CONDITION

Allergic conjunctivitis

Learn how eye allergies cause itching, redness, and watering, how allergic conjunctivitis is diagnosed, and which treatments and warning signs to discuss with a clinician.

WHAT IT IS
Allergic inflammation of the conjunctiva

BODY SYSTEM
Eyes

MAIN SYMPTOMS
Itching, redness, watering, eyelid swelling

WHAT CAUSES IT
Immune reaction to allergens

HOW IT IS DIAGNOSED
Medical history and eye examination

MAIN TREATMENT
Allergen avoidance and anti-allergy eye drops

CAN IT BE CURED?
No - treatment only controls symptoms

IS IT AN EMERGENCY?
Sometimes - sudden major vision loss

LONG-TERM OUTLOOK
Usually no permanent damage, but severe forms may reduce vision

Overview

Allergic conjunctivitis is inflammation of the conjunctiva caused by an allergic reaction. The conjunctiva is the thin, clear tissue covering the white part of the eye and lining the inside of the eyelids.

The reaction begins when the immune system responds to a usually harmless substance, such as pollen, dust mites, or animal dander. The body releases histamine and other chemicals. These chemicals cause itching, redness, watering, and swelling.

Allergic conjunctivitis often affects both eyes. It is not contagious and cannot spread from person to person. Many people also have nasal allergies, including sneezing, congestion, and a runny or itchy nose.

Common forms include seasonal allergic conjunctivitis, which appears during certain pollen seasons, and perennial allergic conjunctivitis, which can occur throughout the year. Less common forms, such as vernal or atopic keratoconjunctivitis, may be more persistent and can affect the cornea, the clear front surface of the eye.

Most uncomplicated cases do not damage vision. However, eye redness can have many causes, including infection, inflammation inside the eye, injury, and contact lens problems. Pain, light sensitivity, or a change in vision needs prompt assessment because these symptoms are not typical of simple eye allergies.

Symptoms

Itching is the symptom most strongly associated with allergic conjunctivitis. The urge to rub the eyes may be intense, but rubbing can increase swelling and irritation.

Symptoms commonly include:

Vision may be temporarily blurred by tears or mucus, but it should usually clear after blinking or gently wiping away the discharge. Persistent blurred vision is not typical and should be evaluated.

Thick pus-like discharge, eyelids stuck together on waking, or symptoms that begin in one eye may point toward another cause, such as infectious conjunctivitis. These features do not confirm an infection on their own, so an examination may still be needed.

More severe allergic eye conditions can cause marked light sensitivity, thick mucus, a foreign-body sensation, or changes on the inner eyelid or cornea. Children and young adults are more likely to develop vernal keratoconjunctivitis, while atopic keratoconjunctivitis is associated with long-standing eczema and other allergic disease.

- Itching, burning, or mild irritation
- Red or bloodshot eyes
- Clear, watery tears
- Puffy eyelids or swelling around the eyes
- A swollen, jelly-like appearance of the conjunctiva, called chemosis
- Stringy or thin mucus
- Symptoms in both eyes, although one may be worse
- Sneezing, nasal congestion, or an itchy nose

Causes and risk factors

Allergic conjunctivitis occurs when an allergen reaches the eye and triggers an immune response. Outdoor allergens may cause symptoms during particular seasons. Indoor allergens can produce symptoms at any time of year.

Possible triggers include:

A person may react to more than one trigger. Windy, dry days can increase exposure to airborne pollen. Outdoor symptoms may be stronger when local pollen levels are high. Indoor symptoms may become more noticeable around pets, bedding, carpets, or damp areas where allergens collect.

Risk is higher in people with other allergic conditions, such as hay fever, asthma, or eczema. A family history of allergic disease can also increase susceptibility.

Contact lenses do not directly cause ordinary seasonal allergies, but allergens and deposits can collect on a lens. This may worsen irritation. A separate condition called giant papillary conjunctivitis can develop in response to repeated friction or deposits associated with contact lenses, an exposed suture, or an ocular prosthesis. It causes itching, mucus, discomfort, and bumps under the upper eyelid.

Eye symptoms can also result from smoke, fumes, chlorine, dry air, or other irritants. These reactions are not always true allergies, even if the symptoms look similar.

- Tree, grass, and weed pollen
- Mold spores
- Dust mites
- Animal dander
- Cockroach allergens
- Cosmetics or skin-care products used near the eyes
- Some eye drops or their preservatives

Diagnosis

A clinician usually diagnoses allergic conjunctivitis from the symptoms, medical history, and eye examination. Important clues include strong itching, watery discharge, involvement of both eyes, repeated seasonal episodes, and a history of allergies.

The clinician may ask when symptoms started, whether they occur indoors or outdoors, and

whether there has been exposure to pets, pollen, cosmetics, medicines, or people with eye infections. Contact lens use is important because redness or pain in a contact lens wearer can sometimes signal a corneal infection.

During an examination, the clinician may assess vision, pupils, eyelids, eye movements, and the surface of each eye. A slit lamp, which is a microscope with a bright light, can provide a detailed view of the conjunctiva and cornea. Fluorescein dye may be placed in the eye to reveal scratches, ulcers, or other damage to the corneal surface.

