Health Letter

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Learn about Conjunctivitis

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1. What is conjunctivitis, and how does it manifest?

Conjunctivitis, commonly known as “pink eye,” is a widespread condition worldwide. It is an inflammation of the conjunctiva, the transparent membrane covering the white part of the eye and the inner side of the eyelids. It manifests with eye redness, edema (swelling), itching, a foreign body sensation, eye discharge, and light sensitivity.

There are several types of conjunctivitis, each with specific causes and manifestations:

- **Viraliral Conjunctivitis:** This is the most common type, caused by viruses similar to those that cause colds. It is characterized by redness, tearing, and is often accompanied by cold or respiratory infection symptoms. It is highly contagious and usually affects both eyes.

- **Bacterial Conjunctivitis:** Caused by bacteria, this type produces thick, yellow or greenish sticky discharge that can cause the eyelids to stick together in the morning. It can affect one or both eyes and is also contagious.

- **Allergic Conjunctivitis:** Resulting from an allergic reaction to substances like pollen, dust, or animal dander, it manifests with intense itching, redness, and tearing. It is often seasonal and may be accompanied by other allergy symptoms such as sneezing and a congested nose.

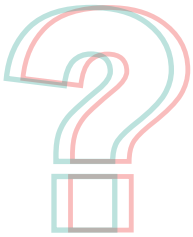
- **Irritative Conjunctivitis:** Caused by irritants such as smoke, chlorine in

swimming pools, or chemical products. Symptoms include redness and a sensation of a foreign body or grit in the eye.

In all types of conjunctivitis, common symptoms include:
Redness of the white part of the eye or the inside of the eyelid Increased tear production Sensation of having sand in the eye Itching, irritation, and/or a burning sensation Discharge of pus or mucus, which can cause the eyelids to stick together upon waking Sensitivity to light (photophobia).

It is crucial to differentiate between the various types of conjunctivitis, as treatment and management vary considerably. Moreover, some forms of conjunctivitis can indicate more serious health problems or cause complications if not treated properly, so self-medication should be avoided at all times.

2. Who can get conjunctivitis?



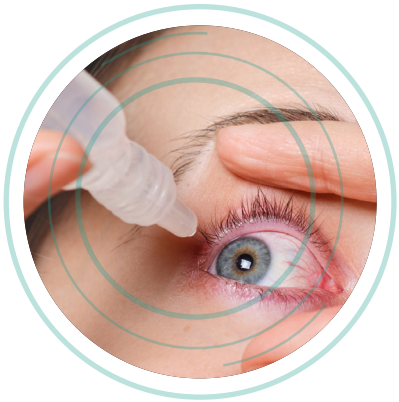
Conjunctivitis can affect anyone, regardless of age, gender, or ethnicity. However, certain groups may be more susceptible to different types of conjunctivitis due to various factors:

- **Viral and Bacterial Conjunctivitis:** These forms are contagious and spread easily, especially in environments with close contact between people. This includes:
- **Children in daycares or schools:** Young children often touch their eyes and are in close contact with peers, facilitating transmission.
- **Adults in work or institutional settings:** Close contact in workplaces or residences can increase the risk.
- **People with weakened immune systems:** A reduced ability to fight infections can make these individuals more prone to developing conjunctivitis.
- **Allergic Conjunctivitis:** This especially affects individuals with allergic tendencies. Those with other allergies, such as allergic rhinitis or asthma, are more likely to develop allergic conjunctivitis.
- **Irritative Conjunctivitis:** Anyone exposed to environmental irritants such as smoke, chlorine, or pollutants can develop this form of conjunctivitis. Susceptibility varies depending on individual sensitivity to these irritants.

Additional risk factors for developing conjunctivitis include:

- *Contact lens use:* Improper use of contact lenses, such as sleeping with them or not cleaning them correctly, can increase the risk of developing bacterial conjunctivitis.
- *Exposure to someone with conjunctivitis:* Close contact with an infected person significantly increases the risk of contracting viral or bacterial conjunctivitis.
- *Poor hygiene conditions:* Lack of personal hygiene and hygiene in shared environments can facilitate the transmission of conjunctivitis.

In summary, while anyone can develop conjunctivitis, certain groups and behaviors can increase the risk of contracting it. Understanding these factors is crucial for the prevention and effective management of the disease.



3. How frequent is conjunctivitis and what types are there?

Conjunctivitis is one of the most common eye conditions and a frequent cause of medical consultation in ophthalmology and general medicine. Its prevalence varies based on several factors, including the type of conjunctivitis, geographical location, and time of year, potentially accounting for 1% of family physician visits.

