# OCULAR EXAMINATION, OCULOPLASTY, OCULAR ONCOLOGY

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The following multiple-choice questions have only one correct answer. However, questions with the "()" symbol at the end of the list of choices must be answered as true or false. Note that there could be one or more true or false answers.

### 1. Which of the following statements concerning the visual acuity test is TRUE?

- A) Vision may be compromised if posterior lens opacity is present on pinnhole examination ().
- B) The Pelli-Robson chart is used to assess near vision ().
- C) The online Spaeth Richman contrast sensitivity test (SPARCS) is available ().
- D) The Amsler Grid test measures the central 40° area ().
- E) The photostress recovery period is frequently longer than normal in optic nerve diseases ().

## 2. Which of the following is NOT a color vision test?

- A) Ishiara test.
- B) The City University test.
- C) Hardy-Rand-Rittler test.
- D) Farnsworth-Munsell 100-hue test.
- E) Sinusoidal (Sine wave) Grating chart test.

## 3. Regarding Goldmann applanation tonometry (GAT);

- A) Excessive administration of fluorescein causes an overestimation of intraocular pressure ().
- B) GAT measures the area of 3.06 mm in the center of the cornea ().
- C) Corneal edema may lead to overestimation of intraocular pressure ().
- D) Low intraocular pressure can be detected in patients wearing narrow-collared clothing ().
- E) Holding breath while measuring intraocular pressure can result in excessive intraocular pressure ( ).

#### 4. Which of the following statements about intraocular pressure measurement is FALSE?

- A) Perkins applanation tonometry can be portably measure intraocular pressure.
- B) Pneumotonometries are especially useful in large-scale screening.
- C) Perkins applanation tonometry allows measurements to be taken without being influenced by corneal mechanics.
- D) Local anesthesia is not necessary when using rebound tonometry to measure intraocular pressure.
- E) Schiotz tonometry measures intraocular pressure by placing a weight on the cornea.

### 57. Regarding choroidal tumors;

- A) Choroidal melanoma shows low internal reflectivity on ultrasound ().
- B) Dual circulation on fundus fluorescein angiography is typical for choroidal metastases ().
- C) Biopsy may be necessary in choroidal metastases ().
- D) In the presence of choroidal metastases-induced subretinal fluid, intravitreal anti-VEGF therapy can be provided ( ).
- E) Melanocytomas are more common in dark-colored individuals, while choroidal melanomas are more common in light-colored individuals ( ).

#### 58. Regarding retinoblastoma;

- A) Retinoblastoma is the most common malignant intraocular tumor ().
- B) Non-heritable retinoblastoma is a predisposing factor for pinealoblastoma ().
- C) If both parents of a patient with heritable retinoblastoma are healthy, the likelihood of retinoblastoma in his sibling is 2% ().
- D) If one of the parents of a patient with heritable retinoblastoma has a finding such as retinoma or calcified retinal scar, the likelihood of the other sibling having retinoblastoma is 40%().
- E) External beam radiotherapy should be the first choice in the treatment of hereditary retinoblastoma cases ( ).

## 59. Regarding neural and vascular tumors of the retina;

- A) Retinal capillary hemangioma is seen at a younger age in patients with von Hippel Lindau Disease compared to other cases ().
- B) Photocoagulation can be applied in the treatment of cavernous hemangioma ().
- C) A gene responsible for Von Hippel Lindau Disease is found on the third chromosome ().
- D) A Von Hippel Lindau Disease gene is an oncogene ().
- E) Retinitis pigmentosa is a predisposing factor for vasoproliferative tumor and retinal astrocytoma ( ).

#### 60. Which of the following is not a typical finding in primary vitreoretinal lymphoma?

- A) Anterior uveitis.
- B) Vitritis.
- C) Exudative retinal detachment.
- D) Cystoid macular edema.
- E) Retinal vasculitis.

11. A 27-year-old female patient presented to the ophthalmology clinic after experiencing light sensitivity in her eye for a few months. Her bilateral corrected visual acuity was 20/20, and her intraocular pressure was 17 mmHg. There was no obvious pathology in the retina. She admitted to taking Moxifloxacin orally three months ago for pneumonia. Based on this information and the anterior segment photographs provided below, which of the following diagnoses is more likely?



