

Clinical Decision-making



THE ACUTE RED EYE

The Acute Red Eye



A 48-year-old woman attended an emergency department. For the previous two days, her left eye had been inflamed and watering. There was slight blurring of vision and the eye was moderately uncomfortable.

The Acute Red Eye



There was no history of trauma. The right eye was asymptomatic. There was no past eye history. She was fit and well and not taking any medication.

The Acute Red Eye



The emergency physician diagnosed viral conjunctivitis and commenced a broad-spectrum topical antibiotic, arranging a routine review appointment in three days but warning the patient to return urgently prior to this if the symptoms worsened.

Q1: The acute red eye is a common ophthalmological presentation caused by conditions ranging from the trivial to the sight-threatening. List five important causes.

The Acute Red Eye



Acute red eye

Scenario 1

Scenario 2

Scenario 3

Scenario 1



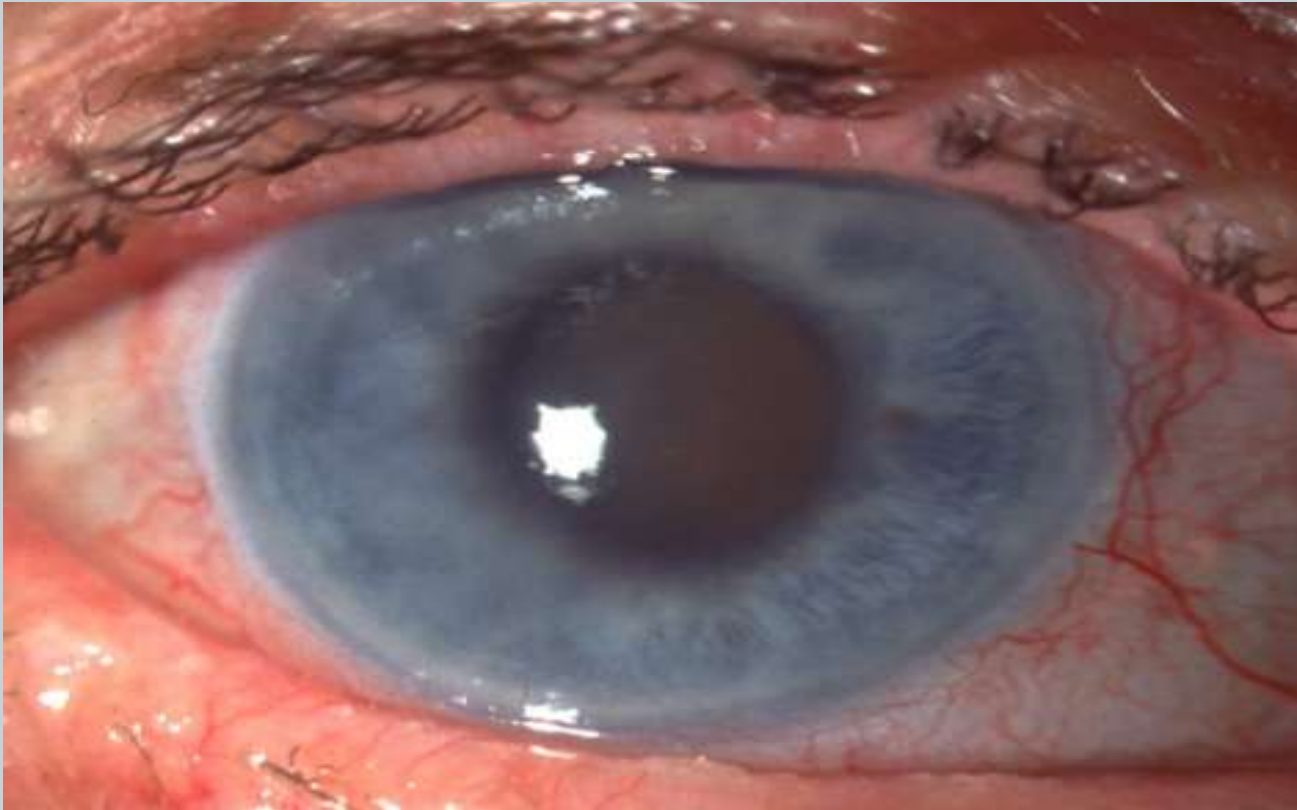
The patient returned to hospital later the same day complaining that the pain in the left eye had become severe. There was now frontal headache and malaise. The vision in this eye had become much worse ('counting fingers' only).

