Virginia Commonwealth University

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

CONJUNCTIVITIS (PINK EYE)

WHAT IS IT?

Conjunctivitis, or "pink eye", refers to inflammation of the conjunctiva, which is a clear, thin membrane that lines the inner eyelid and covers the white part of the eye. When small blood vessels in the conjunctiva become dilated from inflammation, the eye will look pink or red. Normally, tears that contain enzymes and antibodies protect the conjunctiva by diluting and washing away infectious particles and allergens.

WHAT CAUSES IT?

Viruses, bacteria, and allergens are the 3 main causes of pink eye:

- Viral conjunctivitis is the most common form of pink eye and is caused by viruses associated with the common cold.
- ❖ <u>Bacterial conjunctivitis</u> is what most people associate with pink eye, even though bacterial causes are uncommon, making up only 5% of conjunctivitis cases. The infection is usually caused by staphylococcal or streptococcal bacteria from the patient's own skin or respiratory tract.
- ❖ <u>Allergic conjunctivitis</u> is common and results from exposure to air-borne allergens, such as pollen, animal dander, grass, etc.
- Other causes of conjunctivitis include chemical exposures (eg. smoke, chlorine in swimming pools, etc.), foreign body exposures, trauma, and systemic illnesses.
- Use of contact lenses, particularly extended-wear lenses, is a risk factor for conjunctivitis. All contact lenses (even disposable ones) should be removed from the eye nightly to decrease the risk of developing conjunctivitis and more serious eye disorders.

IS IT CONTAGIOUS?

- Viral and bacterial forms of conjunctivitis are highly contagious.
 - They are spread by contact with discharge from the eyes or respiratory tract.
 - Contaminated hands, clothing, towels, and items such as eye make-up applicators and eye droppers can transmit infection.
- Allergic conjunctivitis is not contagious.

WHAT ARE THE SYMPTOMS OF CONJUNCTIVITIS?

All types of conjunctivitis can lead to red eyes and crusty, matted eyelashes in the mornings. Though conjunctivitis is often irritating, it should <u>not</u> cause significant eye pain. In addition, it should rarely affect vision.

Symptoms more specific to the cause of conjunctivitis are listed below. However, symptoms may overlap:

❖ Viral Conjunctivitis

Symptoms usually occur 5-12 days after viral exposure and are often associated with cold symptoms. The most common complaint is a <u>gritty or burning sensation in the eye</u>. The <u>discharge is usually watery</u> and may be accompanied by mucus (not pus). Both eyes can be involved, with the second eye typically developing symptoms 1-2 days later. Symptoms often worsen during the first 3-5 days before gradually clearing on their own over the next 1-2 weeks.

❖ Bacterial Conjunctivitis

Symptoms usually occur 24-72 hours following bacterial exposure. The main complaint is a thick., purulent discharge that is present all day, not just in the mornings. Usually only one eye is affected. The other eye can become involved if you touch it after rubbing the infected eye. Mild sensitivity to light may be present, but there should be no other change in vision.

Allergic Conjunctivitis

The most prominent symptom is usually <u>itchy eyes</u>. Both eyes are typically affected. Like viral conjunctivitis, the discharge tends to be watery, with a stringy white mucus, and the eyes may feel gritty or irritated. Other allergy symptoms (eg. sneezing, runny nose, etc.) are often present. In some cases, there may be significant swelling of the conjunctiva, which can look like clear blisters on the whites of the eyes.

HOW IS IT DIAGNOSED?

Conjunctivitis is usually diagnosed based on your symptoms and findings on physical exam. Sometimes, a fluorescein exam of the eye is performed using an orange dye to look for other causes of a red eye, such as a scratch on the cornea. If symptoms are severe, you may be referred to an ophthalmologist for further evaluation and treatment.

HOW IS CONJUNCTIVITIS TREATED?