- A) Pigment dispersion syndrome (PDS).
- B) Herpes Zoster Ophthalmicus (HZO).
- C) Bilateral acute depigmentation of the iris (BADI).
- D) Herpes Simplex uveitis.
- E) Cytomegalovirus (CMV) uveitis.

## 12. Regarding neovascular glaucoma;

- A) A relative afferent pupillary defect increased neovascular glaucoma risk in patients with retinal vein occlusion ( ).
- B) Etiologically, retinal artery occlusion is more common than retinal vein occlusion in neovascular glaucoma ( ).
- C) Intraocular pressure may be within normal limits when rubeosis iridis is detected in a patient with retinal vein occlusion ().
- D) Miotics can be used in the treatment of neovascular glaucoma ().
- E) Intracameral anti-VEGF injections have proven to be superior to intravitreal anti-VEGF injections in neovascular glaucoma ( ).

# 13. Which two of the following medications are not recommended in inflammatory glaucoma?

- A) Betaxolol-Bimatoprost.
- B) Timolol-Travoprost.
- C) Pilocarpine-Latanoprost.
- D) Acetazolamide-Pilocarpine.
- E) Mannitol-Bimatoprost.

#### 54. Regarding spondyloarthropathies;

- A) Bilateral anterior uveitis is frequently seen in ankylosing spondylitis ().
- B) In ankylosing spondylitis, there is a strong link between the severity of anterior uveitis and joint involvement ().
- C) Ankylosing spondylitis should be excluded from the diagnosis when human leukocyte antigen (HLA)-B27 is negative ().
- D) The risk of developing ocular involvement after intestinal infection in reactive arthritis is greater than the risk of developing after urogenital infections ().
- E) Conjunctivitis is more prevalent than uveitis in patients with reactive arthritis who have ocular involvement ().

## 55. Which of the following does not constitute psoriatic arthritic ocular involvement?

- A) Anterior uveitis.
- B) Conjunctivitis.
- C) Marginal corneal infiltrate.
- D) Secondary Sjogren's syndrome.
- E) Pars planitis.

#### 56. Which of the following is NOT a typical Fuchs uveitis finding?

- A) Peripheral iris vascularization evident on gonioscopy.
- B) Immunoglobulin accumulations in the iris.
- C) Posterior synechia.
- D) Posterior sub-capsular cataract.
- E) Glaucoma.

#### 57. Regarding juvenile idiopathic arthritis (JIA) and uveitis;

- A) Polyarticular arthritis is the most prevalent form ().
- B) There is a link between ANA positive and uveitis ().
- C) Oligoarticular type uveitis is more common than polyarticular type ().
- D) Ciliary injection and red eye are common in severe anterior uveitis ().
- E) Posterior synechia is extremely rare ().

#### 50. A

The FOXL2 gene is associated with Blepharophimosis syndrome.

## 51. F-F-F-T

CT is superior to MRI in imaging bone deformations. Imaging with contrast material is not recommended in cases of suspected acute hemorrhage with the presence of a foreign body because the images of the hemorrhage, foreign body, and contrast material may be confounded. MRI may be required in case of suspicion of a piece of wood or similar foreign body. Calcification can be observed on CT in meningioma cases.

# 52. F-F-T-T-T

T1-weighted imaging shows water hypo-intense. T2-weighted imaging is superior to T1-weighted imaging in examining edematous changes due to inflammation. Gadolinium normally does not cross the blood brain barrier and in the case of inflammation, it can cross this barrier to aid better imaging due to the weakening of the blood brain barrier. FLAIR is used to examine periventricular plaques on T2-weighted imaging. STIR technique can be used to evaluate intrinsic lesions of the optic nerve.

#### 53. E

The intraocular part measures 1mm, the intraorbital 25-30 mm, the intracanalicular 6 mm, and the intracranial 5-16 mm (average 10 mm).

#### 54. D

Devic's disease (Neuromyelitis Optica) is an autoimmune, inflammatory and demyelinating disease. Antibodies develop against Aquaporin-4 proteins located in the cell membrane of astrocytes. It enters the differential diagnosis with Multiple sclerosis.

## 55. C

Schilder's disease begins before the age of 10 and is characterized by demyelination and plaque in the white matter. It enters the differential diagnosis with adrenoleukodystrophy and intracranial mass. It results in death within a few years and may be accompanied by bilateral optic neuropathy.

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