

RACE Summer 2006: Paper 1

Question 1: What factors would you take into account in assessing a high myope (-20D) pre-operatively for cataract surgery and what precautions would you take during surgery?

Question 2: An 84 year old woman complains of poor vision. She describes herself as fit and well. She is a diet controlled diabetic, is mildly hypertensive on treatment with an ACE inhibitor and takes aspirin 1/2 tab/day. She has glaucoma and has been on treatment with latanoprost (Xalatan) and brimonidine (Alphagan) for 5 years. Her mother went blind from glaucoma.

Findings: VaR 6/12 VaL 6/18-1 (best corrected R and L)
 IOP R 19 L 24
Moderate density nuclear and cortical cataract OU
Gonioscopy Grade IV, no PAS, no TM pigmentation
Discs: (hazy view) - infero-temporal rim loss OU R 0.80 L 0.90
Field: established loss in arcuate pattern OU, L worse than R
(Mean deviation R - 1 0. 5dB, L -22.4dB); field loss in LE is progressive.

Discuss your management of this lady and explain your treatment decisions.

Question 3: A four-year-old child is brought into your clinic with a history of intermittent squint. The child is otherwise healthy. You determine the child has an intermittent exotropia.

- (a) What features on history and examination are typical of intermittent exotropia?
- (b) Your findings confirm the diagnosis of intermittent exotropia, the child is coping well most of the time, and you decide that observation is all that is necessary. Six months later the child shows increasing manifest exotropia and you elect to treat. What non-surgical management options are there?
- (c) A further six months later, the child is reviewed and you document progression towards constant exotropia. A decision is made to operate. What procedure would you carry out? What is the aim of surgery? (Assume near and distance deviation is constant and there is no lateral incomitance)
- (d) Three months after surgery the child has a significant esotropia. What treatment is available?

Question 4: A 60 year old physical fitness fanatic comes to see you. His 2 older siblings have both lost vision from age related macular disease. He is concerned about the implications of this for himself and asks if there is anything he can do to prevent his getting AMD. Describe your assessment and advice to this patient.

Question 5: A 45 year old man presents with sudden loss of left vision. He has a past history of well controlled IDDM for 25 years. One year ago he had sudden loss of right vision with a swollen optic disc. His best corrected acuities are: right 6/24, left 6/36. There is a large central and inferior visual field loss in the right eye and extensive loss in the left. The right optic disc is atrophic. The left disc is swollen, especially over the nasal and superior quadrants with dilated pre-papillary capillaries and has no cup.

Background diabetic retinopathy is present. Ocular examination is otherwise unremarkable.

Outline the advice you would give him including diagnosis, the investigations you would recommend and the implications of his vision for daily life.

Question 6: A 34 year old female presents with recent onset of blurred vision in both eyes. There is no past history of ocular or significant systemic disease or trauma. Best corrected vision is 6/18 right, 6/24. You observe that both eyes are white but with iritis, large keratic precipitates, vitreous inflammatory cells, macular oedema and perivenous retinal infiltrates.

What ocular and systemic investigations would you undertake or consider helpful? Outline the likely findings from these investigations and their relevance to the diseases that may be present. How will the results of these investigations help you manage this patient?

Question 7: A 13-year-old boy presents with chronic itching, redness, blurred vision and moderate ptosis in both eyes. He has a general history of asthma. On examination, he has marked conjunctival injection with a dense white plaque on the anterior superior cornea of the right eye.

(a) What is the most likely diagnosis?

(b) What is the management of this condition?

Question 8: What are the advantages and limitations of CT and MRI of the orbit? In which orbital conditions is one modality superior to the other?