Routine laboratory tests are usually unnecessary. Allergy testing may be considered when symptoms are persistent, the trigger is unclear, or identifying a specific allergen would change the management plan. Testing can involve a skin-prick test or a blood test for allergen-specific antibodies. A positive test must be interpreted alongside the person's symptoms because sensitization does not always mean that an allergen is causing the eye problem.

Other possible causes of red or irritated eyes include viral or bacterial conjunctivitis, dry eye, eyelid inflammation, reactions to medication, and inflammation inside the eye. Accurate diagnosis matters because treatments differ.

Treatment and management

Management focuses on reducing allergen exposure, relieving symptoms, and protecting the eye surface. The best approach depends on symptom severity, the suspected trigger, contact lens use, and whether the cornea is involved.

Avoid rubbing the eyes. Rubbing releases more inflammatory chemicals and can make itching and swelling worse. A clean, cold compress placed over closed eyelids can provide temporary relief. Preservative-free artificial tears may dilute allergens and wash them from the eye surface.

Other practical measures include washing the face and eyelids after outdoor exposure, showering before bed during pollen season, and keeping windows closed when airborne pollen is high. Sunglasses can reduce direct exposure outdoors. For indoor allergens, measures directed at the confirmed or suspected trigger may help, such as washing bedding and addressing damp or moldy areas.

Several types of eye drops are used for allergic conjunctivitis. Topical antihistamines block the effects of histamine. Mast-cell stabilizers reduce the release of allergic chemicals. Many products combine both actions and may work quickly while also helping prevent symptoms with continued use. A pharmacist or clinician can help a patient choose an appropriate over-the-counter or prescription product and explain how to use it safely.

Oral antihistamines may help when eye symptoms occur with nasal or whole-body allergy symptoms. However, some can contribute to dry eyes, which may increase burning or a gritty sensation. The benefits and unwanted effects should be discussed with a clinician or pharmacist.

Eye drops marketed mainly to "get the red out" often contain medicines that narrow surface blood vessels. They do not treat the underlying allergy. Frequent or prolonged use can lead to recurring redness when the effect wears off. People who are unsure what a product contains should check with a pharmacist.

Corticosteroid eye drops can rapidly reduce inflammation, but they require supervision by an eye-care professional. Improper or extended use can raise eye pressure, contribute to cataracts, delay healing, or worsen certain infections. Leftover steroid drops should not be used for a new episode without an eye examination.

Severe or persistent allergic eye disease may require treatment from an ophthalmologist. Depending on the specific condition, options can include supervised anti-inflammatory drops or medicines that modify the local immune response. Allergen immunotherapy, sometimes called allergy shots or allergy tablets, may be considered by an allergy specialist when there is a confirmed trigger and significant allergic disease beyond the eyes.

Contact lenses should generally be removed during an active episode, especially when the eyes are red or producing discharge. Lenses should not be resumed until symptoms have settled and any clinician treating the condition says it is safe. Lens cases, cleaning routines, and replacement schedules may also need review. Do not place ordinary eye drops over contact lenses unless the product label specifically says they are compatible.

Complications

Simple seasonal or perennial allergic conjunctivitis usually improves without permanent eye damage. Symptoms can still interfere with sleep, school, work, reading, and contact lens use.

Frequent rubbing can further inflame the eye surface and eyelids. Long-term vigorous rubbing has also been associated with keratoconus, a condition in which the cornea becomes thinner and changes shape. This association does not mean that everyone who rubs their eyes will develop keratoconus.

Vernal and atopic keratoconjunctivitis can affect the cornea. Possible problems include corneal surface defects, ulcers, scarring, and reduced vision. These conditions require specialist care.

Complications can also result from inappropriate treatment. Unsupervised corticosteroid

drops may raise pressure inside the eye or hide signs of infection. Reusing contaminated eye-drop bottles or allowing the bottle tip to touch the eye can introduce germs.

Follow up

Routine follow-up is appropriate when symptoms do not improve with reasonable allergen avoidance and properly selected nonprescription treatment, keep returning, interfere with daily activities, or make contact lens use difficult. A clinician should also review symptoms that are mostly one-sided or accompanied by thick discharge, eyelid skin changes, or worsening dryness.

Arrange prompt medical assessment for eye pain, significant light sensitivity, persistent blurred or reduced vision, marked swelling, a feeling that something is stuck in the eye, or symptoms that worsen despite treatment. Contact lens wearers with a painful, red eye should remove the lenses and seek prompt eye care because corneal infections can progress quickly.

Emergency care is needed after a chemical exposure, a penetrating injury, or sudden major loss of vision. After a chemical splash, begin rinsing the eye immediately with clean lukewarm water and continue while emergency help is arranged. Do not delay rinsing to search for a specific eye solution.

At follow-up, bring a list or photographs of all eye drops, medicines, cosmetics, and contact lens products being used. This helps the clinician identify possible triggers and avoid duplicate ingredients.

Sources

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