

MD Commentary Exam June, 2021

Time Allowed: (1.30 hours)

Answer the two questions:

Question 1:

(100 marks)

1

A 59-year-old man with a 2-year history of hypertension presented to our department with sudden right hemiplegia and decreased visual acuity in his left eye. On examination, his left eye showed ciliary congestion and mydriasis. A visual acuity test revealed that his left eye had no light perception.

He had incomplete Wernicke's aphasia and grade 3/5 right limbs weakness.

Fundus photography demonstrated an optic disc with blurred margins, narrowed arteries, dilated and occlusive veins, cotton wool exudates, scattered blot hemorrhages and a globally pale retina.

Intraocular pressure (IOP) was 33 mmHg in the left eye and 14 mmHg in the right eye.

Subsequent diffusion-weighted MRI showed a large infarction of his left parietal and occipital lobes. MRA was also ordered for neck and brain blood vessels.

The patient was treated with anti-coagulants, anti-platelet drugs and ocular hypotensive agents. Finally, his right limb weakness almost completely recovered and he had normal IOP in his left eye, although there was no change in visual acuity.

Comment on the case ?



Tanta University Faculty of Medicine Ophthalmology Dept.

Question 2:

(100 marks)

A 19 years old healthy female noted blurred vision, redness, and pain in the right eye (RE) for 6 months.

On examination, visual acuity (VA) was counting fingers in RE and 20/20 in left eye (LE). The RE demonstrated shallow anterior chamber with 360 degrees peripheral anterior synechiae. Approximately 400 translucent spherules of 50-200 microns diameter were embedded in the iris stroma and anterior chamber angle.

Other findings included posterior subcapsular cataract, elevated intraocular pressure (IOP) of 30 mm Hg, and advanced glaucomatous damage with C:D ratio of 0.9. The LE was normal.

Iris biopsy was done where a specific stain was ordered and transmission electron microscopy (TEM) confirmed the diagnosis. Results of analysis with *in situ* hybridization for subtyping were inconclusive due to the presence of heavily melanized melanocytes.

Systemic evaluation including complete blood count, liver and kidney function tests, serum and urine protein electrophoresis, serum and urine light chain protein, bone marrow biopsy, and PET. CT scan were normal.

Over the following 3 years, the patient developed cataract, uncontrolled glaucoma, and corneal decompensation, requiring cataract surgery, glaucoma valve surgery, and penetrating keratoplasty, with final VA at 20/30 in affected eye

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Good Luck.



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Tanta University

Faculty of Medicine

Ophthalmology Department

MD Exam in Ophthalmic Surgery

Date: June 2021

Time allowed: 3 hours

Part I:

Write in the following 8 items (20 Marks each)

- 1. Preoperative, intra and post-operative considerations of cataract surgery in uveitis
- 2. Complications of glaucoma implants.
- 3. Recent advances in macular hole surgery
- 4. Management of failed DCR
- 5. Surgical treatment of dry eye
- 6. Management of mono-ocular elevation deficiency
- 7. Indications, types & complications of keratoprosthesis.
- 8. Femtolaser corneal refractive procedures.

Part II: 25 MCQs (4 marks each): Choose only one best correct answer

1. To prevent a radial tear or tear extension during capsulorhexis, all the following may be useful <u>except:</u>

a.Injecting more viscoelastic agent.

b. Widening of the corneal incision.

c.Redirecting the tear in a more central direction.

d.Restarting the capsulorhexis from its origin in an opposite direction.

e.Retracting the iris to note the extent of the radial tear.

2.Before cataract surgery the patient should be informed of all the following issues except which one?

a.Purpose of the surgery.

b.Potential serious complications.

c. Guaranteed good visual outcome.

d.Refractive requirements after surgery (e.g. spectacles).

e.Benefits of successful surgery.

3. The following statements regarding aqueous misdirection syndrome are likely to be true except:

a. Typically occurs in patients with open angle glaucoma who have undergone filtration surgery

b. Patients present with a flat anterior chamber

c. Discontinuation of cycloplegics may precipitate aqueous misdirection

d. The anterior chamber typically remains shallow despite a patent iridotomy

4. What is your initial management maneuver when you suspect a posterior

capsular rupture during cataract surgery using phacoemulsification ?

a. Remove all instruments and irrigation from the eye immediately

b. Enlarge the wound and convert to extracapsular cataract surgery

c. Continue irrigation at foot position 1 and place dispersive ophthalmic viscoelastic gel into the anterior chamber

d. Avoid IOL placement to facilitate removal of posterior lens fragments.

