

NEET PG TND

2026

05 Ophthalmology NEET
TND 2026 Dr Sourabh

Questions

1. Which of these is not a part of anterior segment of eyeball?

- A. Cornea
 - B. Posterior chamber
 - C. Hyaloid vessel
 - D. Zonules
-

2. A child was born at 34 weeks of gestation. Ophthalmologist review was sort to look for any eye abnormalities. There was a white reflex in one eye. On further evaluation, the doctor observed finding as shown in figure. This could be due to abnormality in which embryonic structure?

- A. Mesoderm
- B. Neural crest
- C. Surface ectoderm
- D. Neuro-ectoderm



3. Which structure lies in the intraconal space?

- A. Lacrimal gland
- B. Optic nerve
- C. Levator palpebrae
- D. Orbicularis oculi

4. Parasympathetic fibers for pupillary constriction originate from:

- A. Edinger-Westphal nucleus
- B. Superior colliculus
- C. Lateral geniculate body

D. Red nucleus

5. In a complete lesion of the right optic nerve, shining light in the right eye will produce:

- A. No constriction in either eye*
 - B. Right pupil constriction only*
 - C. Left pupil constriction only*
 - D. Both pupils constrict*
-

6. A 25 year old female was diagnosed to have left eye optic neuritis due to demyelination. MRI was normal. What will be the pupil reaction when torch light will be swung in left eye during swinging flash light examination?

- A. No reaction in both pupils*
 - B. Dilatation of both pupils*
 - C. No reaction in left, constriction in right*
 - D. No reaction in right, constriction in left*
-

7. During pupil examination of a patient, anisocoria was noted which was more in bright light. Slit lamp examination revealed normal iris pattern and pupil shape. There was no pupil constriction in left eye with diluted pilocarpine. Even there was no constriction was noted after instillation of 1% pilocarpine. What's the possible diagnosis

- A. Adie pupil*
- B. 3rd nerve palsy*
- C. Damage to iris sphincter*
- D. Atropine use*

8. The afferent pathway of the reflex needed while doing this testing passes through:

- A. Pretectal nucleus
- B. Oculomotor nerve
- C. Visual cortex
- D. Edinger-Westphal nucleus

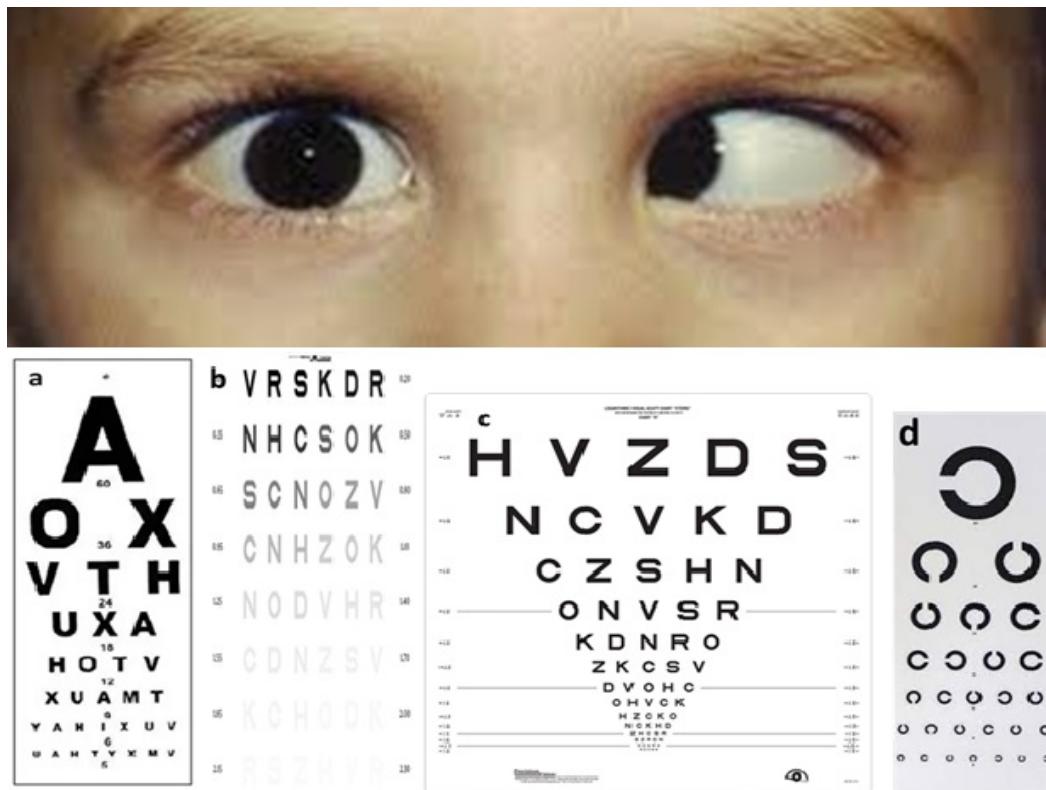


9. A child with visual acuity of 6/6 in right eye and 6/60 in other eye with best possible correction. Both eyes had refractive error of +4D. No structural abnormality was there in eyes other than shown in pic. Which chart shown gives accurate visual acuity here?

- A. A
- B. B

C. C

D. D



10. A patient reads 6/18 with right eye. This implies:

- A. Patient can read at 6 m what a normal person reads at 18 m
- B. Patient can read at 18 m what a normal person reads at 6 m
- C. Minimal angle of resolution is 30 minutes of arc
- D. The total minimal angle of resolution subtends is 3 minutes of arc

11. Which of the following statements is incorrect regarding the device shown?

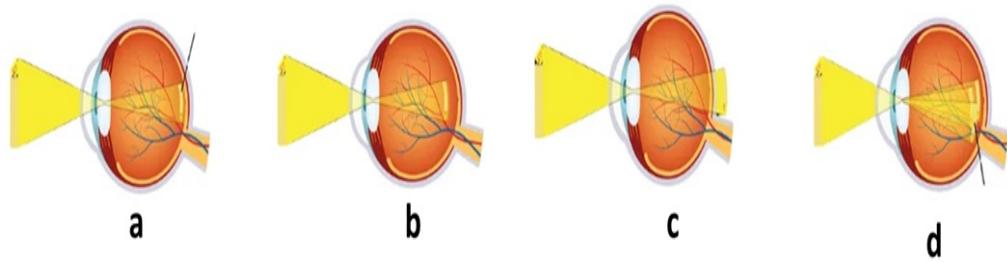
- A. The image seen by observer is real and inverted

- B. Condenser lens is needed*
- C. It is used to view optic disc changes in glaucoma*
- D. The magnification provided depends on the refractive error of patient*



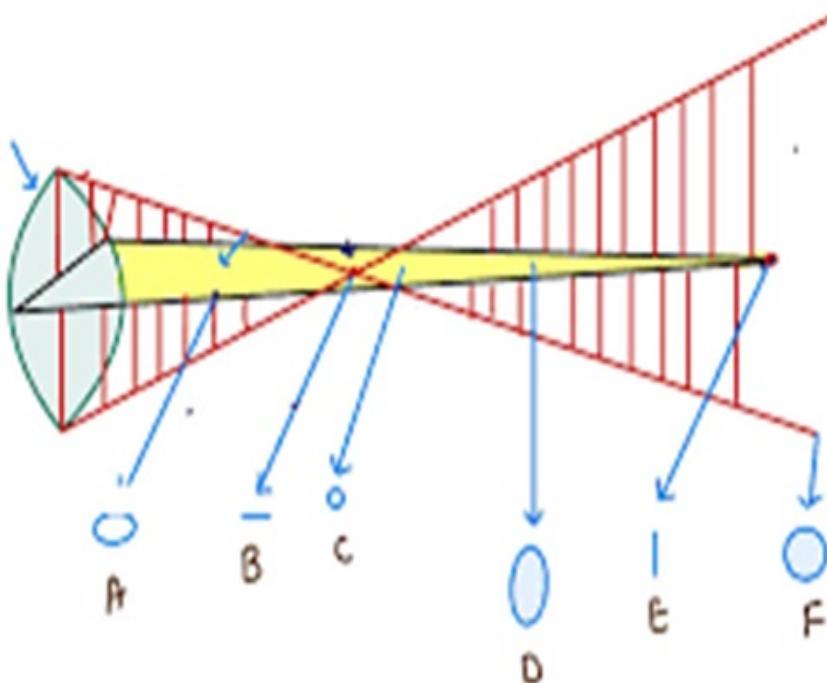
12. A young patient with frequent change of glasses with this sign. What is the likely refractive error in the patient?

- A. A*
- B. B*
- C. C*
- D. D*



13. What is false for the given pic

- A. The interval between the two focal points B and F is called Sturm's conoid
- B. If retina is at point A, its compound hypermetropic astigmatism
- C. Circle of least confusion should be when retina is at point D
- D. It against the rule astigmatism depicted here



14. A patient has a far point of 50 cm in front of eye. What is the refractive error?

- A. -1 D
- B. -2 D
- C. +1 D
- D. +2 D

15. -4.00DS +1.00DC $\times 90$ degrees. What type of refractive error is this?

- A. Mixed astigmatism with the rule
- B. Simple myopic astigmatism against the rule
- C. Compound myopic astigmatism against the rule

D. Compound myopic astigmatism with the rule

16. Which of these is of no use in subjective refraction?

A. A

B. B

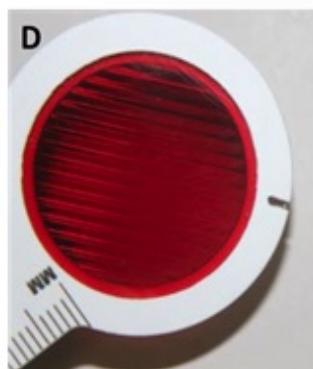
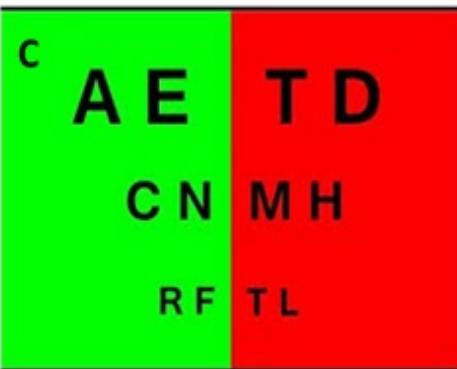
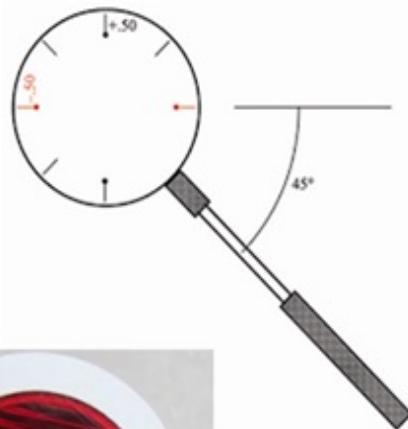
C. C

D. D

A



B



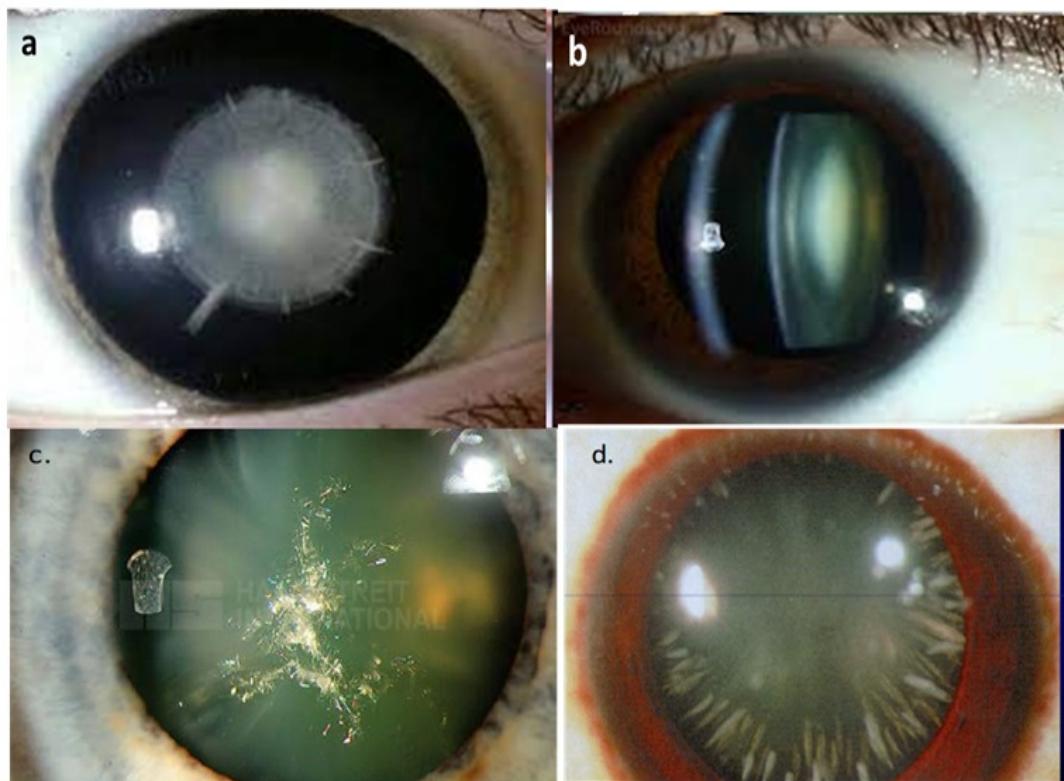
17. Which of the following patient will have stimulus deprivation amblyopia?

