KISS: Allergic Eye Disease

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Assessment:

- **History and examination:**
  - Itching is the predominant symptom; also ask about discharge, duration of symptoms and exacerbating factors; is it seasonal? how much is it affecting quality of life?
  - Check visual acuity (VA); look for corneal and limbal (around the iris) irregularities; consider fluorescein stain if pain, loss of vision or photophobia
- **Red flags (require acute referral):**
  - Pain +/− photophobia; blurring or loss of vision; red eye in contact lens wearer; corneal involvement (ulcer, opacity or spots, limbal changes); recent eye surgery
- **Differential diagnoses:**
  - Infective conjunctivitis - eyes tend to be affected sequentially and discharge tends to be more mucous; URTI symptoms usually present
  - Other differentials include serious causes of red eye (see separate chapter/KISS on 'corneal ulcers and acute red eye') and dry eye disease (see chapter on 'dry eyes')

Causes:

- **Seasonal allergic conjunctivitis (SAC)** - bilateral conjunctival redness with watery/mildly mucous discharge; associated with childhood atopy; most frequent in spring and summer, triggered by pollens; often associated with nasal symptoms (rhinoconjunctivitis)
- **Perennial allergic conjunctivitis (PAC)** - presents as for SAC, but doesn't follow seasonal pattern; triggered by environmental allergens e.g. house dust mites, animals, fungal spores
- Rare causes include **vernal and allergic keratoconjunctivitis** - severe forms of allergic eye disease; present with severe symptoms and often red flags e.g. keratitis, corneal erosions; need to be under secondary care - usually need topical steroids +/- immune suppressants

Management:

- **Preventative measures:**
  - Cold compress; avoid rubbing eyes; refrigerated preservative free lubricants (need to use >4-6 times/day); ?allergen avoidance (evidence for effectiveness poor)
- **Acute symptoms (alone or in combination)**:
  - **Topical antihistamines (AH)** (e.g. azelastine) - well tolerated; only need BD application; switch to alternative if treatment failures or side effects
  - 2nd generation **oral AH** (e.g. cetirizine, loratidine)
  - **Topical vasoconstrictors** - short acting so require frequent use; can result in rebound symptoms; don't use long term or in those with CVD or hypertension
- **Chronic symptoms:**
  - **Mast cell stabilisers** (e.g. sodium cromoglycate, nedocromil sodium) - need QDS application; can cause burning sensation; take several weeks to become effective
  - **Combinations** of topical AH, oral AH and mast stabilisers if single agents ineffective
- **Patient information:** Click here for a good patient information leaflet
  - **Manage expectations** - aim of treatment is to improve symptoms to resume normal activities *not* to eliminate symptoms; treatments take several weeks to suppress symptoms; outcomes are generally dependent on adherence to treatment
  - If patients have **predictable flares**, start treatment continuously for several weeks before as well as during flare periods; if flares are **unpredictable** or symptoms occur throughout the year, consider long term treatment