

# A step-care approach to the management of seasonal allergic conjunctivitis

Meyer D, MB ChB(Stell), MFGP(SA), HonsBSc(Pharm), MMed(Stell), FCOphth(SA), PhD  
Department of Ophthalmology, University of Stellenbosch

Correspondence: dm2@sun.ac.za

Allergic conjunctivitis is a very common condition especially during the pollen season in South Africa. Most sufferers will tend to either manage the condition by self-medication with over-the-counter drugs. This will be adequate for many, but those who fail to respond will eventually consult their medical practitioner. This short management overview attempts to convince the practitioner that patients need logical pharmaceutical care as well as comprehensive management. (SA Fam Pract 2004;46(7): 45-46)

## Summary

When the breezes of spring arrive, they jostle loose minute pollen particles from several kinds of flowering plants and trees. Carried by the winds, many of these tiny yellow particles will make their way to the conjunctivae of human beings. Itchy, red, watery eyes will ensue leading to patient misery and multiple phone calls to doctors, optometrists and pharmacists. Effective management of this very common condition begins with a careful history and a proper diagnosis.

## Is the diagnosis accurate?

Is it definitely an allergic conjunctivitis? Is it seasonal or perennial? Is it related to some topical medication or contact lens wear? Is the patient aware of any pollen, grass, mould, or animal dander allergy? Does asthma, hay fever, or eczema accompany it?

## How severe are the symptoms?

Treatment depends on the severity of the allergic reaction and therefore on the patients' symptoms and not necessarily the clinical signs, which may sometimes be notoriously few.

## At which level should the therapy be pitched?

This is where the science and art of

medicine once again meet. It is a decision the clinician should make for each individual patient following a proper eye examination and correct history. The algorithm below does not attempt to be prescriptive as to which patient gets treated with what. That remains purely a clinical decision. Furthermore the level of therapy may vary from time to time in the very same patient.

## Non-pharmacological intervention

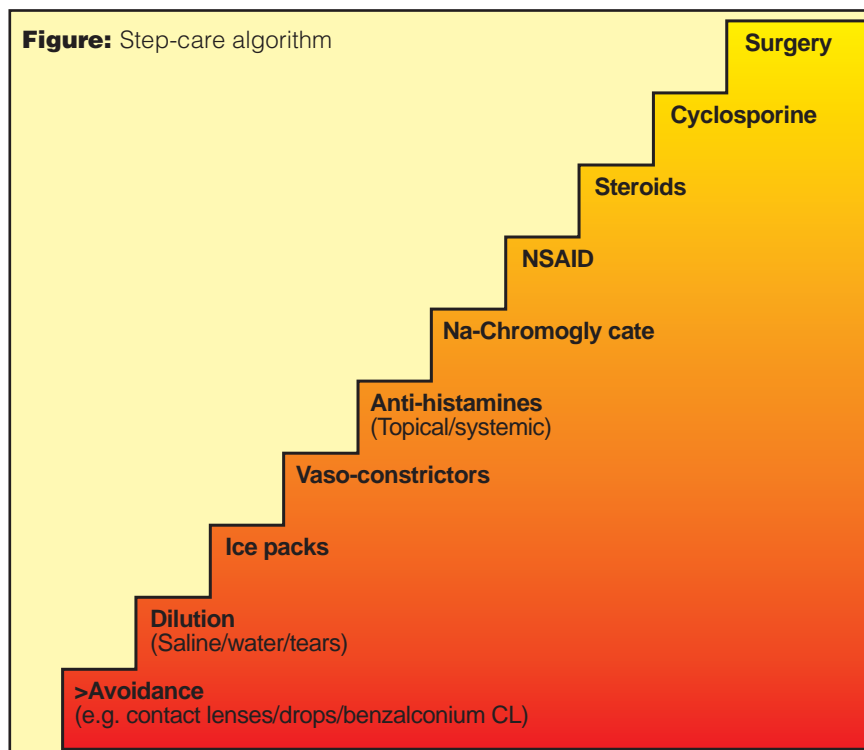
### 1. Identification and avoidance of allergen

The primary approach to the management of ocular allergic disease should be education of the patient and family on the nature of the causative allergens and their environmental control.

