



## ALLERGIC CONJUNCTIVITIS

### Top tips for MURs

- Check patient's understanding of why medication has been prescribed
- Give advice on identifying and avoiding the most likely allergens, depending on whether conjunctivitis is related to seasonal or perennial allergens (**see lifestyle advice section**)
- Advise patient on the importance of regularly administering eye drops. Mast cell stabilisers e.g. sodium cromoglicate should be applied routinely for several weeks to provide prophylactic benefit<sup>1</sup>
- Place cool compresses (e.g. flannel soaked in cold water) on the affected eyes (for 5-10 minutes once or twice a day) to ease symptoms<sup>1,2,3</sup>
- Advise patient that topical antihistamines are more effective than oral antihistamines and that oral antihistamines should only be used if the patient has concurrent rhinitis or sinusitis<sup>1</sup>
- Advise patient avoids rubbing their eyes<sup>2</sup>
- If contact lenses are worn, remove these until symptoms resolve
- Advise that frequent use of artificial tears throughout the day may help remove allergens or dilute them<sup>1</sup>
- Counsel patients on signs/ symptoms that may need referral and common side effects (**see overleaf**)
- Report any relevant adverse drug reactions to the Yellow Card Scheme

### Pathophysiology of allergic conjunctivitis

Allergic conjunctivitis is a term used to describe a group of ocular conditions which are associated with raised immunoglobulin E (IgE) levels. It includes seasonal allergic conjunctivitis associated with hayfever and perennial allergic conjunctivitis associated with non-seasonal environmental allergens<sup>1</sup>. In allergic conjunctivitis, exposure to allergens causes inflammation of the conjunctiva and dilation of conjunctival vessels<sup>1</sup>, leading to symptoms such as red, watery, itchy or gritty eyes. Allergic conjunctivitis may co-exist with other atopic conditions such as allergic rhinitis, asthma, urticaria and eczema<sup>1</sup>.

### How do drugs used to treat allergic conjunctivitis work?

Mast cell stabilisers e.g. sodium cromoglicate	Prevent degranulation of mast cells and the release of histamine and other inflammatory mediators.
Antihistamines (ocular/oral) e.g. antazoline	Antagonise histamine H1-receptors which reduces histamine release and thus reduces inflammatory response.
Topical vasoconstrictor	Constrict ocular blood vessels via the activation of alpha-adrenergic receptors, reducing the carriage of allergy mediators to the conjunctiva. <sup>3</sup>

### Red flags that need referral

- Any symptoms of eye pain, foreign body sensation or photophobia.
- Differences in pupil sizes<sup>1</sup>
- Any reduced vision that doesn't resolve after blinking.
- Stickiness, crusting or discharge of the eye
- Crusting of the eyelids or eyelid eczema
- Severe itch or intense redness in one eye or both<sup>5</sup>
- Contact lens use with any red flag symptoms
- One eye more affected than the other
- Recent intraocular surgery<sup>1</sup>

### Lifestyle issues

- Counsel patient on reducing alcohol intake to within safe limits (up to 14 units a week, spread evenly over 3 or more days)
- Counsel patient on healthy eating, exercise & weight loss (if BMI > 25kg/m<sup>2</sup>) and advise adequate dietary calcium to counteract osteoporosis
- Advise patients who smoke the benefits of stopping smoking and how to access pharmacy smoking cessation services or 'Help Me Quit' resources
- Advise patient to limit exposure to causative allergens (see table overleaf)





### Causative allergens

Hayfever (pollen/grass)	Perennial allergic rhinitis – house dust mites	Perennial allergic rhinitis - pets
Monitor pollen forecasts daily, avoid walking in grassy open spaces when the pollen count is high. <sup>1,4</sup>	Use allergy-proof covers on bedding and synthetic pillows and acrylic duvets instead of woollen or feathered sets. <sup>4,5</sup>	Restrict pets to outdoors or to limited areas in the house (not in the bedroom).
Avoid line-drying clothes.	Wash bedding at 60°C.	Wash dogs and cats regularly.
Shower and wash hair after arriving home on high pollen days.	If possible remove all carpeting in the bedroom and replace with wood /hard vinyl floors.	Remove carpets from rooms where pets are kept.
Keep windows closed in cars or buildings.	Vacuum hard floors regularly with a high-filtration vacuum cleaner or a high-temperature steam-cleaner. Vacuum all surfaces of upholstered furniture at least twice a week. <sup>4</sup>	Vacuum hard floors regularly with a high-filtration vacuum cleaner or a high-temperature steam-cleaner. Vacuum all surfaces of upholstered furniture at least twice a week. <sup>4</sup>
Change car pollen filters at each service.	Damp-wipe all surfaces each week.	Wash pet bedding and baskets regularly.
Avoid mowing lawns or raking leaves.	Use light washable cotton curtains and wash them frequently or use fitted blinds that can be wiped clean. <sup>4,3</sup>	Consider using a good air filter or ventilate rooms well.
Wear wrap-around sunglasses when outdoors.	Keep furry toys off beds. Wash them weekly at 60°C or place in a plastic bag in the freezer for 12 hours at least once a month. <sup>4</sup>	Wash your hands thoroughly after handling pets.
	If necessary use a dehumidifier to keep indoor humidity under 50% (but over 30%). <sup>4</sup>	Groom dogs outside.

### What are the common side effects to look out for?

Drug	Common side effects	Recommendation
Topical mast cell stabiliser/ topical vasoconstrictor/ topical antihistamine*	Mild stinging or temporary blurred vision, itching, redness, irritation.	Normally transient, if persists refer to prescriber. Do not drive until vision is clear.
Oral antihistamines	Sedation ( <i>uncommon in second generation antihistamines e.g. loratadine, fexofenadine and cetirizine</i> ), dry eye.	Counsel patient to avoid driving if affected and to avoid alcohol.

\*Combination products may possess a combination of side effects.

### Potential serious drug interactions?

Oral antihistamines, particularly first generation antihistamines can interact with other medicines, including: opioid analgesics, antibiotics, antidepressants and antivirals. **See BNF Appendix 1 for more details**

### Where can you find more information?

1. NICE Clinical knowledge Summaries: Conjunctivitis - allergic <https://cks.nice.org.uk/conjunctivitis-allergic>
2. The College of Optometrists: Clinical Management Guidelines: *Seasonal Allergic Conjunctivitis (Hay Fever Conjunctivitis); Perennial Allergic Conjunctivitis* June 2017 <https://www.college-optometrists.org/guidance/clinical-management-guidelines/seasonal-allergic-conjunctivitis.html>
3. Northern Ireland Centre for Pharmacy Learning and Development e-learning programme: *Minor Ailments: Eyes, Ears and Oral Health*, available on the WCPPE website: <https://www.wcppe.org.uk/>
4. Allergy UK [www.allergyuk.org](http://www.allergyuk.org)
5. NHS Choices <http://www.nhs.uk/pages/home.aspx>

