

## Sticky, sore, red eyes

A 25-year-old lady comes to the clinic, with a three-day history of sore red eyes, with a sticky, purulent discharge. She says her eyes are ‘gritty’ (feeling as though they have sand in them).

There is a sticky, yellow discharge, which has partially dried on the edges of the eyelids and eyelashes. The redness, and blood vessel congestion on the surface of the eyes extends all over the conjunctiva, and also involves the conjunctiva lining the inside of the eyelids.

Her vision is not affected – except that she says the stickiness sometimes causes blurring of her vision, but she can ‘blink away’ this blurring.

The pupils are normal size, equal in both eyes, and react normally to a light shone into the eyes.

<b>Age</b>	25 years
<b>Gender</b>	Female
<b>BP</b>	120/70
<b>HR</b>	90
<b>RR</b>	20
<b>T</b>	36.9
<b>HIV status</b>	Negative
<b>Visual Acuity</b>	6/6 each eye

## QUESTIONS

1. What is the likely diagnosis?
2. What is the likeliest type of organism causing the condition, and how would you treat it?
3. What other unusual or ‘special’ types of this condition should you consider?

## DISCUSSION

### 1. **What is the likely diagnosis?**

This patient has conjunctivitis (inflammation of the conjunctiva on the surface of the eye, usually due to infection).

The conjunctival blood vessels are congested, and the congestion is all over the conjunctiva, even inside the eyelids.

Usually, both eyes are affected.

The purulent, sticky discharge is typical.

Conjunctivitis is the commonest cause of a 'Red Eye'.



*Bacterial conjunctivitis, showing sticky discharge and conjunctival congestion*

Ophthalmic Atlas Images by [EyeRounds.org](http://EyeRounds.org), The University of Iowa are licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

### 2. **What is the likeliest type of organism causing the condition, and how would you treat?**

Most conjunctivitis is due to a bacterial infection, and the commonest organisms are Staphylococcus, Streptococcus and Haemophilus.

Simple conjunctivitis usually responds in a few days to an antibiotic ointment such as Chloramphenicol or Tetracycline. (Antibiotic ointment or drops should be continued for a week).

### 3. What other 'special' types of this condition should you consider?

There are a number of 'special' types of conjunctivitis, which are less common, but need to be considered in making the diagnosis.

- a) Conjunctivitis is not always caused by bacteria, and can be caused by viruses, commonly adenovirus (which often causes the common 'Cold'). This typically causes lots of eyelid swelling, and a watery discharge (rather than purulent). The conjunctiva inside the eyelids have lots of little 'lumps' which are called follicles and are patches of swollen lymphoid tissue. It is highly contagious, and there are often other family members with the same problem. Care should be taken to avoid spreading the infection to others, and the patient should not share towels, clothing etc., and should wash hands and face frequently. The condition usually resolves in a week or so, and (as usual) antibiotics do not cure virus infections. However, some antibiotic ointment can be prescribed in order to reduce the risk of secondary bacterial infection. Always wash your own hands thoroughly after examining a patient with possible viral conjunctivitis.



*Adenovirus conjunctivitis, with lots of little 'lumps' (Follicles) in the conjunctiva inside the eyelid.*

Ophthalmic Atlas Images by [EyeRounds.org](http://EyeRounds.org), [The University of Iowa](http://The University of Iowa) are licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