5. Selective laser Trabeculoplasty (SLT) is a surgical option for treatment of the following glaucomatous disorders except:

a. Iridocorneal Endothelia Syndrome (ICE)

b. primary Open Angle Glaucoma (POAG)

c. Pigment Dispersion Syndrome (PDS)

d. Pseudoexfoliation Syndrome (PXE)

6. On the first postoperative day after phacoemulsification and posterior chamber IOL implantation, a 67 years old man developed diffuse central and peripheral edema. The cornea of the other eye is normal. He has no pain and IOP is 17 mm Hg with rounded and regular pupil. What is the most likely diagnosis of corneal edema?

a. Decompensated Fuchs endothelial dystrophy

b. Response to intra-operative, intraocular solutions

c. Descemetes membrane detachment

d. anterior chamber collapse with IOL endothelial touch

7. Laser peripheral iridoplasty may be a useful adjunct in the treatment of:

a. Nanophthalmos

b. Anatomical narrow angle with appositional angle closure

c. Plateau iris syndrome

d. An insufficient space between the iris and the cornea in laser peripheral iridotomy

e. All of the above

8- Which sign is commonly found in blepharochalasis syndrome?

- a. thin eye lid skin
- b. blepharoptosis
- c. herniated orbital fat
- d. low lid crease

9- Blepharophimosis, all of the following is true except

- a. is an autosomal dominant condition
- b. epicanthus inversus is a feature
- c. has nasal bridge hypoplasia
- d. has hypertelorism
- e. is associated with mental retardation

10- Which of the following is true about Jones dye test in epiphora:

- a. it is used to diagnose obstruction of the lacrimal drainage system
- b. if the Jones 1 (primary) test is normal, the cause may be due to hypersecretion of tear
- c. if the Jones 1 (primary) test is negative, the obstruction is in the common canaliculus
- d. if the Jones II (secondary) test is negative, the abnormality may be due to pump failure
- e. if the Jones II (secondary) test is positive, there is a partial nasolacrimal duct obstruction

11- In a patient with laceration to the upper lid, choose correct answer:

- a. the presence of fat herniation indicates the orbital septum is penetrated
- b. the orbital septum should be resutured if penetrated
- c. in the presence of ptosis, exploration should be delayed for at least72 hours to avoid retrobulbar haemorrhage
- d. ptosis is usually caused by damage to the oculomotor nerve

12.Following incisional keratotomy, radial corneal wounds regain up to what percentage of unincised corneal tensile strength?

- a. 10%.
- b. 25%.
- c. 50%.
- d. 75%.

13- In blow-out fracture, choose the correct answer:

- a. ocular movement is limited in all direction
- b. Surgical emphysema is a recognized feature
- d. Immediate treatment is mandatory
- e. Decreased sensation at the tip of the nose is common

14- At what point do most flap folds occur after laser-assisted in situ keratomileusis (LASIK)?

- a. within 1 week.
- b. after 2 weeks.
- c. after 1 month.
- d. after 6 months.

15- Local anaesthetic injections are less painful if:

- a. the anaesthetic is cooled.
- b. they are combined with adrenaline
- c. they are given rapidly
- d. the pH is neutralized prior to administration

16- Negative Q value of the cornea indicates:

- a. Oblate shape
- b. Aspheric surface
- c. Prolate shape
- d. Very flat cornea

17- Gold weight is placed pretarsally in the upper lid in :

- a- ankyloblepharon
- b- involutional ectropion
- c- lagophthalmos VII nerve palsy (Bell's palsy)e
- d- spastic entropion of upper lid

18- In concomitant squint:

- a. Primary deviation > Secondary deviation
- b. Primary deviation < Secondary deviation
- c. Primary deviation = Secondary deviation
- d. None of the above

19- Clinical features of total 3rd nerve palsy include all of the following except:

- a. Large angle exotropia with small hypertropia and extorsion
- b. face turn to opposite side
- c. ptosis
- d. Dilated fixed pupil

20- What location for a retinal detachment would be most amenable to treatment by

pneumatic retinopexy?

- a. inferior rhegamatogenous detachment
- b. superior tractional retinal detachment
- c. superior rhegamatogenous detachment
- d. traumautic macular hole

21- The primary goal in intermediate therapy for chemical burns is:

a. normalization of intraocular pressure (IOP).

- b. reestablishment of limbal blood flow.
- c. control of intraocular inflammation.
- d. reepithelialization of the corneal surface.