- **Viral Conjunctivitis:** Particularly common, especially during winter and early spring, coinciding with flu and cold seasons. Outbreaks can occur in closed community settings like schools and offices.
- **Bacterial Conjunctivitis:** Less common than viral but still a significant cause. More frequent in children than in adults and can occur year-round.
- **Allergic Conjunctivitis:** Prevalence varies with seasons, more common in spring and autumn in regions where seasonal allergens like pollen are at their peak. It significantly affects individuals with other allergies and those living in areas with high allergen concentrations.
- **Irritative Conjunctivitis:** Frequency depends on exposure to specific irritants and can vary widely.

Additionally, factors such as hygiene practices, access to healthcare, and public knowledge about disease prevention also influence the prevalence of conjunctivitis. For example, in areas with better education on hygiene and access to clean water, the incidence of conjunctivitis, especially bacterial conjunctivitis, tends to be lower.

Globally, it is estimated that millions of people suffer from conjunctivitis each year, highlighting its high prevalence and the need for effective prevention and treatment strategies.

4. How is conjunctivitis diagnosed?

Diagnosis is primarily based on clinical history and physical examination by a physician, typically an ophthalmologist. Key diagnostic steps include:

- **Clinical history:** Details about symptoms (such as redness, discharge, itching, pain), duration, exposure to possible allergens or irritants, recent contact with individuals with similar symptoms, and history of allergies or contact lens use.
- **Physical examination:** Detailed eye examination, including observation of the conjunctiva, eyelids, cornea, and surrounding areas. Evaluation of the nature and amount of eye discharge (clear, mucous, purulent), presence of swelling or inflammation, and any signs of involvement of other ocular structures.
- **Additional tests:** In some cases, additional tests may be needed to confirm the cause or rule out other conditions. These may include:
- **Symptom and sign analysis:** The type of conjunctivitis can often be inferred from the nature of the symptoms and examination findings. For example, viral conjunctivitis typically presents with redness and tearing, while bacterial conjunctivitis often has thicker, purulent discharge.
- **Smears and cultures:** Especially in severe or persistent cases, to identify bacteria or other pathogens.
- **Allergy tests:** If allergic conjunctivitis is suspected, skin tests or blood tests may be conducted to identify specific allergens.
- **Slit-lamp examination:** A more detailed examination to assess the eye's surface and inflammation depth.

- **Symptom and sign analysis:** Often, the type of conjunctivitis can be inferred from the nature of the symptoms and examination findings. For example, viral conjunctivitis typically presents with redness and tearing, while bacterial conjunctivitis often has thicker, purulent discharge.

In some cases, when conjunctivitis does not respond to treatment or atypical symptoms are present, it may be necessary to investigate further to rule out more serious conditions that can present similarly to conjunctivitis, such as corneal infections or certain inflammatory eye diseases.

A correct diagnosis is crucial for effective treatment and to prevent the spread, especially in cases of contagious conjunctivitis.

5. ¿Cuándo consultar?

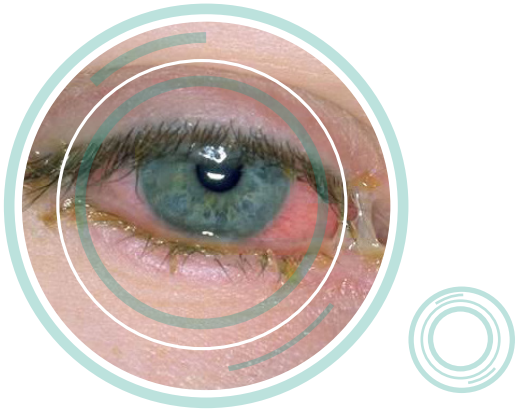
While many forms of conjunctivitis are mild and can resolve without medical treatment, certain situations warrant consulting a healthcare professional, such as an ophthalmologist or general physician:

- **Severe symptoms:** Intense symptoms, such as extreme redness, significant eye pain, or a very bothersome foreign body sensation, should prompt medical consultation.
- **Vision changes:** Blurry vision, light sensitivity (photophobia), or any changes in vision accompanying conjunctivitis should be evaluated by a doctor.
- **Purulent or mucopurulent discharge:** Thick, yellow, or greenish discharge can indicate bacterial conjunctivitis, which may require antibiotic treatment.
- **Persistent or worsening symptoms:** If symptoms do not improve with home care after a few days or worsen, medical advice should be sought.
- **Contact with conjunctivitis:** If you have been in close contact with someone with conjunctivitis, especially if it is infectious, and develop symptoms, seek medical advice.
- **Contact lens users:** Those who wear contact lenses and develop conjunctivitis symptoms should stop using them immediately and consult a doctor due to the risk of more severe complications.
- **Symptoms in newborns or infants:** Conjunctivitis in newborns and infants should always be evaluated by a doctor, as it may indicate a more serious infection.