A. A

B. B

C. C

D. D



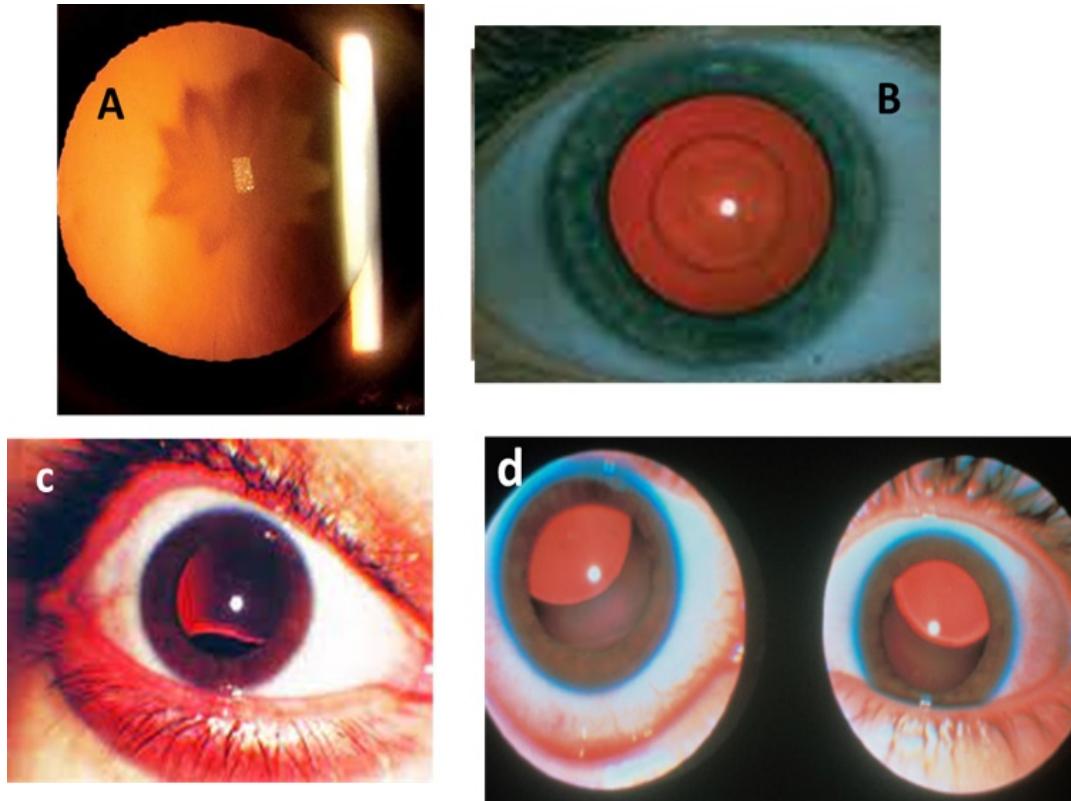
18. A child presents with bilateral cataract and failure to thrive. Most likely cause among options is?

A. A

B. B

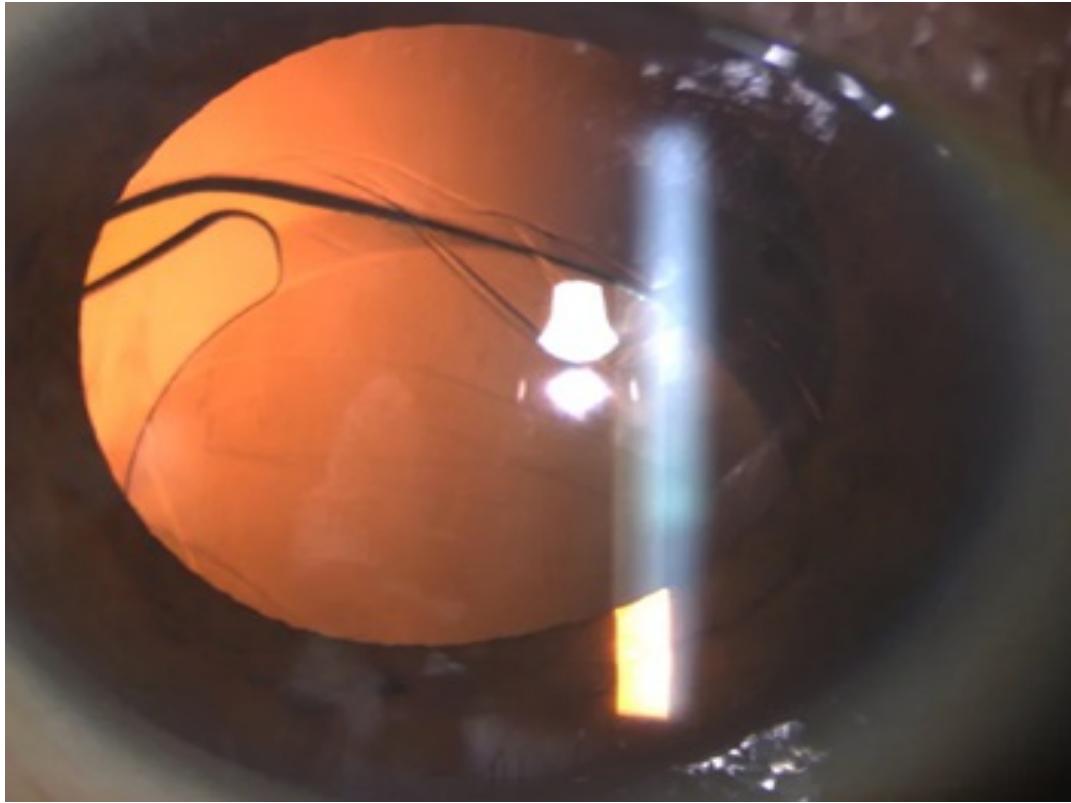
C. C

D. D



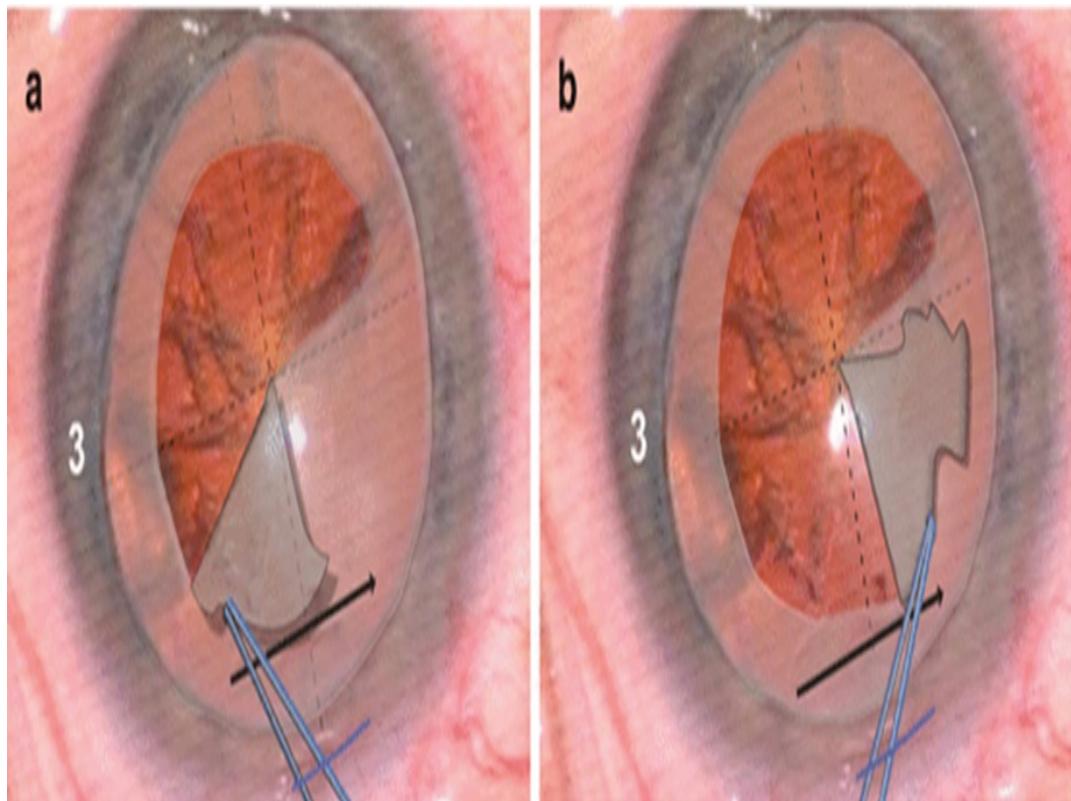
19. A patient was seen after cataract surgery and following was observed on slit lamp. What could be diagnosis

- A. Posterior capsule opacification
- B. Aphakia
- C. IOL subluxation
- D. Lens opacification



20. The given step of cataract surgery is important because it:

- A. Prevents posterior capsular rupture
- B. Allows controlled nucleus delivery
- C. Prevents posterior capsular opacification
- D. Reduces endothelial damage



21. On the first post-op day after complicated cataract surgery, the doctor noticed the following findings. The visual acuity was 1/60. There were restricted eye movements and severe pain. The intraocular pressure was high with cornea and scleral abscess. Ultrasound B scan revealed vitreous exudates. What should be management now in order to save the eye?

- A. Systemic antimicrobials
- B. Eviseration
- C. Enucleation
- D. Intravitreal tap and antimicrobials

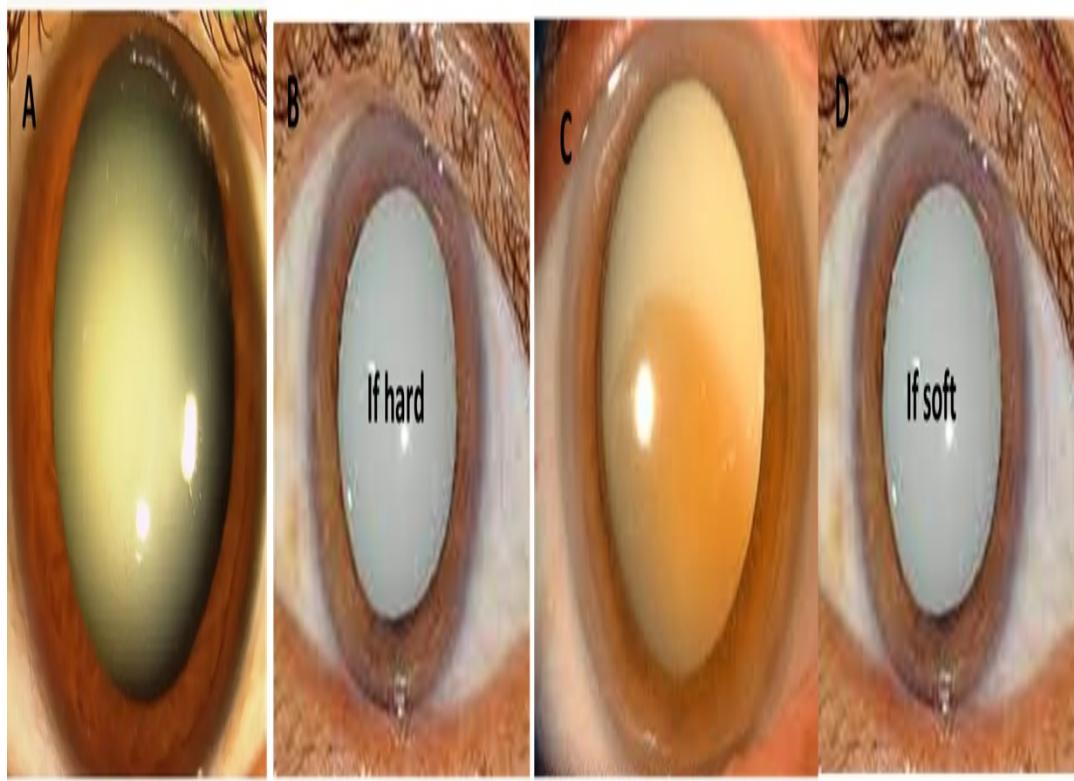
22. A patient with cataract complains of severe glare while driving at night and marked difficulty in bright sunlight. Vision worsens more for near work than distance. Which

cataract is most likely?

- A. Nuclear
 - B. Cortical
 - C. Posterior subcapsular
 - D. Hypermature
-

23. A patient presents with acute pain, redness, shallow anterior chamber, raised IOP, and an intumescent cataract.

- A. A
- B. B
- C. C
- D. D



24. Which of the following is false for a 55 year old pseudophakic person with Fuch corneal endothelial dystrophy?

- A. The amplitude of accommodation is lost
- B. Specular microscopy pre and post surgery is important investigation
- C. Topical hypertonic saline eye drops or ointment is given for post op corneal edema
- D. For evaluation of refractive power for far after cataract surgery, tropicamide is used as cycloplegia

25. Cataract surgery was planned in a diabetic patient of Mature senile cataract. An intern was asked to do some necessary investigations. Which investigation is not useful?

