

Immuno/Rheum/Opthal SAQs

A 76 year old female with a history of hypertension presents with acute onset of pain and decreased visual acuity to her left eye. There is no history of trauma. A photo is attached:



1. List 4 positive findings on the photograph above: (4 marks)
 - Cloudy cornea
 - Fixed pupil not reacting to light (which can be seen shining into it)
 - Mid-dilated
 - Conjunctival injection
2. What is the diagnosis? (1 mark)
 - Acute closed angle glaucoma
3. In the table below list three drugs, doses and rationale for prescription in the circumstance (3 marks)

Drug	Dose	Rationale
Mannitol	1-2g/kg IV	Reduces volume of aqueous humor
Acetazolamide	250-500mg IV/PO	Blocks production of aqueous humor
Pilocarpine 1-2%	1 drop every q15mins	Facilitates outflow of aqueous humor

NB – other examples of treatment are acceptable, but you MUST have one example of each mechanism of action in order to gain full marks

Question 2

A 58 year old man has been referred from his GP with a painful skin rash that initially started as oral mucosa lesions several weeks prior. He has a background of hypertension and smoking but is otherwise slim and doesn't have any other comorbidities. He is in significant discomfort, but his vital signs are normal.

A photograph is below



Describe the photograph above (3 marks)

Large, blistering lesions erosions of the skin

Confluent in areas, isolated in others

Surrounding skin normal in colour and appearance

What is the most likely diagnosis? (1 mark)

Pemphigus Vulgaris

Name 2 differential diagnoses and a clinical feature that may distinguish them from your provisional diagnosis (4 marks)

Bullous pemphigoid – doesn't tend to involve the oral mucosa, aren't painful (more itchy than painful), fever is very rare.

Stevens-Johnson Syndrome – Febrile, generalised aches and pains (myalgia/arthralgia) and conjunctivitis is much more common than in PV. Mucosal involvement is much more prominent and more severe, affecting AT LEAST two mucosal areas – eyes, mouth, pharynx, genitals, Upper respiratory tract or lower GI tract.

How is the diagnosis confirmed? (1 mark)

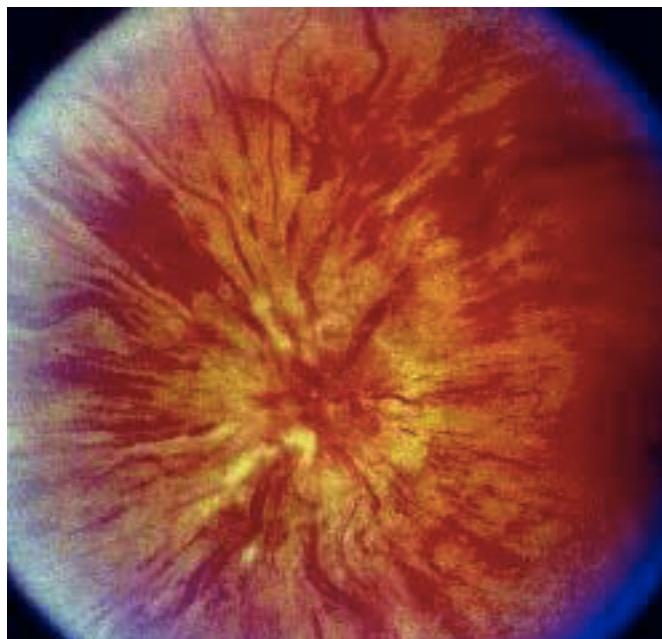
Skin biopsy

Outline the management priorities for this condition (3 marks)

- Primary aim of treatment is to decrease blister formation, prevent infections and promote healing. Systemic corticosteroids, such as oral prednisolone 50mg daily, or IV Hydrocortisone 100mg QID if unable to swallow due to mucosal involvement, are the main treatments. Other immunosuppressants, such as azathioprine and cyclophosphamide can be trialled if steroids are contraindicated or disease progresses despite this.
- Topical emollients help to reduce pain and promote healing
- Wound care with appropriate dressings, such as non-adherent dressings and absorbent ones, provide symptomatic relief as well

Question 3

A 65-year-old male attends complaining of loss of vision in his left eye. He has no pain and is otherwise well. Fundoscopy of his eye is shown below.



a) List six features you would enquire about in the history (6 marks)

- Visual acuity
- Flashers/floaters
- amaurosis fugax
- trauma
- headache/temporal pain
- systemic upset
- neurological signs or symptoms
- eye pain
- previous medical history e.g. AF, TIA

b) Name 2 abnormalities of the fundus photograph above. (2 marks)

- Venous engorgement
- Widespread haemorrhage
- Sunset appearance

c) What is the diagnosis? (1 marks)

- Central Retinal Venous Occlusion

d) Give 4 known associations of this condition (4 marks)

- Trauma –closed head injury
- Vasculitis
- Hypercoagulability states
- HTN
- DM
- Alcohol
- Glaucoma

Question 4

A 34 year old male presents to the ED with a widespread blistering rash. He is systemically unwell and tells you that he recently started a new medication for high blood pressure.

a) Other Stevens-Johnson Syndrome, list six differential diagnosis for a rash in this patient (6 marks)

- Sunburn
- Kawasaki syndrome
- Toxic shock syndrome
- Staphylococcal scalded skin
- Erythema multiforme
- Pemphigoid (or bullous pemphigoid)
- Pemphigus (or pemphigus vulgaris)
- Subcorneal pustular dermatosis
- Insect bites
- Mustard gas
- Boric acid toxicity
- Herpes simplex
- Herpes zoster

b) Give four causes of Stevens-Johnson Syndrome (4marks)

- Herpes simplex
- Mycoplasma
- CMV
- Penicillins
- Cephalosporins
- Sulphonamides
- Phenytoin
- Carbamazepine
- Allopurinol
- Lamotrigine
- NSAIDs especially oxicams
- Immunisations
- Paracetamol (rarely)

c) Describe Nikolsky's sign (1mark)

Epidermis detaches from the dermis/burned with slight friction or rubbing of the skin with finger