

SHORT ESSAY QUESTIONS (Paper 1 – Questions 1-10; Paper 2A – Questions 1-5)
MARCH 2004

Paper 1 – Questions 1-10

Question 1

- (a) List the causes of astigmatism after penetrating keratoplasty. (3 marks)
(b) Describe how you would evaluate post keratoplasty astigmatism. (3 marks)
(c) List the options in management of post keratoplasty astigmatism. (4 marks)

Question 2

A 20 year old male presents two days after an assault. There is no ocular perforation and the visual acuities are 6/6 in each eye. He had adopted a right head tilt to see more comfortably. Radiological tests are normal.

What is the most likely diagnosis? (2 marks)

Give details of your motility examination which would confirm your diagnosis. (8 marks)

Question 3

- (a) Patient A, a 70 year old male, presents two days after left phaco cataract surgery with IOL insertion. He has an intense left uveitis with vision down to 6/60. List four differential diagnoses. (4 marks)
- (b) Patient B, a 70 year old woman, presents after routine left phaco cataract surgery with IOL insertion. At her last consultation 3 months before her acuity was 6/6 and the eye quiet. She has been asymptomatic till a week ago and now has an intense left uveitis with vision down to 6/60 with a dense capsular opacity. The retina is completely attached. What diagnosis must you exclude? (1 mark)
- List the additional signs you would look for (1 mark) and your management (4 marks)

Question 4

- (a) List 4 common causes of an oedematous macula in a 70 year old patient. (4 marks)
(b) Describe the fluorescein angiographic appearance of cystoid macular oedema. (1 mark)
(c) Outline your management of cystoid macular oedema in a 70 year old patient. (5 marks)

Question 5

A 70 year old patient presents with blur and distortion of sudden onset in the left eye. There are drusen with pigment epithelial changes at both maculae with subretinal haemorrhage involving the left foveal avascular zone.

- (a) Describe the most likely diagnosis of each macula. (2 marks)
(b) Describe in detail the various likely appearances on the fluorescein angiogram of the left eye. (5 marks)
(c) Name the published studies which would guide your management of this patient. (3 marks)

Question 6

A four year old child presents with photophobia. List the differential diagnoses and outline the associated signs of each. (10 marks)

Question 7

Describe your examination to determine the site of the lesion in a patient who presents with a unilateral facial nerve weakness.

For each lesion site (i) describe the signs and (ii) give common examples of causes. (10 marks)

Question 8

You are called to the Casualty Department to see a 45 year old woman who has an acute left sided headache with ptosis, enophthalmos and a miotic pupil. Describe your differential diagnoses and the symptoms and signs you would look for with each. (10 marks)

Question 9

A 25 year old male presents with intraocular pressures of 15 mm Hg in right eye, 45 mm Hg in left eye. The eye is not inflamed. What is your differential diagnosis? For each differential describe the additional anterior segment signs you would look for. (10 marks)

Question 10

A 30 year old man presents with a recurrent pterygium needing surgery. Describe your surgical procedure. (10 marks)

Paper 2A – Questions 1-5**Question 1**

A 60 year old man presents with retinal haemorrhages in all 4 quadrants. Describe your differential diagnoses and how you would differentiate on fundoscopy between each diagnosis. (Exclude angiographic signs). (10 marks)

Question 2

An elderly female with previously normal vision presents acutely with a red painful eye and blurred vision. The intraocular pressure is 55 mmHg and the pupil is mid-dilated and poorly reactive.

- What is the most likely diagnosis? (1 mark)
- What is your differential diagnosis? (2 marks)
- Describe your management of this patient. (7 marks)

Question 3

A 22 year old male presents with a 4 day history of left orbital pain. He has a red, congested and proptosed left eye with pain on right gaze. The left acuity is down to 6/9, the ocular media are clear. Examination and imaging of the right eye and adnexae is normal.