- A. Keratometry
- B. Ultrasound A scan

C. Biometry

D. Fundoscopy

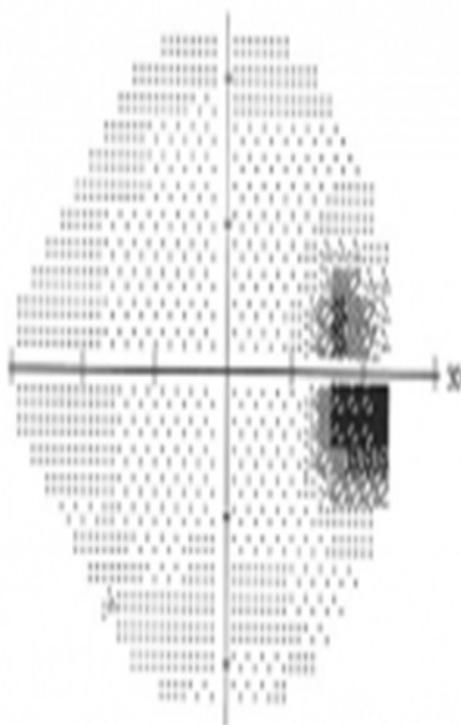
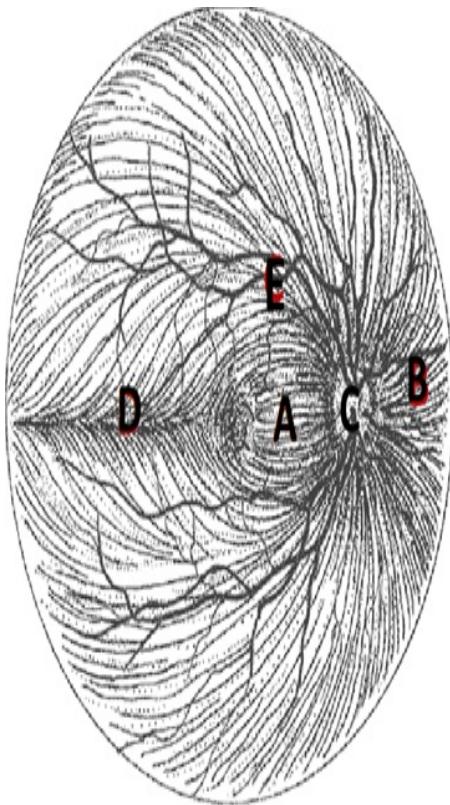
26. The abnormality in given visual field is related to?

A. A

B. B

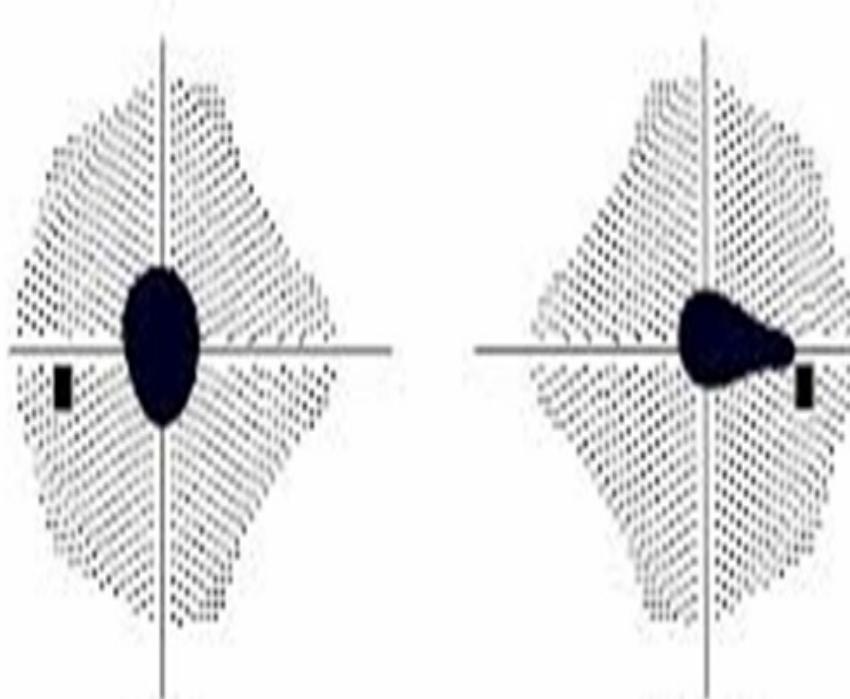
C. C

D. D



27. A 45-year-old alcoholic presents with visual difficulty. Perimetry shows such defects. Fundoscopy reveals temporal pallor of optic discs. Most likely diagnosis?

- A. Glaucoma
- B. Tunnel vision
- C. Pituitary adenoma
- D. Toxic optic neuropathy



28. A visual field chart shows: Left eye: loss of temporal field Right eye: loss of temporal field Central vision preserved Lesion location?

- A. Left optic nerve
- B. Right optic tract
- C. Optic chiasm
- D. Occipital cortex

29. A 58-year-old man presents with difficulty in looking right side from both eyes. On testing shown here, he has right homonymous hemianopia with macular sparing. He can still read small print. Motor and sensory exams are normal. Which artery is MOST likely involved?

- A. Right middle cerebral artery
- B. Left middle cerebral artery
- C. Left posterior cerebral artery
- D. Right posterior cerebral artery



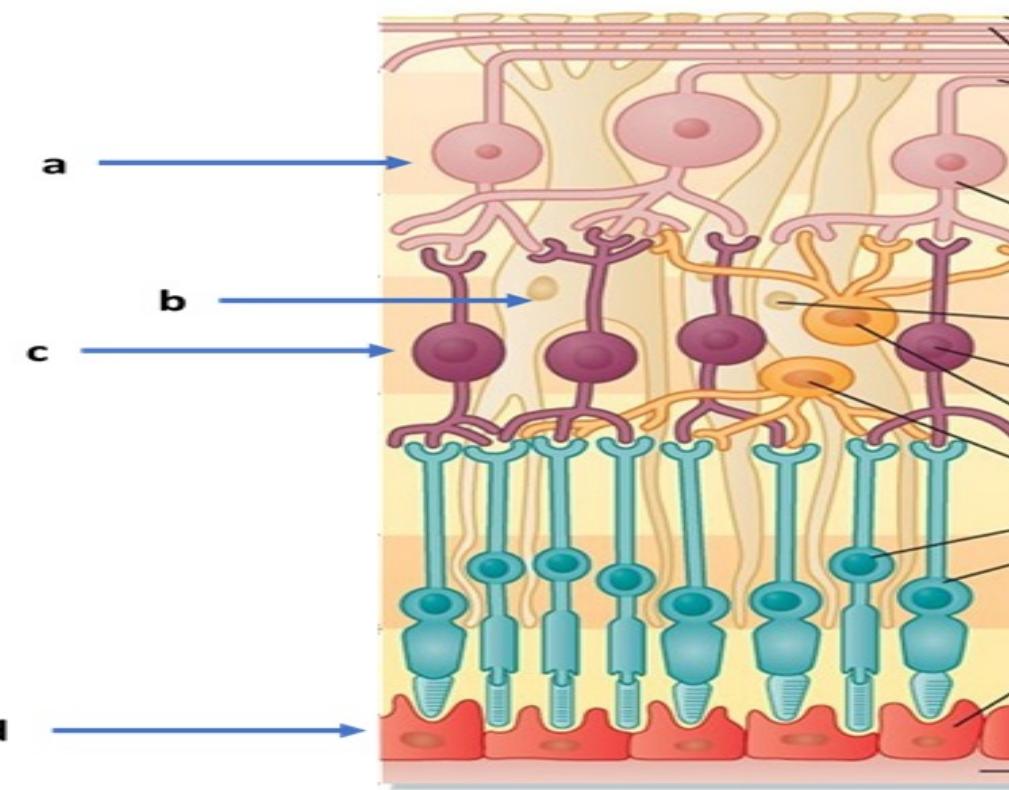
30. A 55-year-old man with no visual complaints is found to have IOP of 26 mmHg, cup-disc ratio of 0.8, and open angles on gonioscopy. Which cells are primarily damaged here?

- A. A

B. B

C. C

D. D



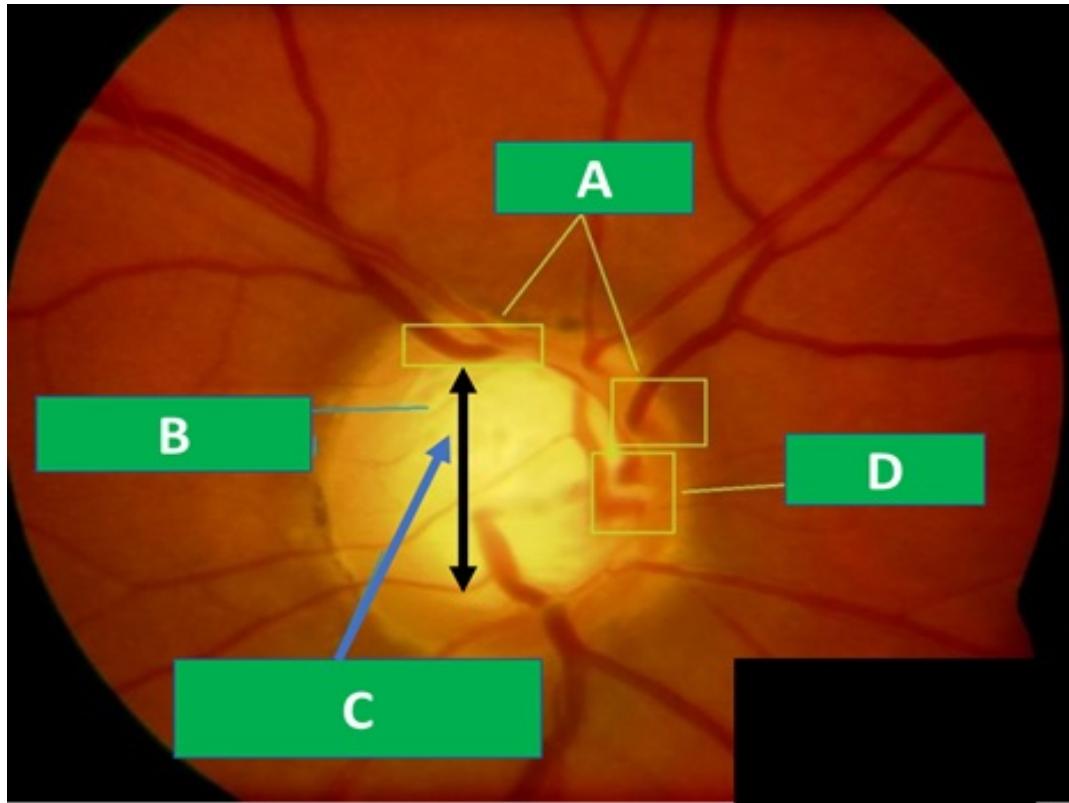
31. Which of the following is not a vascular sign in glaucoma?

A. A

B. B

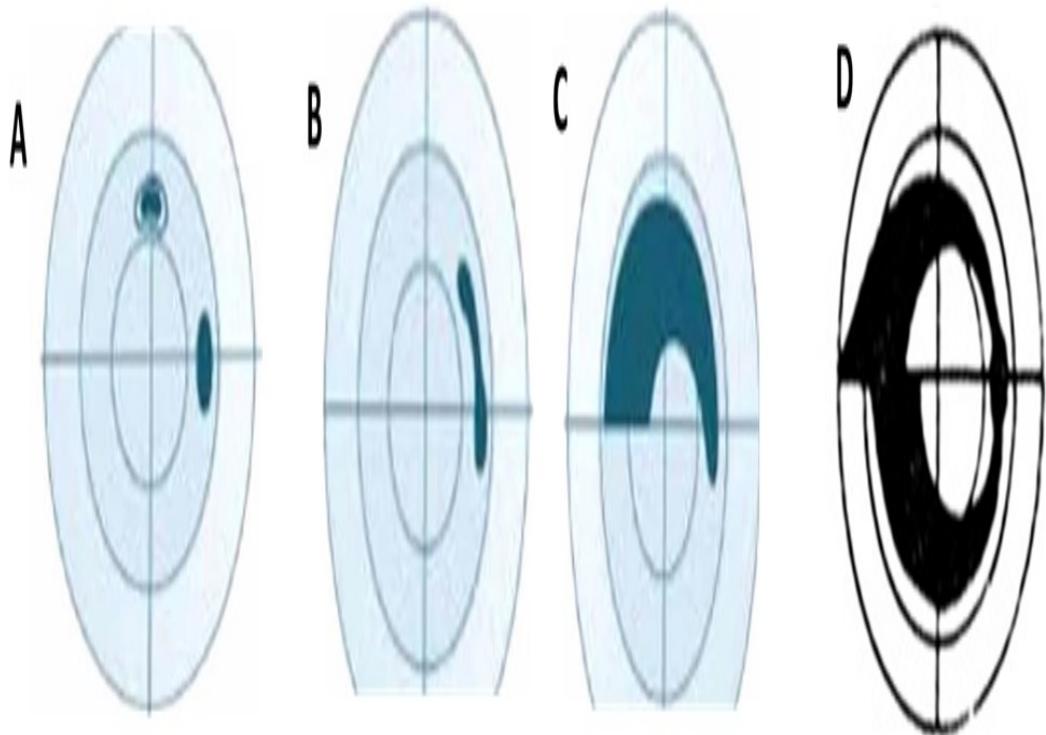
C. C

D. D



32. Which of the following is 1st defect in glaucoma?

- A. A
- B. B
- C. C
- D. D



33. Which finding differentiates glaucomatous optic atrophy from optic neuritis?

- A. Visual field loss
 - B. Loss of color vision
 - C. Cupping of disc
 - D. Reduced visual acuity
-

34. An intern on his 1st day of Ophthalmology posting saw a resident measuring intraocular pressure of a patient of glaucoma. The intern checked notes of the resident and saw that he mentioned corneal opacity. He then observed that the resident measured IOP. Which of the following tonometers was being used by the resident?

