



## FRCS Ophthalmology Part 2 – Sample Questions

Please find below some past paper Problem Solving questions including for the final question a specimen answer:

1. A 17-year-old girl is referred to your clinic with a history of increasing prominence of her right eye. Her general health is good. Describe how you would investigate and manage this case.
2. An 80-year-old lady attends your clinic with a complaint of gradual vision reduction. She describes the problem as being greater for close vision rather than distance vision. She wishes to continue to drive. Describe how you would deal with this case.
3. A 42-year-old metal worker attends the clinic with a history of the recent awareness of substandard vision with his left eye. There is evidence of an afferent pupillary defect. How would you investigate and manage this case?
4. A 60-year-old lady complains of visual reduction for the last year. She works as a secretary and now has difficulty seeing her VDU screen. There is a history of myopia and she previously had successful surgery in both eyes for a retinal detachment 5 years before. On examination she appears to be developing cataracts in both eyes. Discuss the risks and benefits of treatment giving your preferred options and the reasons for your choice.
5. You are asked to see a 35-year-old mother of two children who has a history of ocular toxoplasmosis. She is 20 weeks pregnant and gives a history of distortion and blurring in the left eye. Discuss the possible causes of her visual symptoms and how you would proceed with the management.

Specimen Answer provided below.

### Medical Emergency Sample Question

6. An 82 year old lady with rheumatoid arthritis developed pain, redness and tenderness of her right calf. A deep vein thrombosis is suspected.
  - a) What are the other possible diagnoses?
  - b) What investigations should she have?
  - c) What are the risk factors for developing a DVT?
  - d) What is the best initial management?
  - e) What are the complications of: (i) DVT (ii) Management of DVT?

Specimen Answer provided below.

## Specimen Answer to Question 5

### Answer Guide:

#### A. Differential Diagnosis

Most likely recurrent Toxoplasmosis

Other causes of uveitis in young person e.g. sarcoid, Ankylosing Spondylitis, etc  
Related to pregnancy; Hypertension, Toxaemia, Diabetes, Osmotic cataract, macular oedema

Other causes of blurred vision per se; Optic neuritis, vein occlusion, retinal detachment, Vitreous haemorrhage, CSR, ??ION or arterial occlusion (as too young), Tumour/melanoma  
Refractive change.

#### B. Management

**History:** nature of blurring, duration, onset, severity, intermittent or constant. Associated symptoms; pain, redness, photophobia, floaters, similar to previous episodes of toxoplasmosis. Systemic symptoms; general health, pregnancy, fever, weight loss, chest infection, renal problems.

**Examination:** VA in both eyes, Anterior segments for uveitis, conj injection, IOP, Pupils, lens, vitreous cells and debris, retinal appearance for active toxoplasmosis lesions or old scars, or any of the features mentioned in the D.Diagnosis, involvement of disc or macula and position of focus of inflammation.

**Investigations:** If toxo, probably need few investigations apart from baseline bloods (FBC, ESR, Glucose, U&E and LFTs). If other causes may need retinal photography and FA but caution as pregnant and some risk to foetus unless FA absolutely essential and diagnosis not possible with slit-lamp fundus exam. Perhaps orbital U/S if poor view of fundus to exclude detachment/solid lesion. Systemic investigations as indicated by history e.g. CXR if chest infection, other sources of uveitis.

**Treatment:** decide if treatment is absolutely necessary for toxoplasmosis. Discuss the pros and cons of treatment or not of this condition in pregnant woman: if vision still not too bad and disc and macula not threatened then better not to treat. If vision likely to be permanently affected then need to discuss with obstetrician and pharmacist the best form of treatment.

**Treatment:** antibiotics; Azithromycin, pyrimethamine + vitamin supplements. Systemic steroids; again risk v benefit in pregnancy, probably safe to give in 2<sup>nd</sup> trimester if absolutely necessary, but discuss with obstetrician before starting. Topical steroids; safe to give but probably of little help unless anterior Uveitis

**Follow-up:** monitor closely till condition settles or until side effects with treatment require discontinuation, probably seeing every 1-2 weeks at clinic.

**Other Conditions:** Almost all of the other D.Diagnosis's should merely be monitored till baby delivered and then appropriate investigations performed and treatment instituted. Only exception would be retinal detachment, which would require surgery to repair more promptly.

## **Specimen Answer to Question 6**

### **Answer Guide:**

#### **a) What are the other possible diagnoses?**

Ruptured knee (Baker's Cyst)

Cellulitis

NB These diagnoses are not mutually exclusive – any combination can occur.

#### **b) What investigations should she have?**

Full blood count (WCC – to help find infection; Hb to look for polycythaemia; platelet count look for thrombocytosis)

D-Dimer assay – evidence of clot lysis

Ultra-sound scan of calf and leg – ideally Doppler ultrasound; this should also rule out ruptured knee  
If pulmonary embolus a serious concern Chest X-ray; V/Q scan; CT pulmonary angiogram.

#### **c) What are the risk factors for developing a DVT?**

Immobility especially long flights or associated with illness / hospital admission

Leg swelling, varicose veins

Previous DVT / PE

Inflammatory and auto-immune diseases

Active infection

Malignant disease

Haematological conditions – thrombophilic states, hyperviscosity syndromes (e.g. Myeloma),

Myeloproliferative disease

Recent surgery especially hip, pelvic or gynaecological

These are often multiple and are additive

#### **d) What is the best initial management?**

Graded support stocking

Assessment of risk factors for haemorrhage then anti-coagulation initially with Heparin

Treatment of any underlying condition

Warfarin

#### **e) What are the complications of: (i) DVT (ii) Management of DVT?**

##### **(i) DVT**

Chronic post-phlebitic leg problems – pain, swelling, eczema, itch, ulceration

Pulmonary embolism – range of severity from asymptomatic, to symptomatic, to sudden death

Stroke or other arterial embolus via mechanism of paradoxical embolus through cardiac defect

##### **(ii) Management of DVT**

Haemorrhage – intra-cranial, ocular, GI and other.