

# Acute Infectious Conjunctivitis

## Causative agent

Conjunctivitis is an inflammation of the conjunctiva, the protective membrane that lines the inner eyelids and covers the outer surface of the eyeballs. Conjunctivitis takes various forms. The most common form is acute infectious conjunctivitis (red-eye syndrome). It is mostly caused by viruses and bacteria. Haemophilus influenzae and Streptococcus pneumoniae are the commonest bacterial causes, while adenoviruses and enteroviruses are chiefly responsible for viral conjunctivitis. Chlamydial trachomatis may also be a cause for conjunctivitis in neonates and adults.

## Clinical features

Clinically, bacterial and viral conjunctivitis are very similar. Both eyes are often affected though the symptoms usually start in one eye first. The discharge is thick, whitish or yellowish in bacterial conjunctivitis, and watery in viral conjunctivitis. Other symptoms include tearing, foreign body sensation, itchiness, pain, swelling and redness of the eyes, matted eyelids after sleep, and sensitivity to light. Vision is not affected unless there is scarring of the cornea after the infection.

The clinical course is usually mild and self-limiting, with recovery in one to two weeks' time if it is properly treated. Infection can occur at all age, but children under five are most often affected.

## Mode of transmission

An infected person can spread conjunctivitis as long as there is an active infection. Transmission may occur through direct contact with discharges from the eyes or upper respiratory tracts of infected people, or indirectly through contaminated fingers, clothing and other articles, including shared eye makeup applicators and topical eye medications. In addition, swimmers can contract conjunctivitis when swimming in the contaminated water. Chlamydial conjunctivitis, the disease can also be transmitted during sexual intercourse. Newborns may also acquire the infection from their mothers during delivery.

## Incubation period

The incubation period is usually 1-3 days after exposure for bacterial conjunctivitis; 1-12 days for viral conjunctivitis. In chlamydial conjunctivitis, the incubation period ranges from 3 days to several weeks.

## Management

Infected individuals should seek medical treatment immediately and follow doctor's advice in administering medication and taking rest. Application of antibiotic ointments or drops to the eyes is

generally effective in treating bacterial conjunctivitis. Oral antibiotics are needed to treat chlamydial ocular infections. There is no specific treatment for viral conjunctivitis.

Infected people are advised to wash hands properly especially after touching their eyes. Besides, they should avoid sharing towels and toilet articles with others. Proper disposal of articles soiled with eye or respiratory secretions should be observed. Furthermore, infected individuals should not attend schools or workplaces before recovery, and avoid swimming to prevent transmission of infection.

### **Prevention**

Acute conjunctivitis is highly infectious, often spreading widely in the community. Prevention is therefore very important.

1. Maintain good personal hygiene, particularly thorough handwashing before and after contact with eyes.
2. Avoid hand-eye contact.
3. Do not share towels and toilet articles.
4. Avoid sharing eye droppers, eye medicines, eye make-up and other items that may come into contact with the eyes.

Source : Department of Health, The Government of the Hong Kong Special Administrative Region