Scenario 1



The eye was very inflamed and the cornea looked hazy. The pupil was oval in shape and failed to react to either direct or consensual light stimulation. There was a left relative afferent pupillary defect.

Scenario 1



Q2: What is the most likely diagnosis?

Scenario 1



Q3: What features of the history and examination lead you to this conclusion?

Q4: What are the chief diagnostic alternatives and why?

Q5: How would you manage this patient?

Scenario 2



The patient attended the review appointment as planned. The left eye was feeling more comfortable and was less red, but the right eye was now suffering the same symptoms.

Scenario 2



Visual acuity was 6/6 in each eye, and pupil reactions were normal. The conjunctiva in both eyes was diffusely hyperaemic and there was a profuse watery discharge. There was no corneal haze.

Scenario 2



Q6: The diagnosis is viral conjunctivitis. What features suggest that the cause is not a sight-threatening condition?

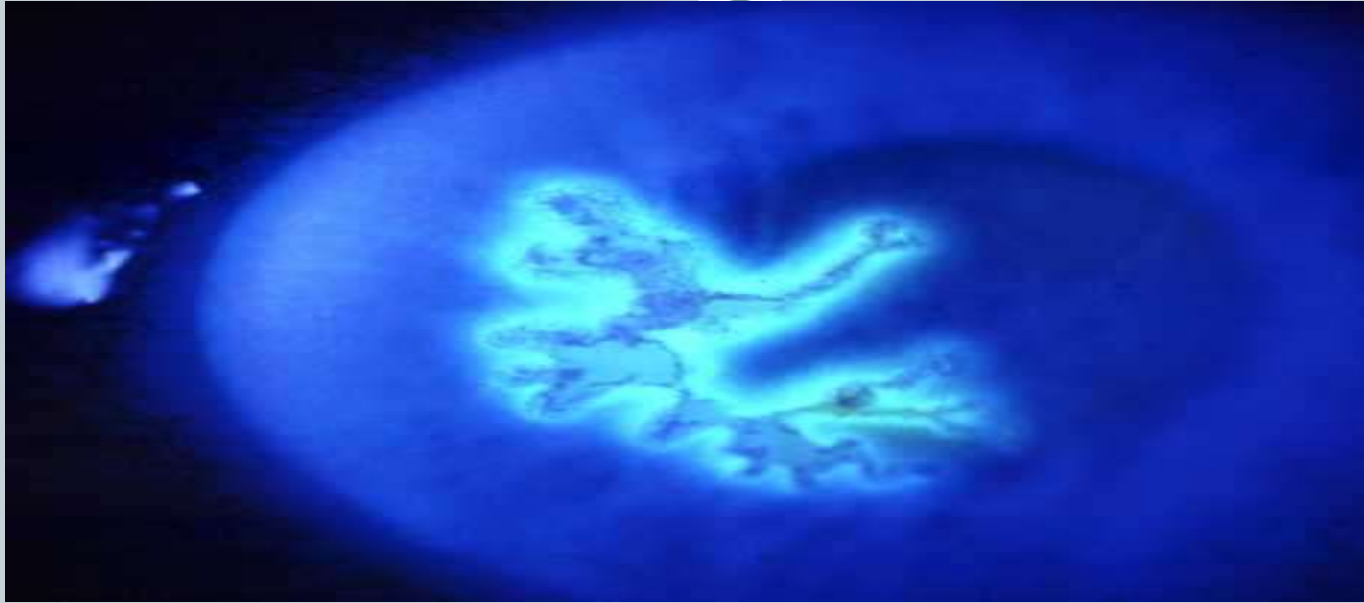
Scenario 2



Q7: What is shown here?