22- A 57-year-old man complains of flashing lights and a shade of darkness over his inferior nasal quadrant in one eye. On exam you find the pressure a little lower on the affected eye and a questionable Schaffer's sign. What condition would lead you to immediate treatment/surgery?

- a.macula-off rhegmatogenous retinal detachment
- b. epi-retinal membrane involving the macula
- c. dense vitreous hemorrhage in the inferior nasal quadrant
- d. mid-peripheral horseshoe tear with sub-retinal fluid

23- The following are true about astigmatic keratotomy except:

a. the incision is placed perpendicular to the steepest meridian

b. causes coupling

c. the nearer the incision to the centre the greater the reduction of astigmatism

d. if astigmatic keratotomy were performed for a phakic patient, the site of incision should be based on the corneal topography

e. astigmatic keratotomy can be carried out either as a transverse or arcuate incision

24- When a tight suture is placed radially in the cornea, all of the following may occur except:

a. the cornea adjacent to it is flattened

b. the curvature of the cornea along that meridian is decreased

c. the curvature of the cornea at 900 to that meridian is decreased

d. the effect on corneal curvature is increased if the suture is deep

e. the effect on corneal curvature is increased if the suture is nearer the centre of the cornea

25- PTK would be most appropriate for treating which of the following corneal

disorders?

a. superficial granular dystrophy

b. anterior stromal neovascularization

c. mid-stromal herpes scar

d. Fuchs' dystrophy

Best wishes



Tanta University

Faculty of Medicine

Ophthalmology Department

MD Exam in Ophthalmic Medicine

June 1st 2021

Time allowed: 3 hours

Total Marks: 260

Part I:

Write in the following 8 items (20 Marks each)

- 1. Perimetric features of chiasmal & retrochiasmal lesions.
- 2. Complications of radiation to the area around the eye.
- 3. Secondary congenital glaucomas in children.
- 4. Causes of visual impairment in patients with thyroid eye disease.
- 5. Ocular surface optimization for corneal refractive surgery.
- 6. Clinical picture of Herpes Simplex Virus (HSV) infection of the anterior segment of the eye.
- 7. Peripheral retinal neovascularization.
- 8. Uveitis masquerade syndrome.

Part II: 25 MCQs (4 marks each): Choose only one best correct answer

1. A 2-year-old child presents with intermittent exotropia. Which one of the following would describe here condition?

- a. Obligatory suppression
- b. Excellent stereopsis
- c. Monofixation
- d. Amblyopia

2. All findings are associated with sickle cell disease except:

- a. Dalen-Fuchs nodules
- b. Sunburst
- c. Sea fan neovascularization
- d. Angioid streaks

3. Which one of the following concerning Horner's syndrome is TRUE?

- a. Cocaine 4% will dilate the Horner's pupil and leave the normal pupil unchanged.
- b. The distribution of anhydrosis is helpful in locating the lesion.
- c. The miotic pupil which dilates in response to hydroxyamphitamine rules out the need for chest x-ray.
- d. A painful Horner's syndrome with coincident ipsilateral headache is indicative of spontaneous carotid dissection, even in the setting of normal carotid angiogram.

4. Cogan's syndrome is frequently associated with which systemic disorder?

- a. Polyarteritis nodosa.
- b. Wegener's granulomatosis.
- c. Rheumatoid arthritis.
- d. Systemic lupus erythematosus (SLE).

5. Essential atrophy of the choroid is a consequence of disordered metabolism of:

- a. Phenylalanine
- b. Ornithine
- c. Cysteine
- d. Arginine

6. Examples of autosomal dominant anterior stromal corneal dystrophies include all of

the following EXCEPT:

- a. Granular dystrophy.
- b. Macular dystrophy.
- c. Lattice dystrophy.
- d. Reis-Bucklers dystrophy.

7. Stevens-Johnson syndrome is characterized by all of the following except which one?

- a. It usually occurs in the fifth and sixth decades of life.
- b. It can cause an acute, bilateral, mucopurulent conjunctivitis, chemosis, and conjunctival vesicles.
- c. Systemic toxicity includes fever, malaise, headache, and fluid imbalance.
- d. It may be precipitated by bacteria and sulfonamides

8. On routine examination of a 37-year-old man, you find multiple midperipheral yellowish flecks in both eyes with flecks in the posterior pole. Fluorescein angiogram reveals a characteristic silent choroid appearance. Which one of the following electrophysiologic findings is characteristic for this condition?