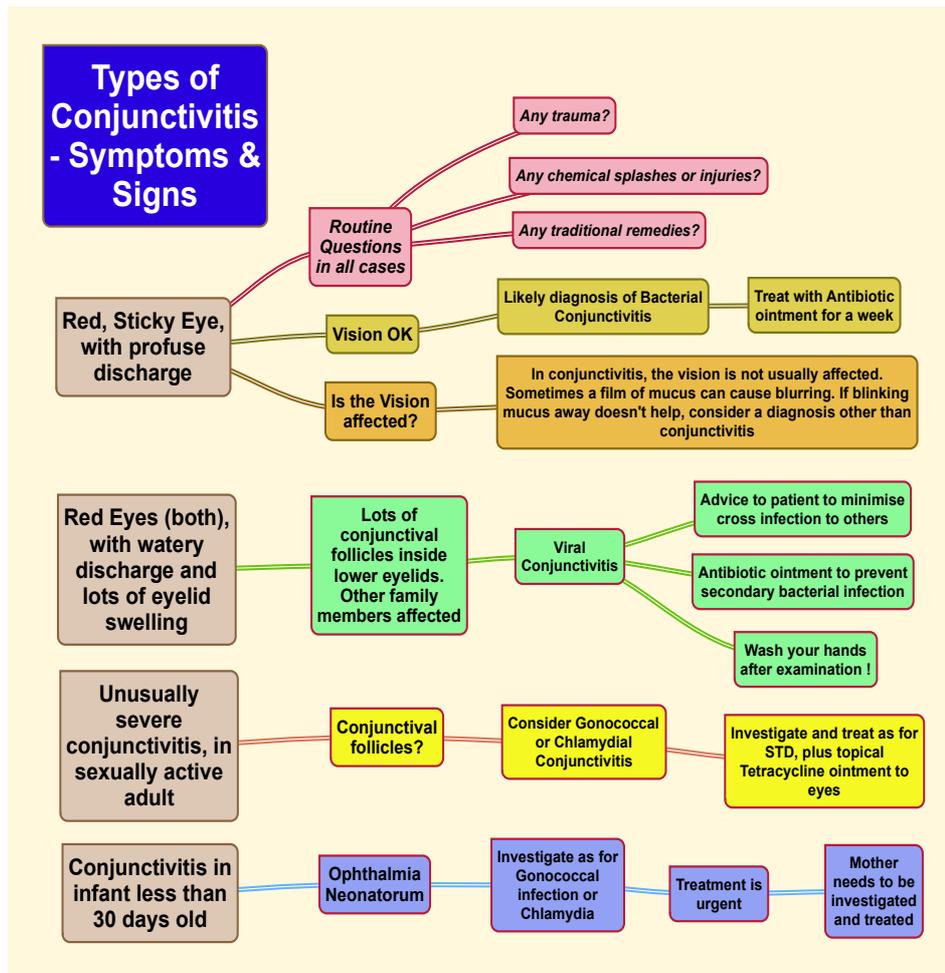
- b) Gonococcus and Chlamydia can cause conjunctivitis, usually acquired through sexual contact.  
Gonococcal conjunctivitis is usually very severe in appearance, with gross, raw-looking conjunctival swelling and a very profuse purulent discharge. Treatment is as for the systemic Gonococcal infection, with the addition of suitable local antibiotic ointment.  
Chlamydial conjunctivitis looks similar, but less severe.

- c) Conjunctivitis in newborn babies (within the first 30 days of life) is termed "Ophthalmia Neonatorum" and usually represents Gonococcal or Chlamydial infection acquired from mother during birth.  
All conjunctivitis in newborns should be treated vigorously, for example with *ceftriaxone* and *erythromycin* systemically for 14 days.  
Also treat with *tetracycline* eye ointment 2 hourly until pus is no longer present.  
If Ophthalmia neonatorum is not treated promptly, permanent scarring and damage to the cornea can occur, or even loss of the eye.  
Mother should also have appropriate treatment and follow-up for the infection.



*Chlamydial  
Conjunctivitis, with  
pale pink lumps  
(follicles) in the  
conjunctiva. Follicles  
are enlarged patches of  
enlarged tissue*

Ophthalmic Atlas Images by [EyeRounds.org](http://EyeRounds.org), The University of Iowa are licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License](https://creativecommons.org/licenses/by-nc-nd/3.0/).



## KEY POINTS

- Conjunctivitis is common, and the commonest cause of red eye
- BUT ... Not every red eye is conjunctivitis!
- Most, but not all conjunctivitis is due to 'common' bacteria
- Some cases are due to virus infection, and are contagious, and risk infecting family members and healthcare staff
- Some cases are part of STD infection and need wider treatment and follow up
- Conjunctivitis in infants, in first 30 days of life, is Ophthalmia Neonatorum, and needs special, urgent treatment and follow up of infant and mother.
- Some conjunctivitis can be due to allergy, but that's another teaching session!

*If you need advice about a patient with Red Eyes, please contact one of our Ophthalmologists via the App.*

*Have you read our other posts about eye conditions? Remember you can look back at them on the Forum [here](#)*