Q8: What should you do about this ?

Scenario 2



Q9: What is shown here?

Q10: How do you manage this?

Scenario 3



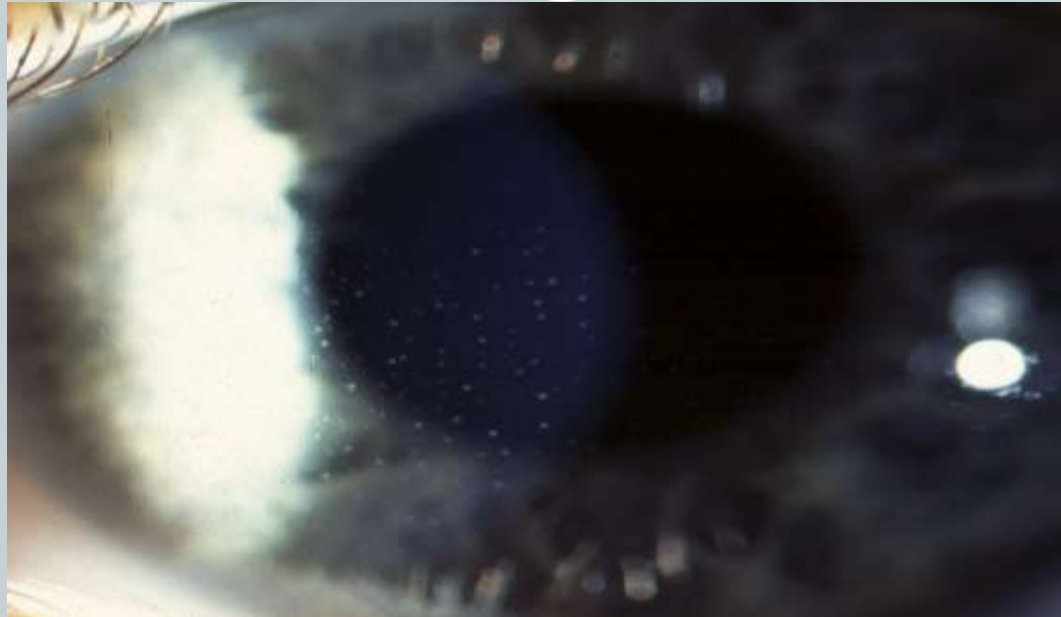
The patient attended the next appointment as scheduled, but the left eye was now considerably more uncomfortable and visual acuity was reduced to 6/18.

Scenario 3



Photophobia (sensitivity to bright light) was a prominent feature. The cornea showed negative stain after installation of fluorescein 1%.

Scenario 3



Q11: Describe the abnormalities shown here and suggest the diagnosis.

Scenario 3



Q12: What is the management of this condition?

Q13: Name three systemic associations of this disorder.

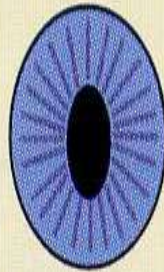
The Acute Red Eye

Condition

Configuration

Reactivity

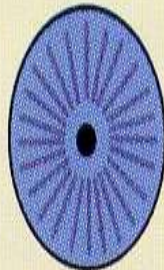
Acute angle
closure glaucoma



Mid-dilated, oval

Fixed to direct and
consensual light
stimulation \pm RAPD

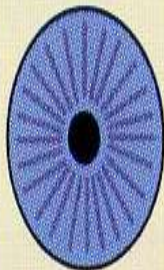
Acute iritis



May be normal; often
miotic due to iris spasm
 \pm posterior synechiae

Normal or decreased
reaction to direct and
consensual light; no RAPD

Conjunctivitis



Normal in uncomplicated
conjunctivitis [the majority]

Normal



Thank You