



EPIDEMIC VIRAL CONJUNCTIVITIS

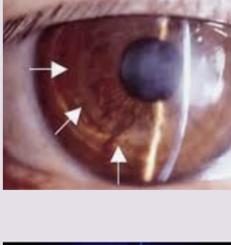
Viral Conjunctivitis

Viral conjunctivitis, or pink eye is a common, self-limiting condition that is typically caused by adenovirus. Conjunctivitis may accompany the common cold and other systemic viral infections (especially measles, but also chickenpox, rubella, and mumps).

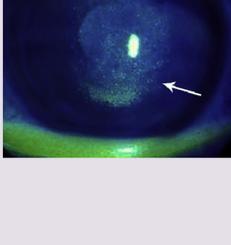
Symptoms

Patients with adenoviral conjunctivitis may give a history of recent exposure to an individual with a red eye at home, school, or work, or they may have a history of recent symptoms of an upper respiratory tract infection. Patients may report ocular itching, foreign body sensation, tearing, redness, discharge, eyelids sticking (worse in the morning), and photophobia (with corneal involvement, as in epidemic keratoconjunctivitis).

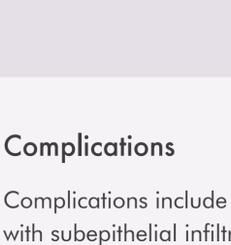
Signs



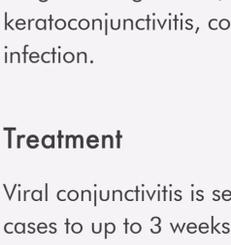
Redness, watery discharge and ocular irritation in one eye and then may spread to other. The eyelids often are edematous and ecchymotic.



A preauricular lymph node is often enlarged and painful.



Corneal punctate epitheliopathy, sometimes followed by diffuse subepithelial infiltrates, which generally occur 7-14 days after the onset of symptoms. In severe cases, there can be a corneal epithelial defect.



Even after conjunctivitis has resolved, residual corneal subepithelial opacities (multiple, coin-shaped, 0.5 to 1.0 mm in diameter) may be visible with a slit lamp for up to 2 yr. Corneal opacities occasionally result in decreased vision and significant halos and starbursts.

Complications

Complications include the following: punctate keratitis with subepithelial infiltrates, bacterial superinfection, conjunctival scarring and symblepharon, severe dry eye, irregular astigmatism, corneal ulceration with persistent keratoconjunctivitis, corneal scarring, and chronic infection.

Treatment

Viral conjunctivitis is self-limiting, lasting 1 week in mild cases to up to 3 weeks in severe cases.

Supportive Measures: Treatment methods focus on providing relief from symptoms. These include cold compresses, artificial tears, and topical cycloplegic medications to alleviate significant complaints of photophobia. For patients who may be susceptible, a topical antibiotic may be used to prevent bacterial superinfection.

However, patients who have severe photophobia or whose vision is affected may benefit from topical corticosteroids, usually prescribed by an ophthalmologist.

Patients with conjunctivitis, especially those treated with medications, require follow-up care.

Prevention

Viral conjunctivitis is highly contagious, usually for 10-12 days from onset as long as the eyes are red and transmission precautions must be followed.

Patients should do the following:

- Use hand sanitizer and/or wash their hands thoroughly after touching their eyes or nasal secretions
- Avoid touching the non infected eye after touching the infected eye
- Avoid sharing towels or pillows
- Avoid touching their eyes, shaking hands,
- Avoid swimming in pools
- Eyes should be kept free of discharge and should not be patched.
- Small children with conjunctivitis should be kept home from school to avoid spreading the infection.
- Patients with conjunctivitis who wear contact lenses should be instructed to discontinue lens wear until signs and symptoms have resolved.

Key Points



Most viral conjunctivitis is caused by adenoviruses or enteroviruses.



Diagnosis is usually clinical.



Treatment is usually cool compresses and measures to prevent spread.



Patient Education

To allay patient anxiety, it is helpful to inform patients that their symptoms may worsen during the first 4-7 days after onset before they begin to improve and may not resolve for 2-4 weeks. The contagiousness of the infection also should be emphasized. Proper isolation from the workplace or school is advisable and essential to prevent epidemics.

Squint

A squint, or strabismus, is a condition in which the eyes do not align properly. One eye turns inwards, upwards, downwards, or outwards, while the other one focuses at one spot. It can be a constant or an intermittent squint.

This usually occurs because the muscles that control the movement of the eye and the eyelid are not working in tandem. As a result, both eyes are unable to look at the same spot at the same time. It can also happen because a disorder in the brain means that the eyes cannot correctly coordinate.

An early diagnosis of strabismus will enable more effective treatment. In the past, it was thought that after a "critical period", strabismus could not be treated. While treatment up to the age of 6 years is believed to be most effective, strabismus can be treated at any time.

What are the effects (problems) caused by squint?

- Amblyopia (lazy eye) - A constant squint in one eye leads to progressive decrease in vision in that eye as that eye is not being used for seeing.
- Loss of binocular vision: - A child with squint cannot appreciate depth or stereovision as it requires both eyes to be aligned with each other.
- Abnormal head posture - some children adopt an abnormal head posture like turning face to one side or tilting the head to one side in order to keep both the eyes aligned together.
- Cosmetic problems & loss of self esteem- A child with squint is always low in confidence as it is a cause of embarrassment among peers.
- Double vision especially in adults- the brain has been trained to gather data from both eyes, so it cannot ignore one of them hence causes double vision

Signs & Symptoms

One of the eyes does not look straight ahead. A minor squint may be less noticeable.

Infants and newborns may go cross-eyed, especially if they are tired.

If a child has one eye closed, or turns their head when looking at you, this could be a sign of double vision, and a possible squint. It is a good idea to see a doctor. Sometimes a squint that was treated successfully in childhood returns later in adulthood. This may lead to double vision in the adult because, by that time, the brain has been trained to gather data from both eyes, so it cannot ignore one of them.

Strabismus can be:

- Congenital, meaning a person is born with it
- Hereditary, or running in families, suggesting a genetic link
- The result of an illness
- The result of a refractive error- usually occurs around 2 years or older
- Due to a lesion on a cranial nerve

Diagnosis and treatment

Children and babies should have routine eye checks as they develop. If there are signs of strabismus, the physician or optician will refer the child to an ophthalmologist.

The ophthalmologist will probably use eye drops that dilate the pupils before the test is done.

Treatment Options: Prompt treatment reduces the risk of complications, such as amblyopia, or lazy eye. The younger the patient is, the more effective treatment is likely to be.

Treatment options include:

- Glasses: If hypermetropia, or long-sightedness, is causing the squint, glasses can usually correct it.
- Eye patch: Worn over the good eye, a patch can get the other eye, the one with the squint, to work better.
- Botulinum toxin injection, or botox: this is injected into a muscle on the surface of the eye. The doctor may recommend this treatment if no underlying cause can be identified, and if signs and symptoms appear suddenly. The botox temporarily weakens the injected muscle, and this can help the eyes to align properly.
- Eye drops and eye exercises may help

Surgery is only used if other treatments are not effective. It can realign the eyes and restore binocular vision. The surgeon moves the muscle that connects to the eye to a new position. Sometimes both eyes need to be operated on to get the right balance.