), *Adhyasanam* (over eating)
- Avoid hot head water bath, day time sleeping, night awakening, smoking, cold water bath in hot body condition, suppression of urges.

### Outline of Management:

It often resolves on its own but treatment can speed up recovery process or sometimes if severe left untreated may lead to complications.

In all types of conjunctivitis *Nidana Parivarjana* (avoidance of causative factors) is followed. To manage conjunctivitis causative factors as mentioned earlier should be avoided first. Hot, humid, dusty climate, sharing of personal things, exposure to allergens (like dust, smoke, irritants, pollen, grass, animal dandruff, mites, sunlight etc.) should be avoided.

### Medical management:

There are numbers of herbal and herbo-mineral preparations in practice which are used either topically or internally in conjunctivitis since ages and have their proven effect, used either single or in combinations depending on the severity of symptoms as per attending clinicians advice. The following drugs/formulations may act as anti-bacterial, antihyperemic, anti-pruritic, analgesic, anti-allergic, anti-inflammatory and helpful in patients of conjunctivitis e.g. water extracts of *Candana* (*Santalum album*), *Sphatika* (*Alum*), *Shobhanjana* (*Moringa oleifera*), *Bhringaraja* (*Eclipta alba*), *Haritaki* (*Terminalia chebula*), *Amaiki* (*Emblica officinalis*), *Vibhitaka* (*Terminalia bellerica*), *Tulasi* (*Ocimum sanctum*), *Haridra* (*Curcuma longa*), *Yastimadhu* (*Glycyrrhiza glabra* Linn.), *Daruharidra* (*Berberis aristata*), *Lodhra* (*Symplocos racemosa*), *Eranda* (*Ricinus communis*), *Mustak* (*Cyperus rotundus*), *Manjishtha* (*Rubia cordifolia*), *Bhumyamalki* (*Phyllanthus niruri*), *Karpura* (*Cinnamomum camphora* Linn.), *Nimba* (*Azadirachta indica*), *Sirishsa* (*Albizia lebbik*) and compound formulations like *Triphala kwatha*, *Saptamrita lauha*, *Candrodaya varti*, *Mahatriphaldya ghrta*, *Haridrakhanda*.

Out of the drug mentioned above any one of the drug or in the combination may be prescribed by the physician. The duration of the treatment may vary

from patient to patient. Physician will decide the dose and duration of the therapy based on the clinical findings and response to the therapy.

**Samsodhana cikitsa (Bio-cleansing therapies)** – required in the late stage (*Niramavastha*) of the disease and in early stage (*Amavastaha*) *Shirovirecana* should be done. In early stage (*Ama* stage) of the disease *Langhana*, *Sveda*, *Pralepa*, *Vidalaka*, *tikta anna* consumption, and 4 days can digest it (*Ama Pacana*).

**Kriya-kalpa (specific eye procedures like Tarpana, Putapaka, Seka, Aschyotana, Anjana)** – these are specialised ayurvedic procedures applied judiciously after considering stages of disease. And prior to its application necessary preparatory procedures like purification (*shodhana*) is performed if required and post therapeutic measures should be adopted. *Aschyotana* can be started from the beginning in all stages of the disease and *Putapaka*, *Tarpana* etc can be done in *Nirama* stage of the disease.

#### **Some other supportive Practices:**

The following practices are beneficial in Conjunctivitis;

- Eye washes with clean water.
- Hot compresses with lukewarm water.
- Practise breathing exercises (*Pranayama*).



Pictures showing Ayurvedic procedure (*Kriya-kalpa*) (specific eye procedures like *Tarpana*, *Aschyotana*)

## FREQUENTLY ASKED QUESTIONS

### What is "Conjunctivitis" or pink eye?

"Conjunctivitis" or Pink eye also known as in hindi "आँख का आना" is defined as a swelling or redness of the outer covering (Conjunctiva) of the eye .

### What is the cause of Conjunctivitis?

The main causes of a red or inflamed eye are infections caused by viruses or bacteria; with viruses being the most common cause and allergy.

### Who is prone to get Conjunctivitis?

Children get Conjunctivitis most often but anyone of any age can be affected.

### What are the symptoms of Conjunctivitis?

Usually self diagnosable, the viral form of Conjunctivitis causes the eye to become red and watery. A discharge from the eyes, swollen eyelids or blurred vision may also be noticed. Eyelashes may be matted together when waking in the morning or after a nap.

### How Conjunctivitis spreads, is it Conjunctivitis contagious?

Yes, Conjunctivitis viral form is highly infectious or contagious spreading easily through many of our most common daily activities. The bacterial form of Conjunctivitis stops being contagious after 1-2 days of proper treatment. The viral form of Conjunctivitis can remain contagious until the eyes become symptom free. Sometimes there is associated ear infection may be the cause so ear examination by doctor is performed.

### Is there any test to know if the Conjunctivitis is viral, bacterial or allergic?

Yes, the FDA-cleared a point-of-care test, AdenoPlus™. This in-office test detects the viral form of Conjunctivitis in ten minutes for early treatment. For bacterial form, culture and sensitivity test of the discharges from the eyes is performed. Absolute Eosinophil count is required in allergic conjunctivitis.

### How is conjunctivitis treated?

It often resolves on its own but treatment can speed up recovery process or sometimes if severe left untreated may lead to complications. In Ayurveda, there are several single and compound drugs and procedures available depending on the severity and types as per judgement of the attending physician. However In all types of conjunctivitis *Nidana Parivarjana* (avoidance of causative factors) is followed. To manage conjunctivitis causative factors as mentioned earlier should be avoided first. Hot, humid, dusty climate, sharing of personal things, exposure to allergens (like dust, smoke, irritants, pollen, grass, animal dandruff, mites, sunlight etc.) should be avoided as a precautionary measure. Common recommendations are: • Apply a cool compress to the eye 3-4 times a day and for 10 minutes, and make sure to use a clean washcloth each time • Wash your hands frequently

and try to keep your hands away from the eye area • Use a clean pillow cover each night • avoid or discard use of contact lenses that have been worn while infected.

### **When is it advisable to return to normal functioning, school, or work with conjunctivitis?**

With bacterial form of conjunctivitis you can usually return to public places 24-48 hours after proper treatment. With viral form conjunctivitis the contagious period may last as long as the symptoms persist.

### **What can I do at home to help relieve the symptoms?**

Frequent wiping away the drainage from around the eyes with a clean warm damp washcloth. You may need to hold the cloth over eyes for a few seconds to help remove thicker crust sometimes found after sleep and of course, wash your hands very well after touching the drainage!

### **How can conjunctivitis be prevented?**

The best measures to prevent conjunctivitis are to avoid areas of overcrowding, maintenance of good hygiene and proper sanitation, avoidance of hot, dry, dusty climate, avoidance of sharing of personal households e.g. handkerchiefs, towels, cosmetics, keep hands away from the eyes as far as possible, washing of hands with soap often at least 5 times a day, avoid consuming incompatible food items (*Viruddhahara*), *Adhyasanam* (over eating), avoid hot head water bath, day time sleeping, night awakening, smoking, cold water bath in hot body condition, suppression of urges. Also children need to be taught to avoid touching their eyes (as well as the nose and mouth) since these are gateway for infections to enter our bodies. At home, if someone is affected in the family Conjunctivitis, be sure this person has own washcloth and towels in the bathroom to prevent spread of infection through the infected/contagious discharges from the eyes.