- Give the most likely diagnosis (2 marks)
- List four differential diagnoses. (2 marks)
- Assuming your diagnosis in (a) is correct what would the CT scan show? (2 marks)
- Assuming your diagnosis in (a) is correct which cases are difficult to manage to manage and why? (4 marks)

Question 4

While undergoing investigation for sleep apnoea in hospital a 75 year old female suffers a trivial incident and bumps her head. Six months later you receive a letter from her lawyer asking your opinion whether the left upper ptosis of which she now complains, was caused by the subject accident.

- What would assist you in coming to a decision as to cause and effect in this lady? (2 marks)
- What would you look for on clinical examination? (4 marks)
- What investigations would you do in this patient? (4 marks)

Question 5

A 90 year old lady presents with a mature white cataract. In doing a capsulorrhexis on this patient:

- what difficulties might occur as a consequence of the mature opacity (4 marks)
- describe a stain that can be used to assist your capsulorrhexis (3 marks)
- describe your surgical technique using this stain (2 marks)
- describe possible adverse effects of the stain (1 mark)

Pathology - March 2004

QUESTION 1

A pigmented conjunctival lesion is reported as "primary acquired melanosis (PAM) with atypia".

- a. Describe the histological features of primary acquired melanosis with and without atypia.
- b. What is the relationship between primary acquired melanosis and melanoma of the conjunctiva?

QUESTION 2

- a. What pathological features (gross and microscopic) are noted in a senile cataract?
- b. Discuss the histopathology of cystoid macular oedema.

QUESTION 3

- a. What cells are involved in a sarcoidal type granuloma and briefly discuss the steps in formation of such a granuloma.
- b. Discuss histopathological findings in a globe with Fuchs Heterochromic Iridocyclitis (FHI).

QUESTION 4

- a. What are the risk factors for developing Acanthamoeba keratitis?
- b. Where is the organism found in the environment?
- c. What can an Ophthalmologist do to help confirm the diagnosis in a patient suspected with Acanthamoeba keratitis?
- d. How is this organism detected in the laboratory?

QUESTION 5

- a. List possible corneoscleral complications of chronic rheumatoid arthritis?
- b. Describe relevant histopathological findings (of these complications).

QUESTION 6

A 45 year old woman has a tender firm to hard mass in the anterior orbit which she first noted 2 months ago with a gradual increase in size. This was biopsied and the report showed: "dense fibrous tissue necrosis with lipid droplets, mixed inflammatory cell infiltration and perivascular aggregates of mononuclear cells. No frank vasculitis is noted."

- a. What is the most likely pathological diagnosis?
- b. How may the histopathological appearance change in time?
- c. What differential diagnoses does the pathologist entertain in this case?
- d. Discuss possible alternative clinical presentations of the most likely diagnosis.

QUESTION 7

- a. Describe the wound healing process in the cornea following a clear corneal incision for cataract surgery.
- b. What factors may interfere with healing of this wound?

QUESTION 8

- a. What are the histopathological features in the retina in acute central retinal vein occlusion (CRVO)?
- b. What changes may be seen in a globe enucleated many years after CRVO?

QUESTION 9

- a. What are the classic histological features of pleomorphic adenoma of the lacrimal gland?
- b. What are potential complications of pleomorphic adenoma of the lacrimal gland?

QUESTION 10

A 45 year old man with chronic progressive external ophthalmoplegia is seen in the clinic.

- a. What other clinical features would you look for in this patient?
- b. It is planned to perform a skeletal muscle biopsy in this patient. How would this be done and how should this be sent to the laboratory?
- c. What specific investigations would you write on the request form?

QUESTION 11

A diagnosis of ocular cicatricial pemphigoid is suspected in a patient.

- a. Outline the procedure for obtaining an optimal specimen for accurate pathological diagnosis.
- b. Briefly describe the characteristic diagnostic histopathological features.

QUESTION 12

List the most appropriate serological investigation(s) of a patient suspected to have ocular involvement with the following disorders

- a. Wegener's granulomatosis
- b. Thyroid Related Ophthalmopathy (Grave's Disease)
- c. Giant cell arteritis
- d. Juvenile Arthritis
- e. Birdshot chorioretinopathy
- g. Vogt Koyanagi Harada
- f. Suspected infectious neuroretinitis