- A. A

B. B

C. C

D. D



35. A 50-year-old man has progressive peripheral vision loss. Fundus: CDR 0.7, neuroretinal rim thinning inferiorly. Visual field: nasal step superiorly. IOP = 16 mmHg. History: migraine, Raynaud's phenomenon. Most likely diagnosis?

A. Primary open angle glaucoma, starts topical meds

B. Ocular hypertension, observe

C. Normal tension glaucoma, starts topical meds

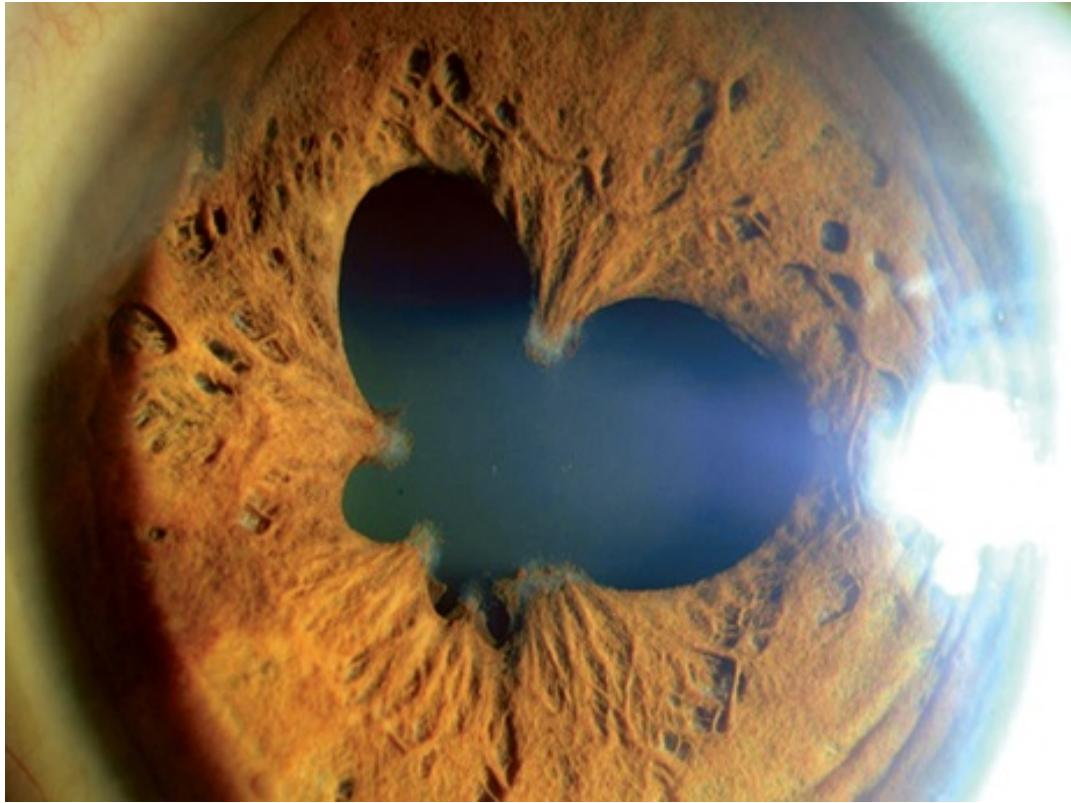
D. Normal tension glaucoma, observe

36. A patient presents with sudden onset severe eye pain, headache, blurred vision, and coloured haloes. Examination reveals a small irregular pupil, steamy cornea and 60 mm Hg. What is the most likely diagnosis?

- A. Secondary angle closure due to anterior uveitis*
 - B. Neovascular glaucoma*
 - C. Phacomorphic glaucoma*
 - D. Acute primary angle closure*
-

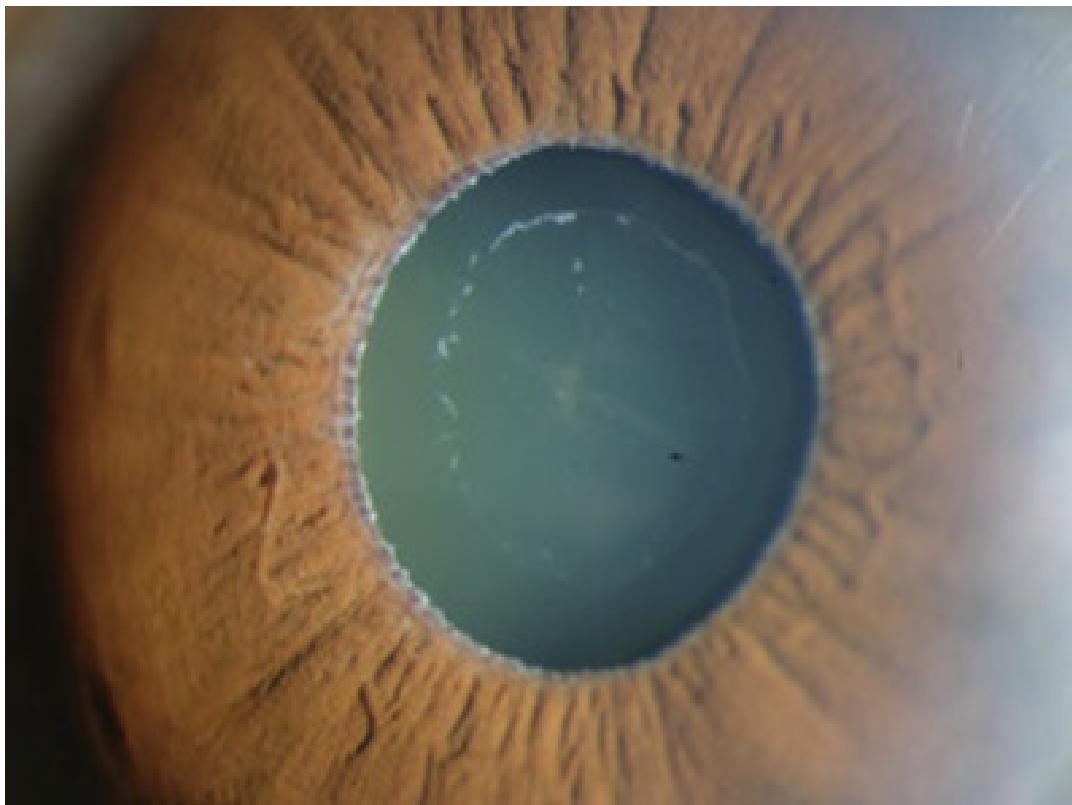
37. This was seen in a patient on slit lamp. Which of the following drugs can cause this?

- A. Atropine*
- B. Prostaglandins*
- C. Phenylephrine*
- D. Pilocarpine*



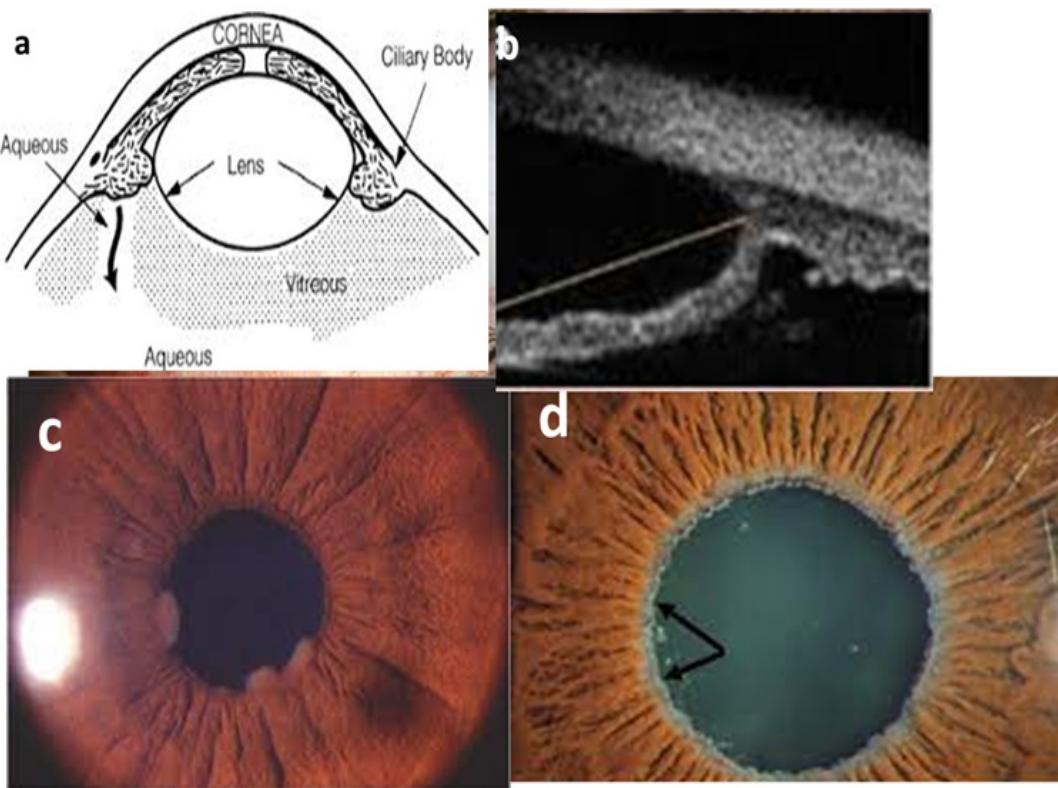
38. A 65-year-old man presents with gradually decreasing peripheral vision. On slit-lamp: the given image was seen. IOP = 28 mmHg. Gonioscopy: open angles. Visual field: arcuate defect. Most likely mechanism of raised IOP?

- A. Pupillary block
- B. Reduced trabecular outflow due to exfoliative material
- C. Disruption of trabecular meshwork due to trauma
- D. Decreased aqueous flow due to primary resistance at trabecular meshwork



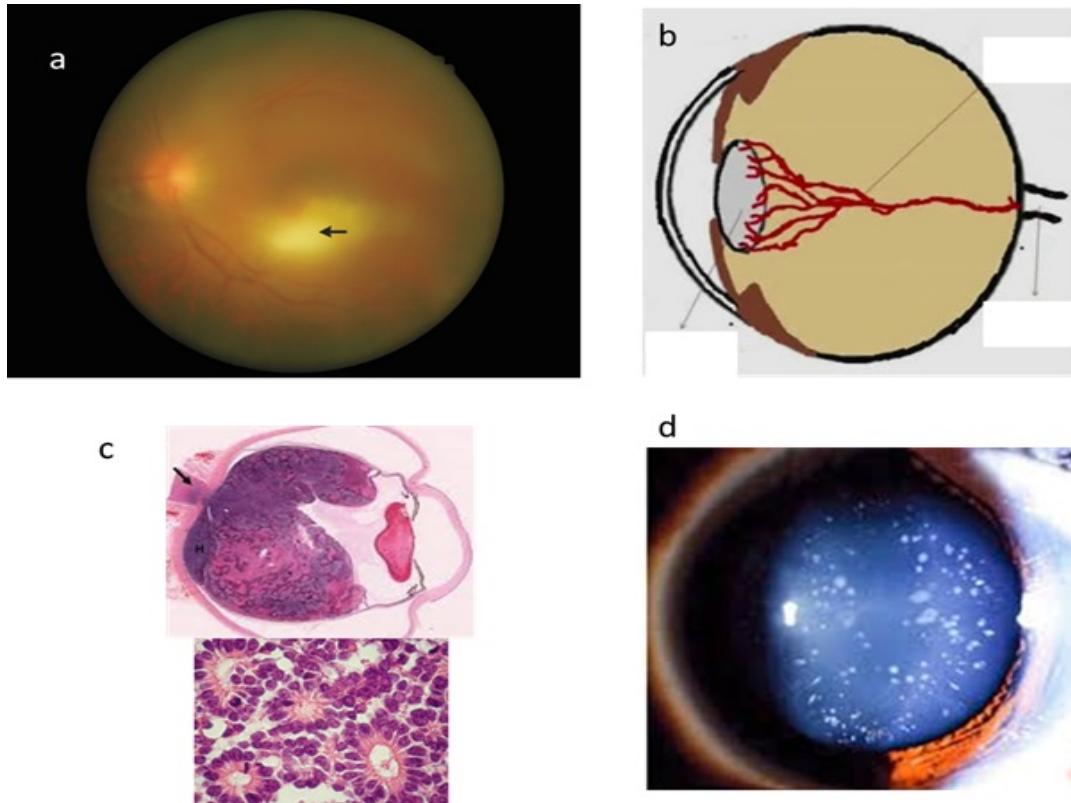
39. Krukenberg spindles can be seen in which of the following?