❖ Viral Conjunctivitis

- Antibiotics cannot cure viral conjunctivitis. Treatment is aimed at decreasing symptoms while the virus runs its course (much like the common cold).
- <u>Lubricating eye drops (artificial tears) or ointments</u> can help relieve symptoms and wash out the virus. Lubricating drops with preservatives can be used up to 6 times daily. Preservative-free lubricant drops can be used hourly if needed. Ointments provide longer relief but can temporarily blur your vision, so they are often preferred at bedtime.
- Over-the-counter eye drops that contain a decongestant-antihistamine combination (eg. Visine AC, Naphcon-A, Ocuhist) may reduce symptoms but should not be used for more than 2 weeks. Eye redness may worsen for several days after stopping these medications. <u>Do not use decongestant eye drops if you have angle-closure glaucoma</u>. <u>Consult your medical provider before use of decongestant eye drops if you have high blood pressure or heart disease</u>.
- Warm or cool compresses may also be helpful.

❖ Bacterial Conjunctivitis

- Bacterial conjunctivitis is self-limited in most cases; however, antibiotics may shorten the course if given early. All contact lens wearers with bacterial conjunctivitis should be treated with antibiotics.
- An antibiotic eye drop or ointment should improve symptoms in 1-2 days. It is important to use
 the medication for the entire time prescribed as symptoms may improve before the infection has
 been fully treated.
- Bacterial conjunctivitis is considered contagious until 24 hours after starting treatment.

Allergic Conjunctivitis

- The first step is to remove/avoid the allergen if possible. Cool compresses may help in mild cases.
- Over-the-counter eye drops that contain a decongestant-antihistamine combination may be used for no more than 2 weeks (see "Viral Conjunctivitis" above).
- Antihistamine eye drops are very effective and the preferred treatment option. Zaditor (ketotifen) is the only product available over-the-counter; the dose is 1 drop to the affected eye twice a day (every 8-12 hours) as needed. Other products are available by prescription.
- Antihistamine pills (such as Benadryl, Zyrtec, Claritin, etc.) can also reduce itching and redness but are not as effective as antihistamine eye drops and may have more side effects.
- Artificial tears can help wash out allergens and decrease swelling (see "Viral Conjunctivitis" above).

WHAT IF I WEAR CONTACT LENSES?

❖ If you have viral or bacterial conjunctivitis,

- Stop contact lens use while you are on eye medication and until all symptoms are gone.
- If you have bacterial conjunctivitis, you cannot restart contact lens use until the <u>eye is white and</u> has no discharge for 24 hours after finishing antibiotic treatment.
- Throw away contact lenses if they are disposable. Otherwise clean lenses thoroughly prior to reinserting them. Remember to use a new lens case.
- If you have allergic conjunctivitis, reduce or avoid contact lens use, since allergens can adhere to contact lens surfaces.

HOW CAN I PREVENT THE SPREAD OF INFECTION?

To avoid spreading viral or bacterial conjunctivitis to others or reinfecting yourself:

- Keep your hands away from your eyes. If you touch your eyes, wash your hands thoroughly with soap and water.
- ❖ Wash your hands <u>before and after</u> putting medication into your eye. Gently pull down the lower lid and put the ointment or drop into the pouch. Avoid touching the tip of the medicine bottle to the eye.
- Use paper towels as compresses and discard them immediately after use.
- Stop using eye make-up until your eyes are no longer infected. Use only new make-up when resuming.
- Change pillowcases, towels, and washcloths daily until the infection is resolved.

REASONS TO CONTACT YOUR HEALTHCARE PROVIDER:

Because pink eye symptoms can imitate more serious problems, seek prompt medical attention if:

- There is no improvement 48 hours after beginning treatment. Contact lens wearers will need to be seen by an eye specialist if symptoms to do not improve within 24 hours of treatment.
- Your vision decreases.
- Sharp eye pain develops, especially if it prevents you from keeping your eye open.
- Sensitivity to light persists or worsens.
- ❖ A severe headache develops.

RECOMMENDED WEBSITES: www.aao.org, my.clevelandclinic.org, www.mayoclinic.org