- a. ERG amplitudes are often normal
- b. EOG light peak to dark trough is profoundly reduced
- c. Photobic ERG amplitudes are extinguished
- d. Scotopic ERG amplitudes are extinguished

9. Which one of the following factors constitutes the greatest risk of affecting vision from hydroxychloroquine used for treating rheumatoid arthritis in a middle-aged female?

- a. Relatively younger age
- b. Presence of renal insufficiency
- c. Concomitant glaucoma
- d. Presence of marked obesity

10. Corneal clouding does not occur in which mucopolysaccharidosis?

- a. Hunter
- b. Hurler
- c. Scheie
- d. Sly

11. Which of the following disorders is most likely to be found in a patient suffering from sleep apnea?

- a. Iritis
- b. Interstitial keratitis
- c. Papillary conjunctivitis
- d. Diffuse folliculosis

12. Epidemic keratoconjunctivitis (EKC) typically remains contagious for how many days?

a. 5 daysb. 7 daysc. 10 daysd. 14 days

13. Which of the following is the best indicator of activity in thyroid eye disease?

- a. Diplopia
- b. Upper lid edema
- c. Pain
- d. Reduced color vision.

14. A 60- year- old man presented by severe throbbing eye pain and a sudden drop in vision 6 days after cataract extraction and IOL implantation in the left eye. He had light perception vision and IOP of 25 mm Hg, 1.5- mm hypopyon, hazy iris details, and mild corneal edema. What would be the recommended intervention for this patient?

- a. AC tap with injection of intravitreal antibiotics.
- b. Surgical removal of the IOL.
- c. IV antibiotics
- d. Pars plana VIT with antibiotic injection.

15. You evaluate a 30- week old preterm baby in the neonatal ICU. On exam you note stage 3 Zone I ROP in the right eye and stage 3 Zone II ROP in the left eye. How would you proceed with counseling the parents concerning treatment options?

- a. Both eyes will benefit more from panretinal photocoagulation (PRP) than bevacizumab.
- b. The right eye will benefit from either PRP or bevacizumab equally, but the left eye may benefit more from bevacizumab.
- c. The right eye may benefit more from bevacizumab but the right eye will benefit from either PRP or bevacizumab equally.
- d. Both eyes will benefit more from bevacizumab than PRP.

16. What finding in a child with isolated abduction deficit most strongly argues for the diagnosis of Duane's retraction syndrome rather than a congenital sixth nerve palsy?

- a. Inability to fully abduct the eye voluntarily
- b. Normal abduction on oculocephalic rotational testing
- c. Orthophoria in primary gaze
- d. Involvement of the left eye only

17. A 34-year-old woman presents complaining of double vision while reading. The examination is normal except for a small angle left hypertropia in down gaze and poor elevation of the left eye as well. No systemic abnormalities and no history of trauma. The next step in diagnosis should be:

- a. Tensilon test
- b. MRI of the orbit
- c. Orbital ultrasound
- d. Forced duction test

18. Which one of the following does NOT apply to central serous chorioretinopathy?

- a. Increased frequency at times of physical strain or emotional stress.
- b. History of migraine-type headache.
- c. Systemic corticosteroid use.
- d. Reported occurrence in only a few individuals younger than 18 years.

19. Which statement is not true about arteritic anterior ischemic optic neuropathy:

- a. Results from long ciliary artery vasculitis.
- b. Is more common in women than in men.
- c. Is usually associated with a pale disc.
- d. Rarely is associated with spontaneous improvement of visual acuity.

20. The drug of choice for presumed filamentous keratomycosis is:

- a. Topical amphotericin.
- b. Oral ketoconazole.
- c. Topical clotrimazole.
- d. Topical natamycin.

following panretinal photocoagulation?

- a. Systemic hypertension.
- b. Increasing age
- c. Short axial length (<23 mm).
- d. Total retinal surface area treated.

22. Hearing loss is not found in

- a. Cogan's syndrome
- b. Refsum's disease
- c. Duane's syndrome
- d. Stickler's syndrome

23. The test that gives the best dissociation is:

- a. Maddox rod
- b. Worth 4 Dot
- c. Bagolini glasses
- d. Red glass

24. Congenital superior oblique palsy is characterized by all of the following except:

- a. Excyclotorsion <10°
- b. Head tilt
- c. Facial asymmetry
- d. <10 D of vertical vergence amplitudes

25. Which of the following statements regarding monofixation syndrome is false?

- a. There is no diplopia with the 4 Δ base-out prism test
- b. Fusion with the Worth 4 Dot test is absent at distance
- c. Fusional vergence amplitudes are absent
- d. Titmus test for fly is normal

END OF EXAM

GOOD LUCK