- A. A
- B. B
- C. C
- D. D



40. In which of the following, the presentation is absolutely different from others?

- A. A
- B. B
- C. C
- D. D



41. A patient presents with mutton-fat keratic precipitates, hypopyon, iris nodules, and chronic granulomatous uveitis. Most likely cause?

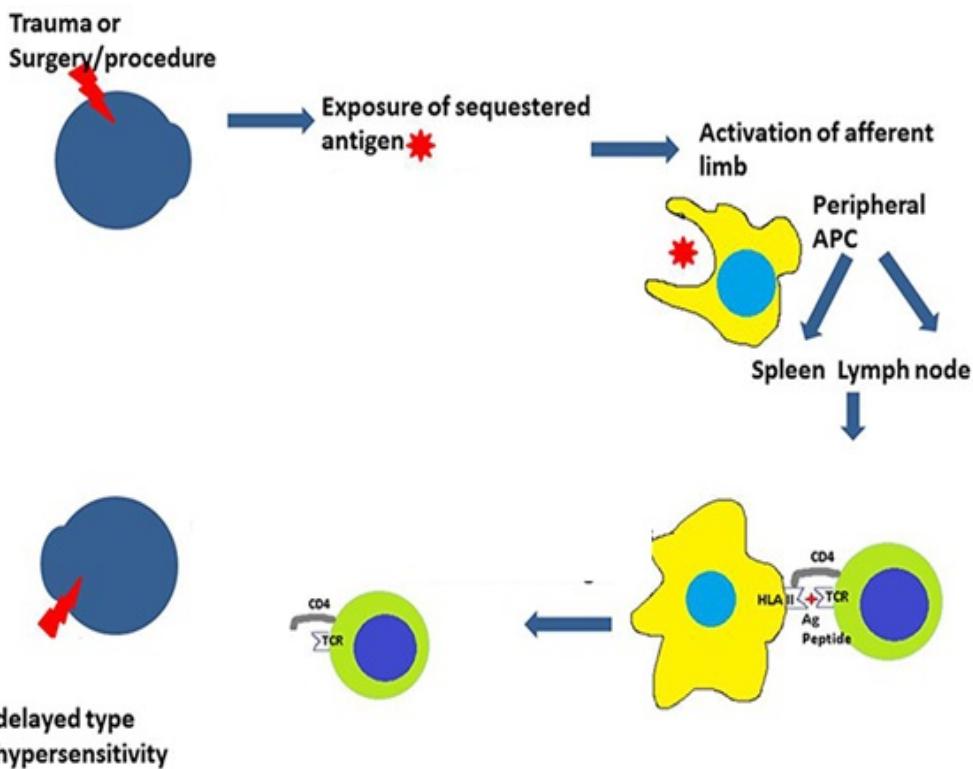
- A. HLA-B27 disease
- B. Sarcoidosis
- C. Viral uveitis
- D. Rheumatoid arthritis

42. What will be the management if there is trauma in 1 eye with vision of 1/60 and other eye has vision of 2/60 with granulomatous panuveitis ?

- A. Intravenous steroids
- B. Intravenous antimicrobials

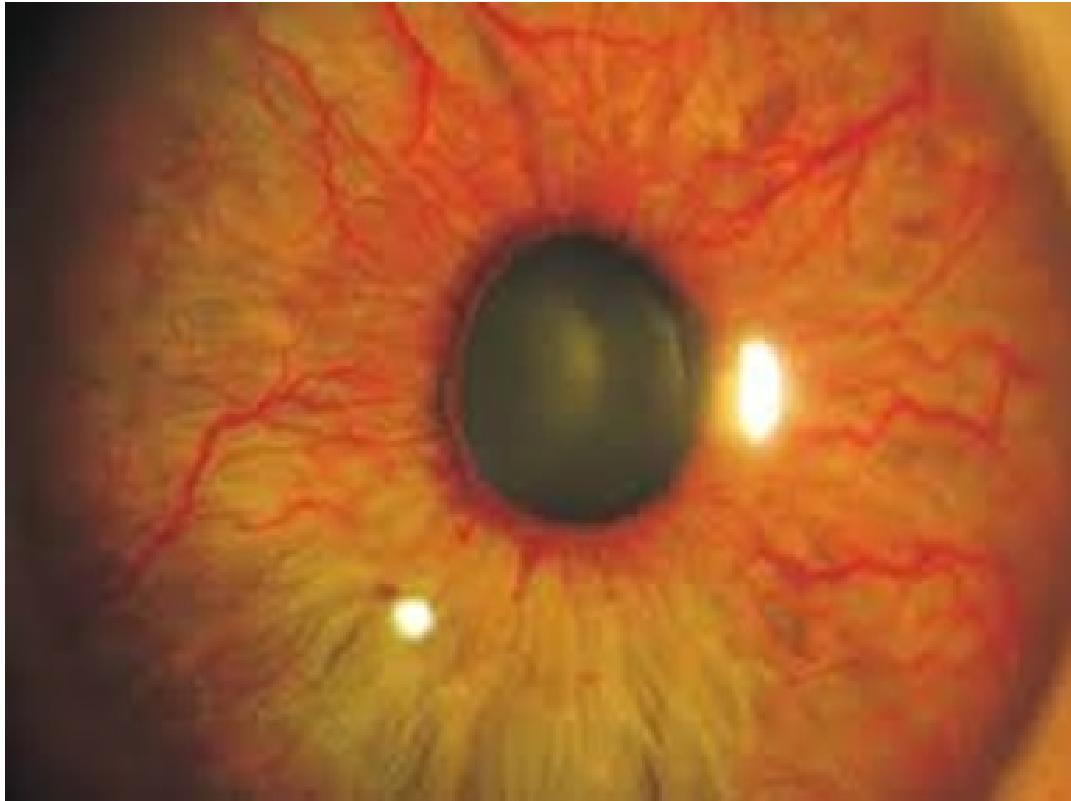
C. Enucleate the injured eye

D. Enucleate the other eye



43. A 55-year-old patient with long-standing diabetes complains of painful, red eye with gradually decreasing vision. Slit-lamp shows following image, IOP = 42 mmHg. Which is false here?

- A. Its seen in advanced diabetic retinopathy stage
- B. Pupil block mechanism causing high IOP
- C. This sign suggests extensive retinal ischemia
- D. IOP control with Pan retinal photocoagulation to be done here



44. What is not included in a Proliferative diabetic retinopathy?

- A. Retinal detachment
 - B. 100 day glaucoma
 - C. Rubeosis iridis
 - D. Vitreous hemorrhage
-

45. On normal angiography, which is not true

- A. The dye is injected in antecubital vein in forearm
- B. Choroidal vessels are filled last in angiography
- C. Arm-retinal time is 11s

D. Fovea is hypofluorescence

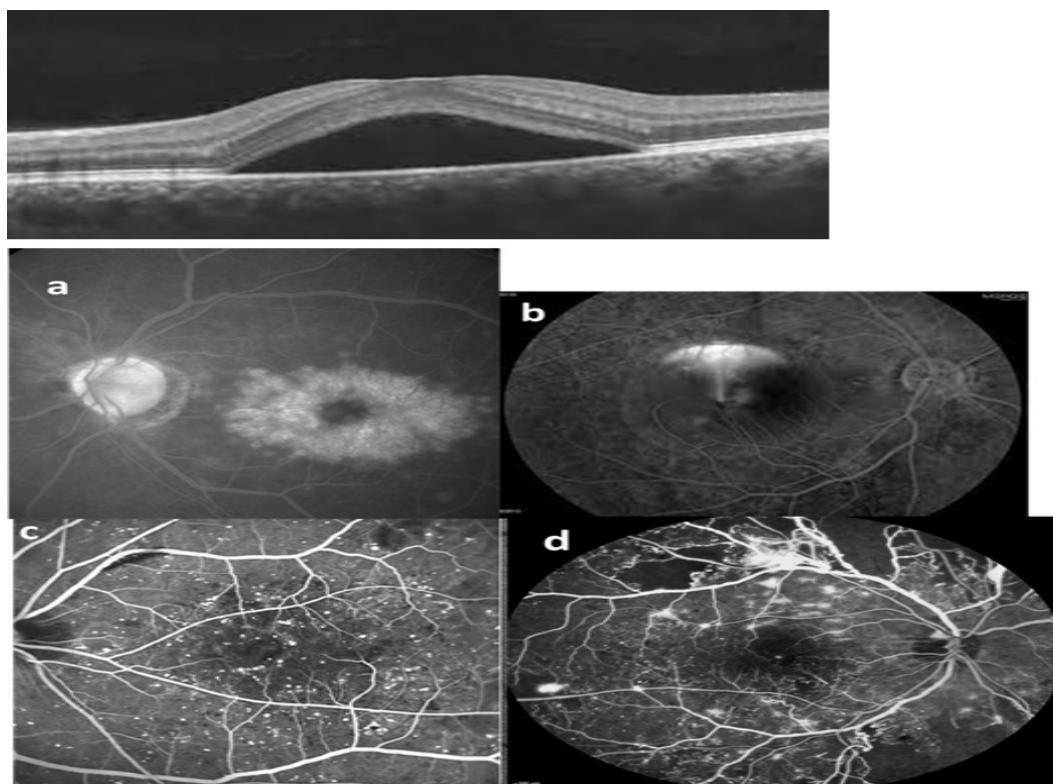
46. *With which of the following angiography images, the given Optical coherence tomography images matches?*

A. A

B. B

C. C

D. D



47. *A patient develops CME following cataract surgery. What is the most likely pathophysiological mechanism?*

A. Increased choroidal permeability

B. Breakdown of blood-retinal barrier

C. Vitreomacular traction

D. Retinal ischemia

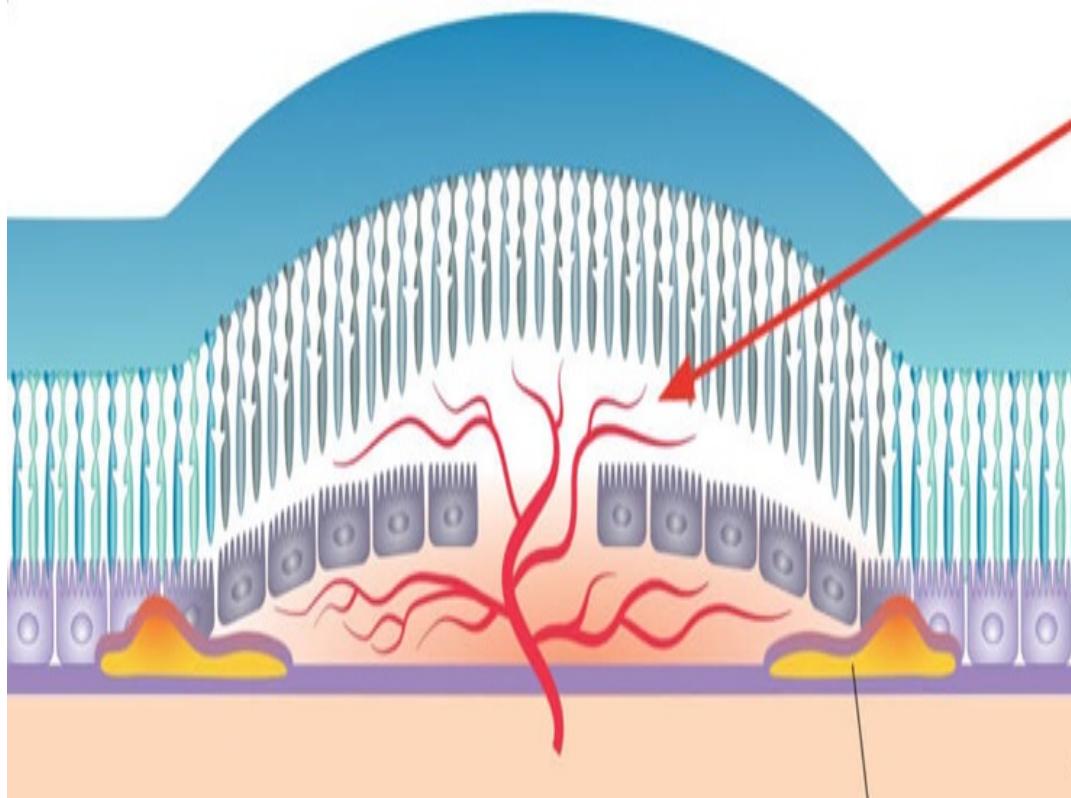
48. Which of the following is wrong regarding given picture