- **Pre-existing ocular health conditions or immunosuppression:** Individuals with pre-existing eye conditions or compromised immune systems should seek medical attention if they develop symptoms of conjunctivitis.

  Early consultation with a healthcare professional not only facilitates proper diagnosis and treatment but also helps prevent the spread of conjunctivitis, especially its contagious forms.

  Additionally, the healthcare professional can provide guidance on eye care and recommendations to prevent future infections or irritations.



6. How is conjunctivitis treated?

Treatment depends on the cause of conjunctivitis and can vary significantly:

- **Viral Conjunctivitis:** Since it is caused by a virus, there is no specific treatment, and it tends to resolve on its own within one or two weeks. Recommendations usually include:
  - Cold or warm compresses to relieve inflammation and discomfort.
  - Artificial tears to alleviate dryness and discomfort.
  - Avoiding contact lens use during the infection.
  - Maintaining good eye and hand hygiene to prevent spread.
- **Bacterial Conjunctivitis:** Typically treated with topical antibiotics, either eye drops or ointments. The duration of treatment varies but is generally around 7 to 10 days. Completing the full course of treatment is important to avoid relapses or antibiotic resistance.
- **Allergic Conjunctivitis:** Managed by avoiding allergens and using medications to control the allergic response, such as:
  - Oral or topical antihistamines to reduce itching and inflammation.
  - Mast cell stabilizer drops to prevent allergic reactions.
  - In severe cases, topical corticosteroids may be used under medical supervision.
- **Irritative Conjunctivitis:** Treatment focuses on eliminating the irritant and alleviating symptoms, which may include:
  - Washing the eye with water or saline solution to remove the irritant.

- Artificial tears to relieve irritation.
- Avoid future exposure to the irritant.
- In addition to specific treatments, some general measures can help in all types of conjunctivitis.
- Maintain good eye hygiene, including frequent hand washing.
- Do not share towels, pillows, or other personal items.
- Avoid rubbing the eyes to prevent irritation and the spread of infection.
- In cases of infectious conjunctivitis, it is important to take steps to avoid spreading it to others, such as staying home during the most infectious days.

It is important that the treatment be supervised by a healthcare professional, especially in cases of severe or persistent conjunctivitis, to ensure proper management and prevent complications.

7. How to prevent conjunctivitis?

Prevention involves measures to avoid its spread and reduce the risk of development, especially in its infectious and allergic forms. These measures include:

- **Hand hygiene:** Washing hands frequently and properly, especially after touching the eyes, sneezing, or coughing, and before handling contact lenses.
- **Avoid touching eyes:** Minimizing contact with the eyes with unclean hands can significantly reduce the transmission risk.
- **Proper contact lens use:** Maintaining good hygiene in handling contact lenses, including cleaning and storing them correctly, using appropriate cleaning solutions, and avoiding sleeping with lenses unless designed for it.

- **Not sharing personal items:** Avoid sharing towels, pillows, cosmetics, or any item that comes into contact with the eyes.
- **Protection against allergens:** For those with allergic conjunctivitis, avoiding known allergens is important. This can include staying indoors when pollen levels are high, using air purifiers, and regular cleaning to reduce allergens at home.
- **Pool care:** Wearing swimming goggles to protect eyes from chlorine and other chemicals.
- **Education and awareness:** Teaching children and individuals in community settings about the importance of hand hygiene and not sharing personal items can help reduce spread.
- **Infection control in shared environments:** Implementing and following cleaning and disinfection protocols in daycares, schools, and workplaces can help prevent conjunctivitis outbreaks.
- **Handling chemical irritants:** Using appropriate protection, such as safety goggles, when working with chemicals or in environments prone to eye irritation.

These preventive measures are effective not only in reducing the risk of conjunctivitis but also for many other eye and general infections. Prevention is especially important in settings where conjunctivitis can spread rapidly, such as schools, childcare centers, and workplaces.

Recommended Readings and Online Resources

- CDC: Conjunctivitis Symptoms
- AAO Conjunctivitis Guideline Summary
- Viral Conjunctivitis (Pink Eye) Guidelines
- Pink Eye (Conjunctivitis) - Symptoms and Causes - Mayo Clinic
- American Academy of Ophthalmology or PubMed for recent studies on conjunctivitis.

Images taken from:

- https://www.lentesplus
- https://www.Brill Pharma
- Freepik

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