### 2. Dilution of the antigen

This can be used very effectively

Figure: Step-care algorithm



especially in the acute attack or when the ocular surface had been recently exposed to a large dose of allergen. The patient is simply taught to rinse the eyes with a solution of one teaspoon of table salt and half a teaspoon of bicarbonate of soda in a litre of lukewarm water. Alternatively, just instilling synthetic commercial teardrops will also dilute the antigen load.

### 3. "Cryotherapy"

Simple application of ice in the form of ordinary freezer ice cubes or the commercially available ocular icepacks on the closed eyelids will help in the acute case to reduce conjunctival chemosis and eyelid swelling, aid vasoconstriction and relieve itching.

## Pharmacological intervention

### 1. Vasoconstrictors

More than a million bottles of vasoconstrictors are purchased in the USA each month. Vasoconstrictors provide symptomatic relief by decreasing conjunctival oedema and hyperaemia. Most eyes whiten within 1 minute of instillation of the drop and the effect of a single application lasts up to 4 hours. Long-term use may however lead to rebound congestion and dependence. *Examples include:* NAPHAZOLINE (e.g. Albalon A®, Antistin-Privin®) PHENYLEPHRINE (e.g. Prefrin®, Universal Eye Drops®) OXYMETAZOLINE (e.g. Oxylin®) TETRAHYDROZOLINE HCL (e.g. Gemini®, Spersallerg®).

### 2. Antihistamines

Examples include: ANTAZOLINE (e.g. Albalon-A®, Antistin-Privine®, Spersallerg®) a specific H<sub>1</sub> receptor antagonist and has been used since the 1940s. LEVOCABASTINE (Livostin®) and EMEDASTINE (Emadine®) are newer potent, selective, and longer acting H<sub>1</sub>-receptor antagonists.

### 3. Non steroidal anti-inflammatories (NSAID)

(e.g. Acular®, Naclof®, Ocufer®) Although not primarily registered for this indication in SA, Acular is registered for the treatment of aller-

gic conjunctivitis in the USA.

### 4. Mastcell stabilisers

(e.g. Na chromoglycate (Opticrom®) and Lodoxamide (Alomide®)). They both suppress type I hypersensitivity reactions by inhibiting the degranulation of mast cells and by preventing the release of histamine and other mediators.

### 5. Topical steroids

(e.g. betamethasone (Betnesol®), dexamethasone (Maxidex®), prednisolone (Pred-Mild®), fluorometholone (Efemoline®)). The conundrum is that steroids work extremely well! Unfortunately, they have significant side-effects like glaucoma and cataract formation. Topical steroids should therefore be used with extreme caution and only when all other measures have failed.

### 6. Cyclosporine-A

The use of topical cyclosporine-A is a valuable adjunct in severe cases and should be prescribed and monitored by an ophthalmologist.

### 7. Surgery

Several surgical procedures may

be necessary in the optimal management of severe allergic eye disease and its complications, but once again is the domain of the ophthalmic surgeon.

## Conclusion

Allergic conjunctivitis is usually a chronic condition and remains difficult to manage effectively and I therefore always suggest a step-care approach, starting with identifying and avoiding the antigen and progressing step by step to the top of the ladder where the use of steroids become unavoidable. Educating the patient to understand the condition and supplying the patient with all the step-care knowledge will aid him or her in controlling symptoms adequately and will therefore reduce dependency on drug therapy.

## Reference

1. Abelson MB and Zbyszynski B. Vasoconstrictors. In: Abelson MB (Ed). *Allergic Diseases of the Eye*. W.B. Saunders Company: Philadelphia. 2000.

## Note:

Contact INFOMED at the Tygerberg Campus Library at [infomed@sun.ac.za](mailto:infomed@sun.ac.za) to request one of the above references

© Stellmed Updates, Faculty of Health Sciences, Stellenbosch University.  
All Articles are Peer Reviewed.



It's the **shell** that makes **Ecotrin®** safer.

Safety-Coated  
**Ecotrin®**  
81mg

The miracle of Aspirin made **safer**.

Each tablet contains Aspirin 81mg. Reg.No.: 29/2.7/0767  
Pharmafica (Pty) Ltd. 33 Hulbert Road, New Centre, Johannesburg 2001  
Under licence from Goldshield Pharmaceuticals Ltd. U.K.