A. Blue arrow indicates deposits under retina

B. Red arrow indicates retinal new vessels

C. Angiography reveals hyperfluorescence due to leakage of dye

D. Photodynamic therapy has additive effect when anti-VEGF is given



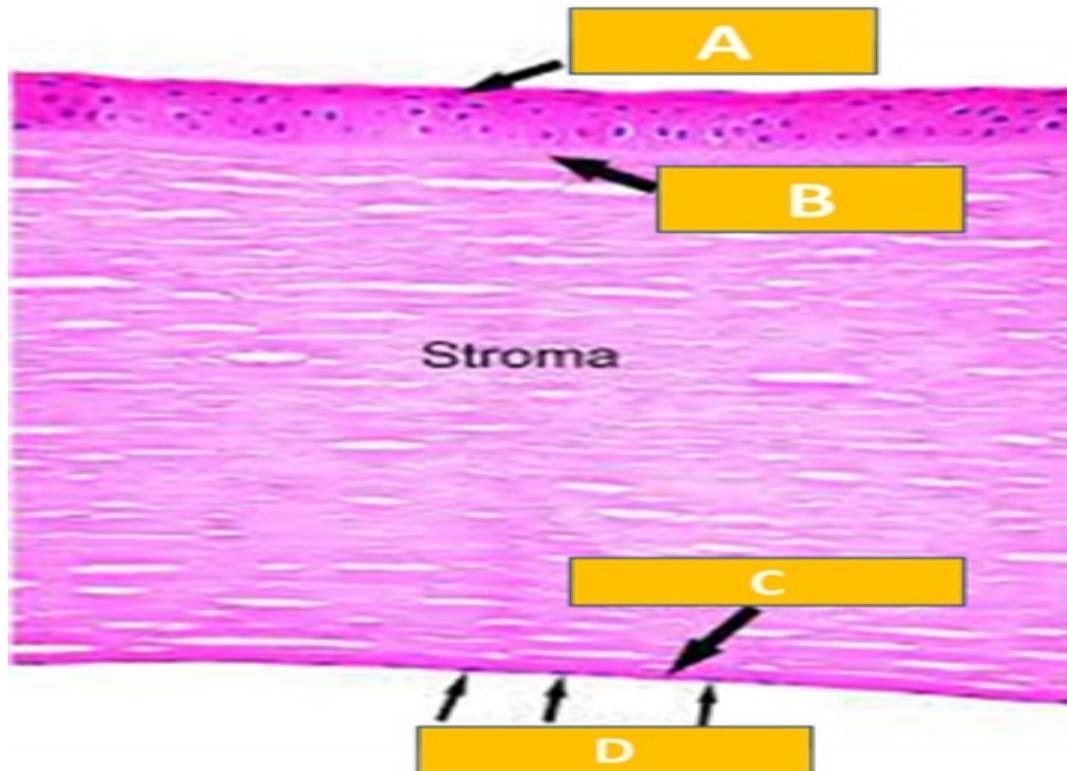
49. Which corneal layer is has embryologic origin different from others?

A. A

B. B

C. C

D. D



50. A patient with corneal ulcer has copious purulent discharge, rapid stromal necrosis, and greenish infiltrate. He is a contact-lens wearer. Most likely organism?

A. *Staphylococcus aureus*

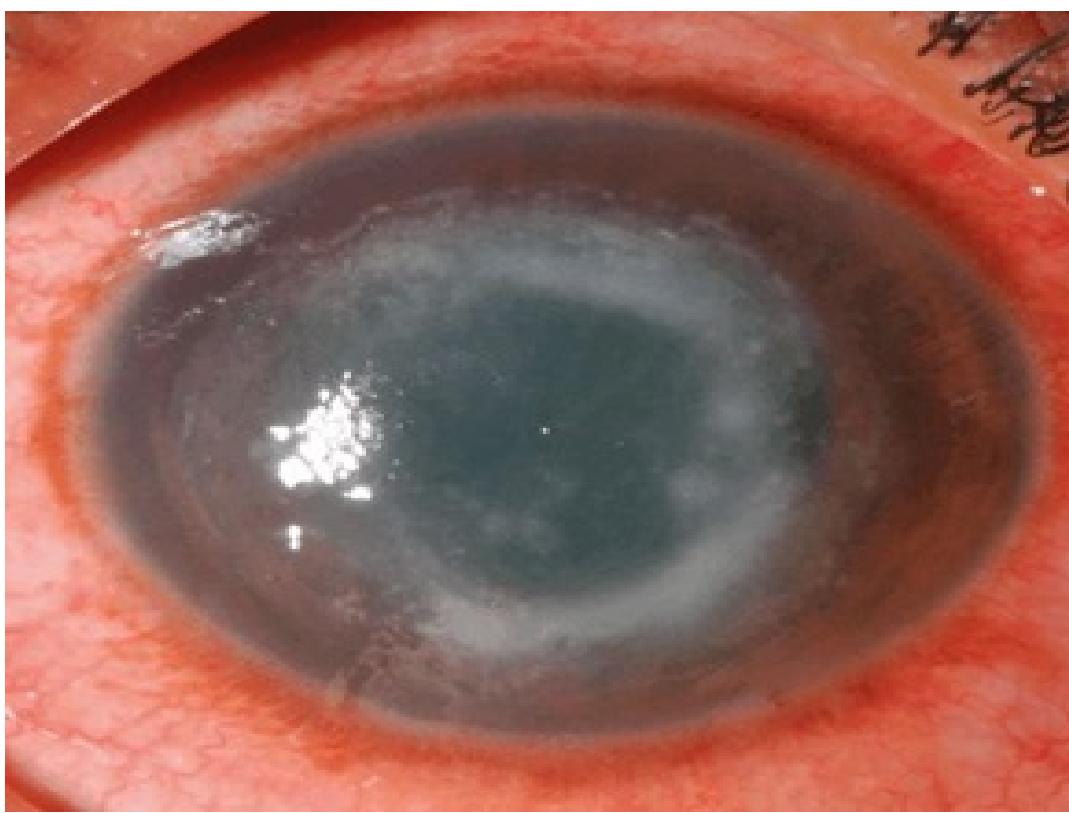
B. *Streptococcus pneumoniae*

C. *Pseudomonas aeruginosa*

D. *Candida albicans*

51. A patient presented with painful blurred vision with photophobia after wearing contact lens. Slit-lamp picture is given. What is the stain used?

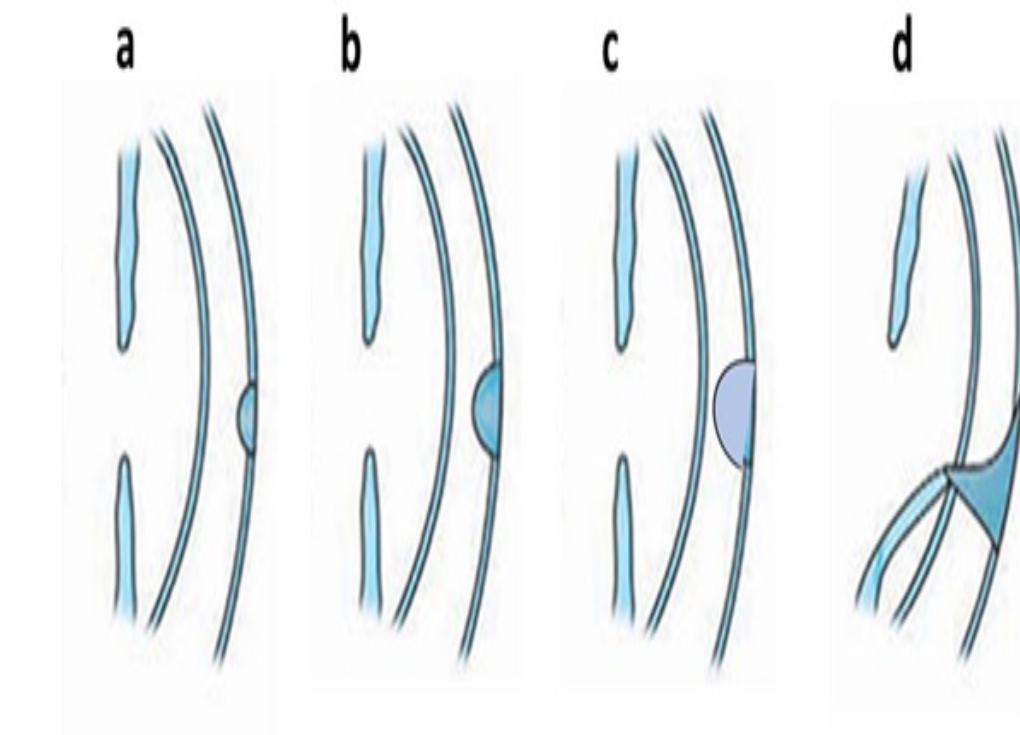
- A. Ziehl Neelsen
- B. Calcoufor white
- C. Gram
- D. Gomori Methamine Silver



52. Through which of the following corneal opacities, the anterior segment details are visible

- A. A
- B. B
- C. C

D. D



53. A 17-year-old boy presents with progressive blurring of vision in both eyes. He frequently changes spectacles but vision never becomes perfect. On retinoscopy, a scissoring reflex is seen. Slit-lamp shows fine vertical lines in deep stroma. Which investigation is MOST sensitive here?

- A. Slit-lamp examination
- B. Retinoscopy
- C. Keratometry
- D. Corneal topography

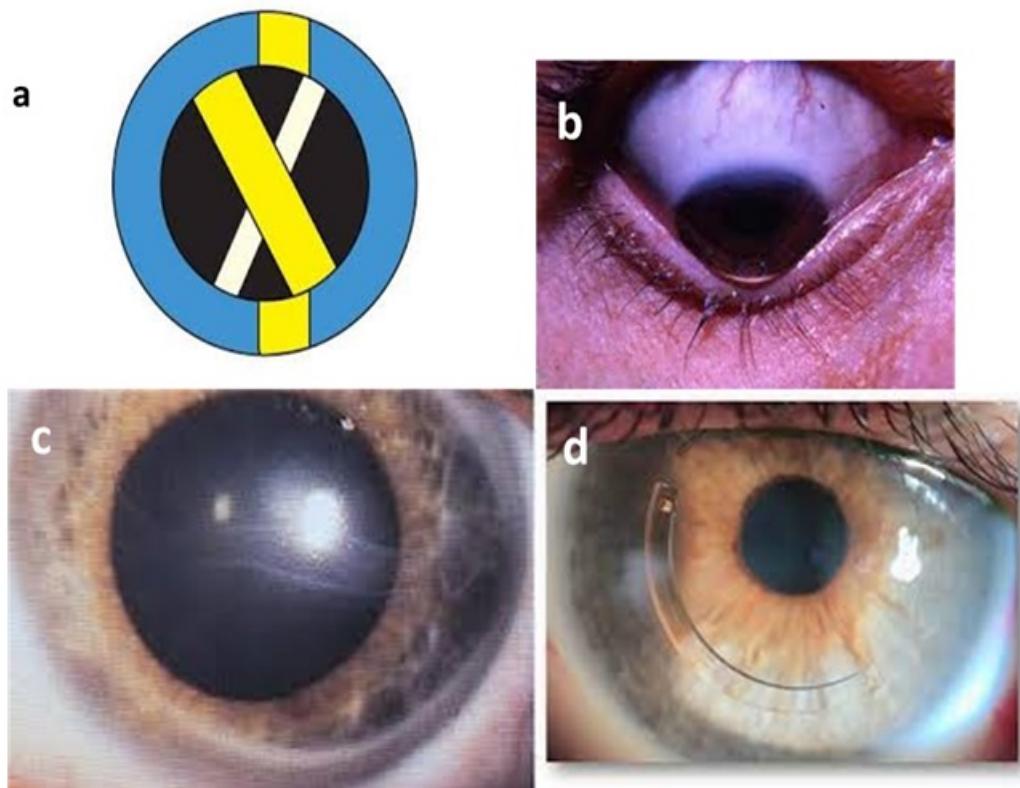
54. Which is not seen in a patient of keratoconus

A. A

B. B

C. C

D. D



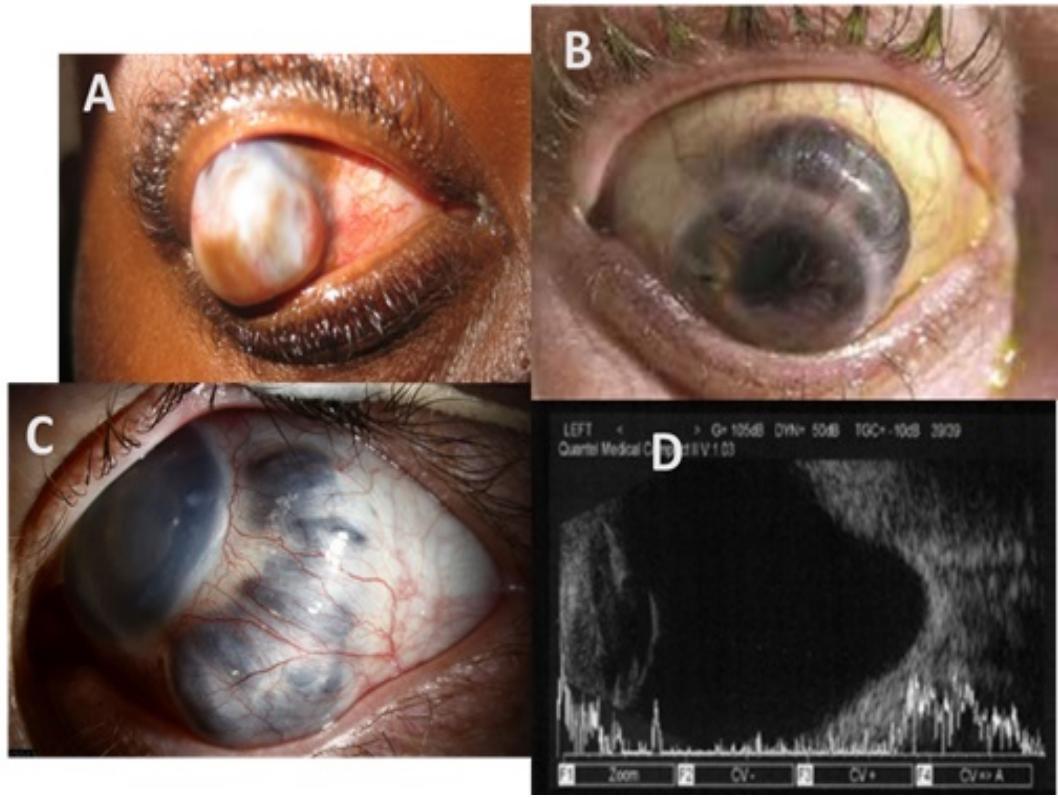
55. Which of the following is seen as a complication of corneal ulcer?

