

# Allergic Conjunctivitis

## Overview

- Signs and symptoms of inflammatory diseases of the eye overlap various conditions
- Ocular complaints are uncommonly the only complaint in allergic disease
  - Perhaps 10% of the cases, eye problems are the only manifestation of allergies
- The sensitivity of the eye to allergen-induced problems results in the frequent manifestations
  - Itch, watering, swelling, soreness
  - These can often be the most prominent features but not usually the only symptom

## Allergic Diseases of the Eye

- Conjunctivitis: Inflammation of the Conjunctiva
- Broad spectrum of problems can cause conjunctivitis
  - Allergy – IgE-mediated or cellular-mediated reactions
  - Infection – Viral and bacterial are most common
  - Autoimmune – Uveitis, episcleritis, vasculitis (RA, SLE, PAN, Wegner's)
  - Miscellaneous- Dry eye, irritants, foreign body
- Acute Allergic Conjunctivitis (IgE-mediated)
  - Seasonal (cedar, oak, ragweed)
  - Perennial (cat, dust mite)
- Vernal Keratoconjunctivitis (VKC)
  - Chronic mast cell-epithelial-lymphocyte disorder
  - Begins often in grade-school boys and often resolves by 3<sup>rd</sup> decade
  - Usually have year round symptoms
  - Tense pruritus aggravated by non-specific triggers (wind, hot weather, etc)
  - Papillary response on the upper lid similar to that seen in giant papillary conjunctivitis
  - Corneal symptoms include photophobia, foreign body sensation, and giant papillae (7-8 mm) on the tarsal conjunctiva
  - Can lead to blindness
  - While 50-60% have positive skin tests, immunotherapy does not help
- Atopic Keratoconjunctivitis (AKC)
  - More common than VKC and seen in patients with eczema and asthma
  - May begin in 20's but becomes more common as one gets older
  - 25% of elderly eczematous patients have some AKC
  - Intense pruritus, thickened eyelids, and 40% of patients over 30 contract ocular herpes
  - Symptoms are present on year round basis with seasonal exacerbations
  - In cases with severe Atopic Dermatitis, cataracts occur in 10% of patients which involve the anterior portion of the lens
- Drug-Induced Conjunctivitis/Contact Dermatitis of the Eyelids
  - Usually delayed-type hypersensitivity caused by cosmetics (e.g. hair dyes, nail polish), thimerosal, neosporin, and agents used to treat glaucoma
  - Stinging and burning are the commonest complaints
- Giant Papillary Conjunctivitis
  - Most often seen in extended-wear soft contact lens
  - Papillary hypertrophy of the tarsal conjunctiva is seen in 5-10% of soft lens wearers
- Tear Film Dysfunction
  - Often seen in RA, Sjogren's syndrome, HIV disease
  - Perimenopausal and post-menopausal women, computer users, lens wearers
  - Initially complain mild injection and excessive mucus that is confused with SAC or PAC
  - Gritty, sandy feeling which usually worsens later in the day
  - Anticholinergic properties of antihistamines, TCAs, B-blockers, retinoids, etc.