# Over-the-counter eye preparations for allergies

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### Introduction

Eye allergies, also known as allergic conjunctivitis, occur when the eyes react to a substance which irritates them. These substances are called allergens.\* The condition is characterised by itchy, watery, red eyes. Over-the-counter (OTC) eye preparations are available which may help to alleviate the troublesome symptoms of eye allergies.

### **Causes**

When the eyes come into contact with an allergen, such as grass pollen, the immune system fights against it by releasing histamine, thereby causing the typical symptoms of eye allergies. Most eye allergies are triggered by airborne allergens.

Eye allergies may occur at any time of year. Seasonal allergic conjunctivitis is particularly common during spring, summer, and autumn, and is often triggered by the pollens of trees and grasses. Perennial allergic conjunctivitis is triggered by allergens such as pet dander, mould, smoke and dust which occur year-round.

### **Symptoms**

Common symptoms of eye allergies are:

- Burning eyes
- Watery eyes
- · Red or pink eyes
- · Scaling around the eyes
- · Swollen or puffy eyelids, especially in the morning
- Contact lenses may become uncomfortable, since allergens and other substances accumulate on the surface of the lenses

## Management

The following may be tried as an initial step to relieve the symptoms of eye allergies:

- Avoid the allergy trigger where possible
- Use artificial tears to help dilute and remove the allergens
- Place a cold compress over the eyes to relieve swollen sore eyes

Taking certain **oral medications** may be helpful including:

- Antihistamines, such as loratadine, cetirizine, and fexofenadine
- Decongestants, such as pseudoephedrine in combination with an antihistamine such as loratadine

### Over-the-counter eye drops

There are a number of OTC eye drops available which are formulated to relieve the troublesome symptoms of eye allergies. Some eye drops relieve symptoms quickly and are suitable for short-term use, while others are used for the prevention or long-term relief of eye allergy symptoms.

OTC eye drop products include:

- Antihistamines
- Decongestants
- · Mast cell stabilisers and
- Combination preparations

### **Antihistamines**

Antihistamines reduce allergic reactions by blocking histamine in the body. Available antihistamine eye drops contain:

- Antazoline (usually in combination with a decongestant)
- Azelastine

<sup>\*</sup>An allergen is a substance that causes an allergy in a person sensitive to that substance. Only people who are allergic to that allergen will show a reaction.

- Emedastine
- Levocabastine

### **Decongestants**

Decongestant eye drops relieve red eyes by constricting the blood vessels supplying the white of the eye. Prolonged use of these agents should be avoided since they may cause "rebound redness" in the eye. Medical attention should be sought if irritation or redness is not relieved within 48 hours. Available decongestant eye drops contain:

- Naphazoline
- Oxymetazoline
- · Phenylephrine
- Tetrahydrozoline

# Combination antihistamine/decongestant

Examples include:

· Antazoline and tetrahydrozoline

#### Mast cell stabilisers

These agents exert their effect by stabilising mast cells, thereby blocking them from releasing histamine. Since it may take several weeks for the full benefit of mast cell stabilisers to take effect, these eye drops are best initiated before the allergy season starts.

These agents are suitable for long term use. Available preparations include:

- Lodoxamide
- Sodium cromoglycate

# Combination antihistamine and mast cell stabilising eye drops

These agents have both antihistaminic and mast cell stabilising properties. They are effective in treating and preventing symptoms of allergic conjunctivitis. Examples include:

- · Epinastine has antihistaminic and mast cell stabilising effects. It is indicated for the short-term treatment of seasonal allergic conjunctivitis.
- · Ketotifen has antihistaminic and mast cell stabilising effects. It is used to prevent and treat itching of the eyes caused by seasonal allergies.
- · Olopatadine is a selective antihistaminic and mast cell stabilising agent. It is indicated for the temporary prevention of itching of the eye due to allergic conjunctivitis.

### **Lubricating eye drops**

Artificial tears can be helpful by washing allergens from the eyes. Examples include:

- Carboxymethylcellulose
- Hydroxypropylmethylcellulose
- Polyvinyl alcohol

#### **Caution: contact lens wearers**

Many eye drops may not be used by contact lens wearers. Sometimes, lenses may be removed and re-inserted after instilling the eye drops. It is recommended to check the prescribing information for each product.

### Self-help tips

- · Initiate prophylactic eye drops timeously before the allergy season starts.
- Avoid eye allergies by limiting exposure to allergens.
- Protect the eyes by wearing wrap-around sunglasses.
- Some eye drops may sting or burn when they are used in the eye. Storing them in the fridge may alleviate this.
- When using OTC eye preparations, always follow the instructions given by the manufacturer or prescriber.

#### **Conclusion**

Several OTC eye drops are available to treat the symptoms of eye allergies. The pharmacist's assistant is well placed to advise the patient in this regard. A doctor should be consulted if the allergy symptoms worsen or are particularly severe, or if these agents prove ineffective after an appropriate period of time.

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