A. A

B. B

C. C

D. D



56. A 10 year old presents with decreased vision. On slit-lamp examination, superotemporal lens dislocation was seen. Posterior staphyloma was seen on Indirect ophthalmoscopy. What is the most likely underlying condition?

- A. Homocystinuria
- B. High myopia
- C. Ehlers-Danlos syndrome
- D. Marfan syndrome

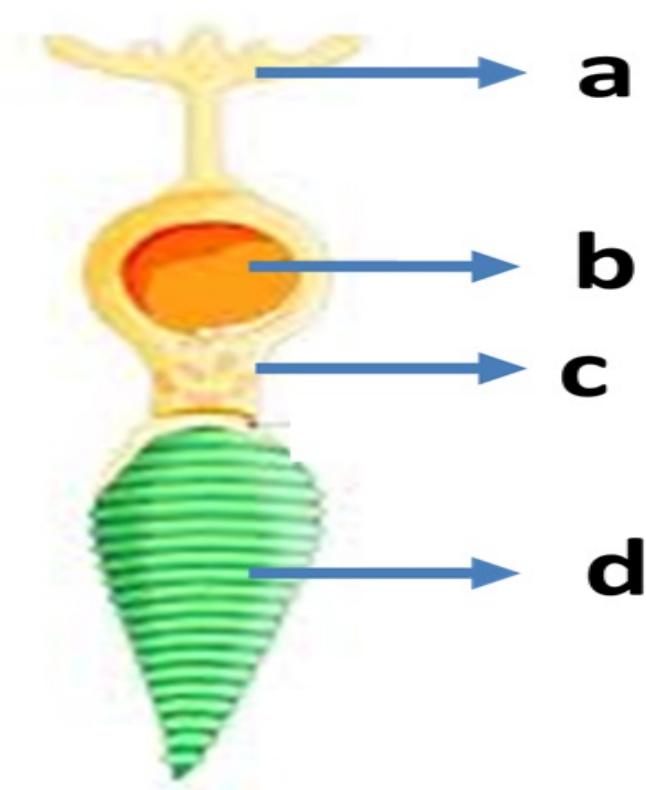
57. Mitochondria, Endoplasmic reticulum and Golgi apparatus are present in which of the marked structures?

- A. A

B. B

C. C

D. D



58. After 6 months of uneventful cataract surgery, a patient presented with floaters, followed by curtain falling from above his eyes. Most probable diagnosis?

A. Posterior vitreous detachment

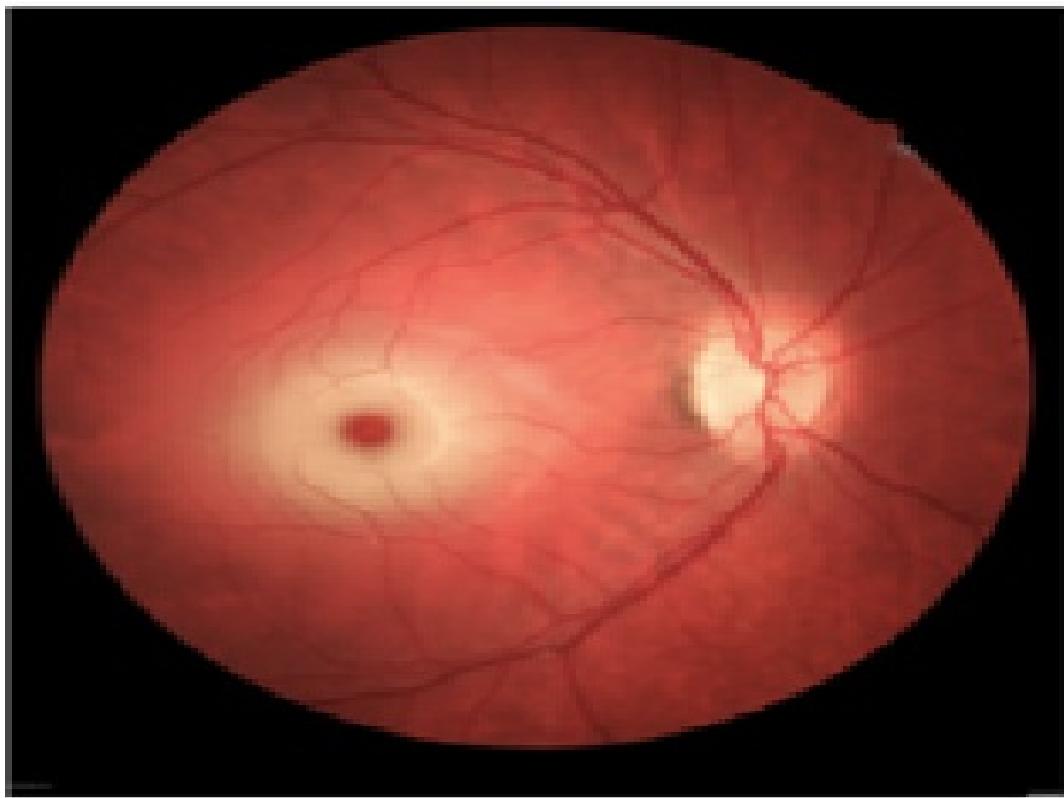
B. Vitreous hemorrhage

C. Rhegmatogenous retinal detachment

D. Central serous retinopathy

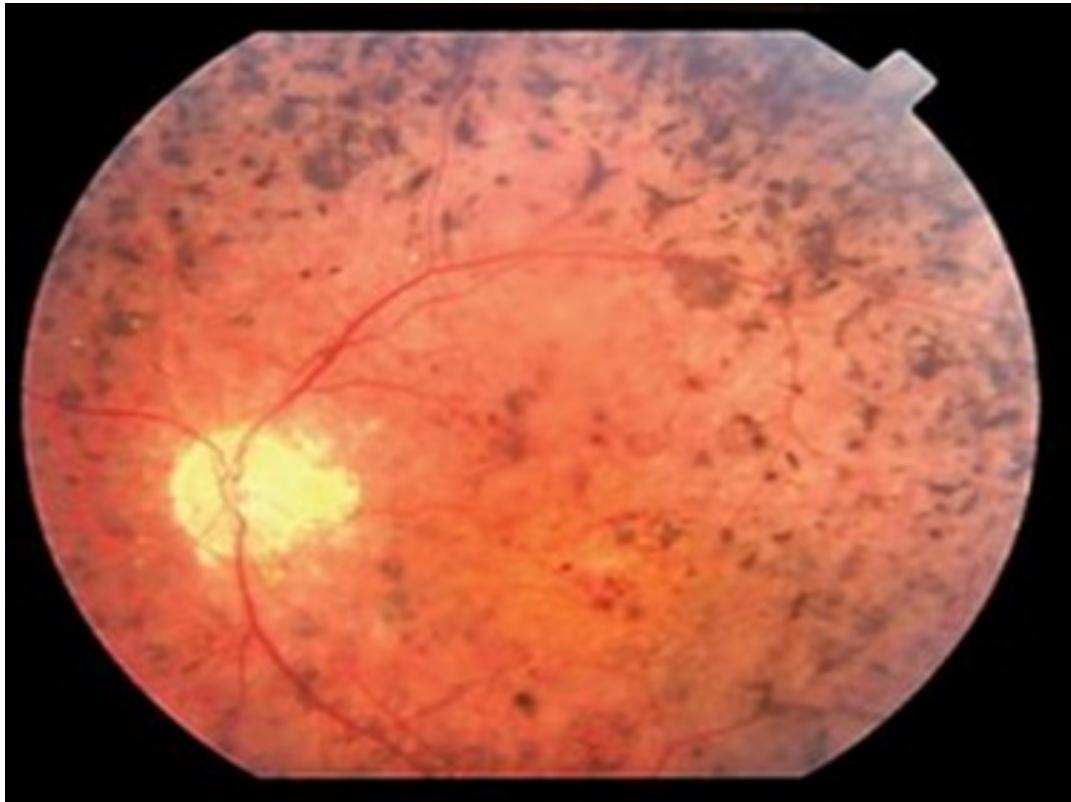
59. A patient with sudden painless loss of vision presents within 2 hours. Fundus finding is shown. The pathophysiology in this condition?

- A. Hyperemia of macula
- B. Retinal hemorrhage
- C. Transparency of fovea due to absence of inner retinal layers
- D. Increased choroidal blood flow



60. The earliest and most sensitive investigation to confirm diagnosis is:

- A. Electrooculography
- B. Optical coherence tomography
- C. Electroretinography
- D. Visual evoked potential

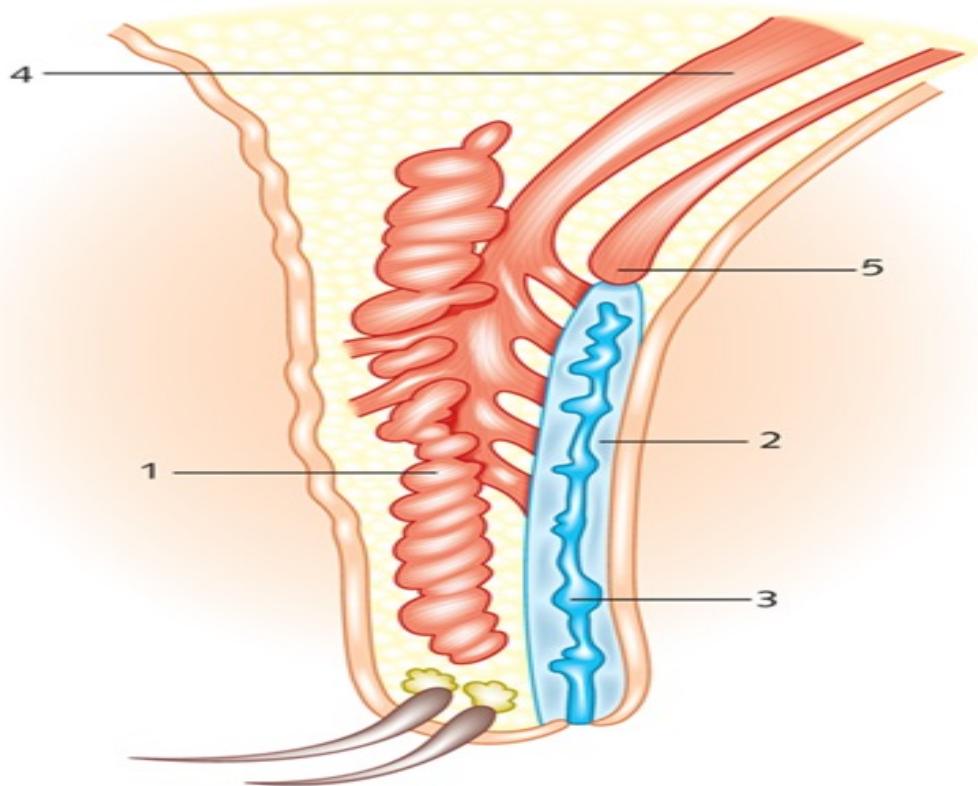


61. A 45-year-old patient with long-standing Thyroid eye disease presents after 2 years with stable proptosis and persistent diplopia, but no redness or pain. There was difficulty in looking upward and diplopia. This patient is most likely in which phase?

- A. Acute inflammatory phase
- B. Active congestive phase
- C. Inactive fibrotic phase
- D. Thyrotoxic crisis

62. A 28-year-old woman presents with a painless, slowly enlarging swelling on the upper eyelid for the past 2 months. There is no redness or tenderness. On everting the lid, a firm, localized nodule is seen on the tarsal conjunctiva. Which structure is likely involved?

