



The Human Eye - Cut Away View

## Allergic Conjunctivitis

Conjunctiva is the outer lining of eye balls. When it is red and inflamed, it is known as conjunctivitis. There are many reasons for conjunctivitis. Pink or red eye is often caused by viral and other infections. Usually it starts in one eye and subsequently spreads to the opposite eye. It is characterized by redness, pain, difficulty seeing bright lights, sticky and crusty secretions and sometimes by development of visual difficulties. There may be history of contact with another pink eye sufferer. Infectious conjunctivitis is often contagious. On the other hand conjunctivitis caused by allergies often involves both eyes simultaneously and is characterized by itching of the eyes, red and swollen conjunctiva, profuse tearing and watery secretions, stinging and burning sensation and swollen eyelids bilaterally.

Allergic conjunctivitis can appear in two forms: seasonal and perennial. The seasonal version is much more common, and is related to exposure to specific airborne allergens, such as grass, tree and weed pollens and molds. The perennial form persists throughout the year and is usually triggered by dust mites, animal dander and feathers.

There are several components in the treatment of allergic conjunctivitis: allergen avoidance, symptomatic treatment by using cold compresses and refrigerated tear substitutes and by using prescription eye drops. Some of the over the counter eye drops contain decongestant medications. They are very effective at relieving redness of eyes immediately. However, if used for long periods they could cause worsening of the eye condition (Conjunctivitis medicamentosa- just like rhinitis medicamentosa caused by OTC decongestant nasal sprays like Afrin).

Eyes tend to get drier as we get older, in dry climates, following exposure to constant breeze, in occupations requiring frequent staring at computer screens or TV screens' following use of certain medications such as antihistamines and in certain autoimmune conditions. People with dry eyes should avoid wearing contact lenses and use refrigerated OTC artificial tears such as TheraTears, Refresh or Systane eye drops several times during the day. Dry eye symptoms get worse as the day progresses and can be particularly worse at night. The eyes feel gritty, dry, itchy and burning.

Topical eye medications, over-the-counter (OTC) decongestants, prescription antihistamines, mast cell stabilizers and anti-inflammatory drugs are all used for the treatment of allergic conjunctivitis, but there are some differences. Topical antihistamines (drop form) are effective, with levocabastine (Livostin) having rapid onset of action and prolonged protection. Additionally, several mast-cell stabilizer medications are available. Lodoxamine (Alomide) can be effective, and nedocromil (Zaditor) and cromolyn (Crolom) inhibit mast cells and provide clinical relief. Olopatadine (Patanol) has dual action as a mast cell inhibitor and antihistamine. It provides clinical relief and can be used in children above 3 years. This group of medicines shows the greatest potential for relief of the symptoms of allergic conjunctivitis. Ketorolac (Acular) is a non-steroidal anti-inflammatory drug, which blocks production of the allergy mediators, prostaglandins, and relieves itching and burning. This can also be effective.

You may also be tempted to use OTC topical decongestants which claim to relieve eye-related symptoms as well. However, these medications can have potentially serious adverse effects and are not always effective. In addition, oral antihistamines alone often do not provide adequate relief. And while corticosteroids are effective medicines in the treatment of hay fever, they are too potent for routine use in allergic conjunctivitis. Due to potential side effects, their use is limited to extreme situations. If you're experiencing symptoms of allergic conjunctivitis, see your allergist/immunologist, who will prescribe the best treatment for you.

Because the skin of the eyelid is thin, soft and pliable, there is increased susceptibility to swelling and redness with minor degrees of inflammation. *Contact dermatitis* is the most common cause of a rash of the eyelid and surrounding area. The most frequent trigger of this rash is cosmetics applied to the hair, face or fingernails. The sites to which these cosmetics are applied may not be affected at all, but the eye area is. This is especially true for hair dye and nail polish. The typical onset of this eye rash occurs when cosmetics are applied on or near the eyelids. Symptoms can include stinging and burning of the eyes and eyelids. The lids become red, thickened and scaly in appearance. The treatment is to identify and eliminate the suspected sensitizer and then apply a topical corticosteroid (cream) to the eyelid and surrounding area.

Allergies of the eye can be extremely disturbing, but with the help of an allergist/immunologist, symptoms can be prevented and controlled.