- A. 1
- B. 2
- C. 3
- D. 5

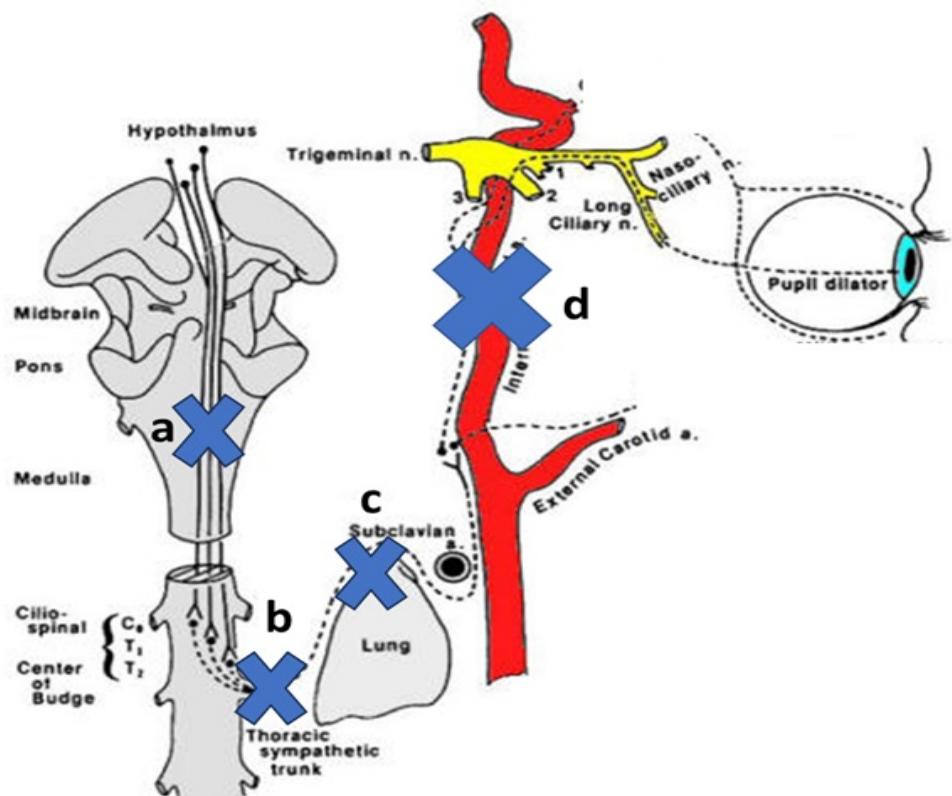


63. A patient presents with a painful eyelid swelling with pus pointing at the base of the eyelash. On examination, there were restricted eye movements. Vision was 6/6. what is likely diagnosis?

- A. External hordeolum
- B. Preseptal cellulitis
- C. Orbital cellulitis
- D. Cavernous sinus thrombosis

64. A patient with miosis, ptosis and absence of anhidrosis presented to the clinic. Which structure is most likely compressed in such a scenario?

- A. A
- B. B
- C. C
- D. D

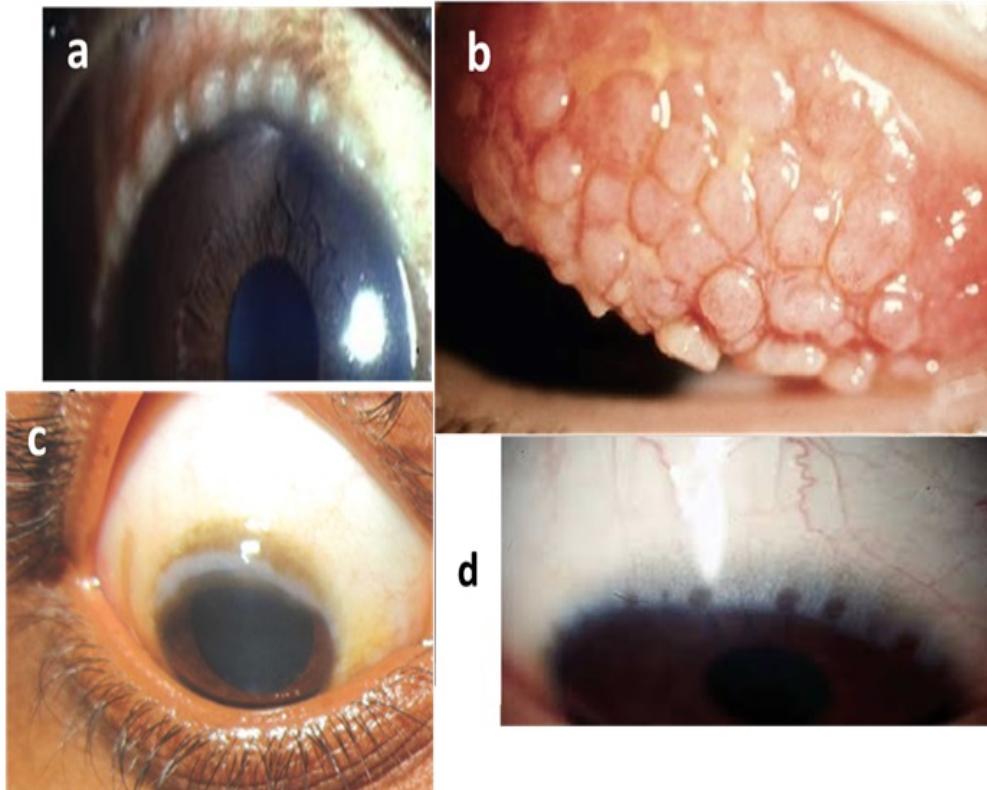


65. A 10-year-old boy presents in spring with intense itching, photophobia, and thickropy discharge from both eyes. Which among these is not to be seen in his eyes?

- A. A
- B. B

C. C

D. D



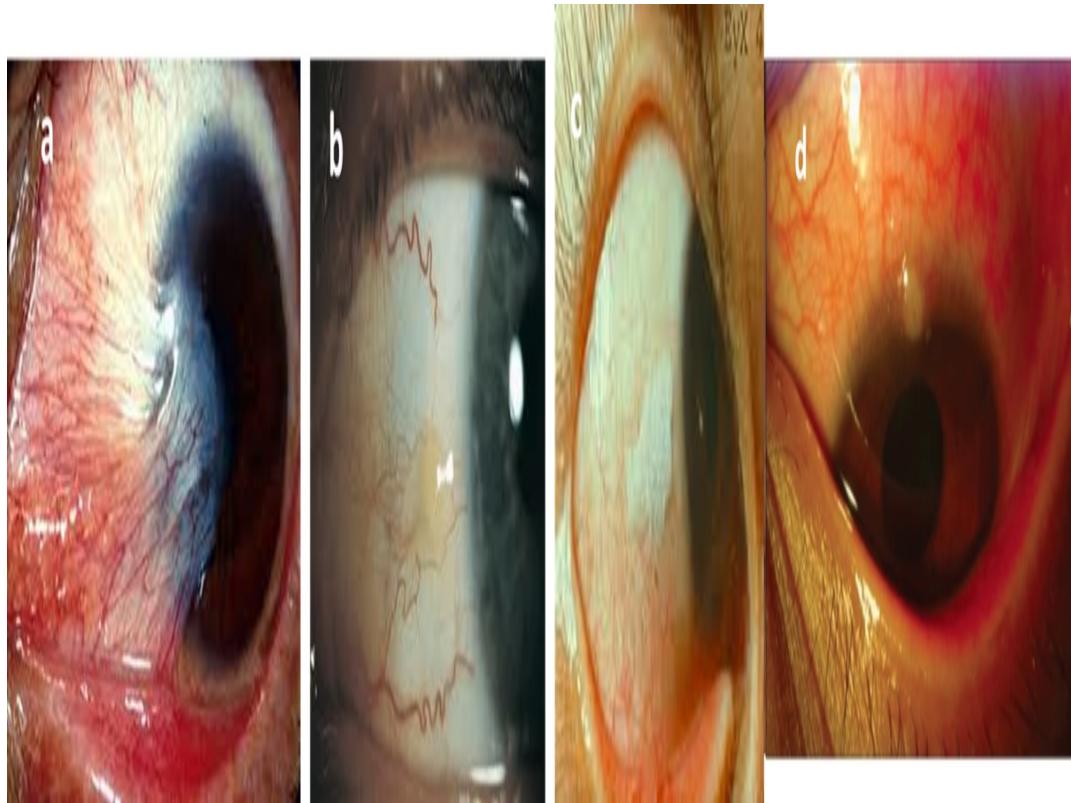
66. A laborer was working outdoors since many years. He has complains of progressive increasing growth in eyes which was associated with gradual decrease in vision. On examination, a mass was seen growing on to the cornea. What could be the diagnosis among these?

A. A

B. B

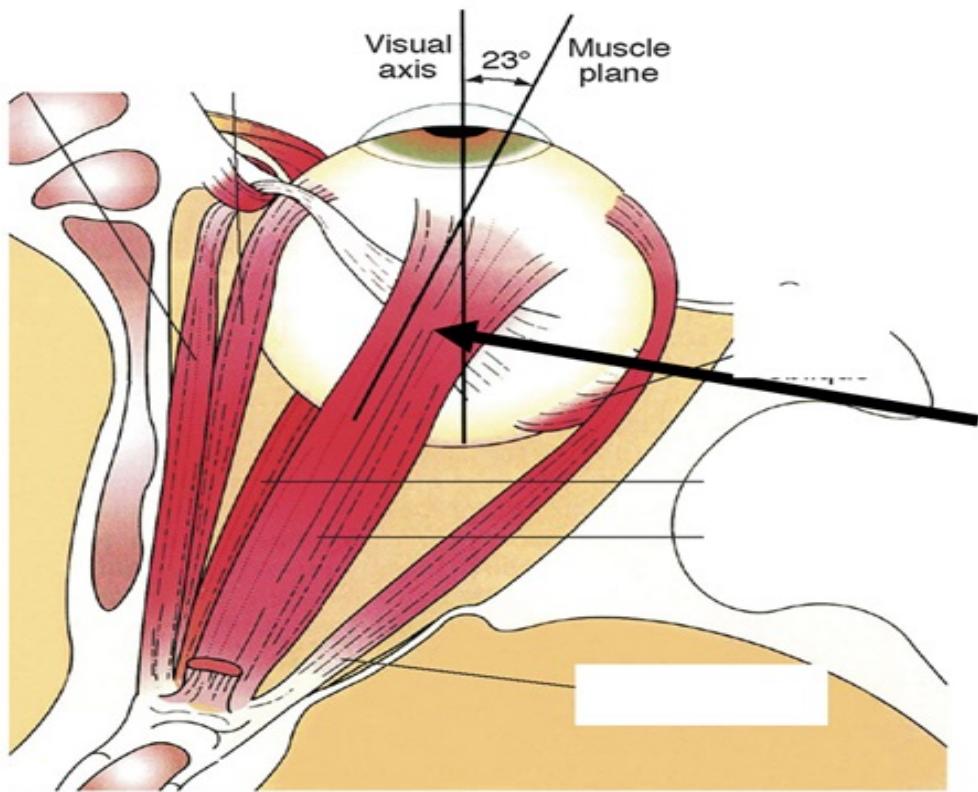
C. C

D. D



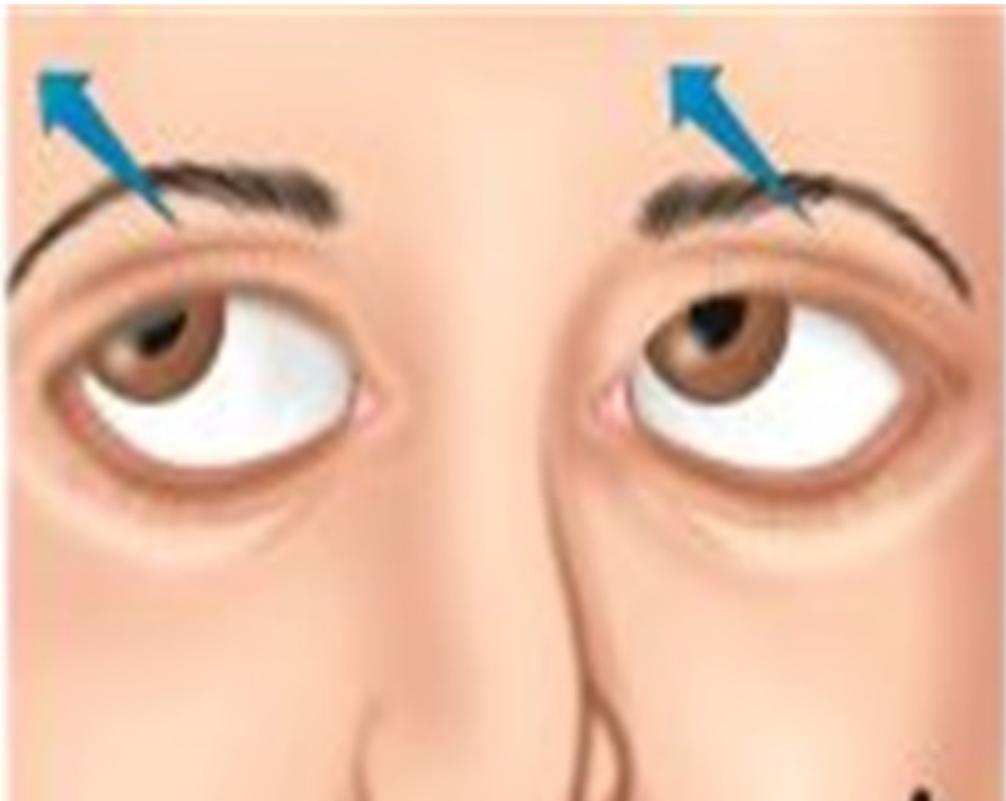
67. True for muscles marked are all except:

- A. Muscle 'b' only works in horizontal axis
- B. Origin of 'c' muscle is from the apex of the orbit
- C. Maximum elevation of 'a' muscle is in 23 degree abducted position
- D. Maximum depression of 'c' muscle is in 51 degree abducted position



68. Which is true for the action shown in the figure?

- A. It is a type of version
- B. Herring law applies here
- C. Dextro-elevation is shown here
- D. Right inferior oblique and left superior rectus are working here



69. During Hirschberg testing, the corneal light reflex is displaced 2 mm nasally in the left eye compared to the right eye. The approximate angle of deviation is:

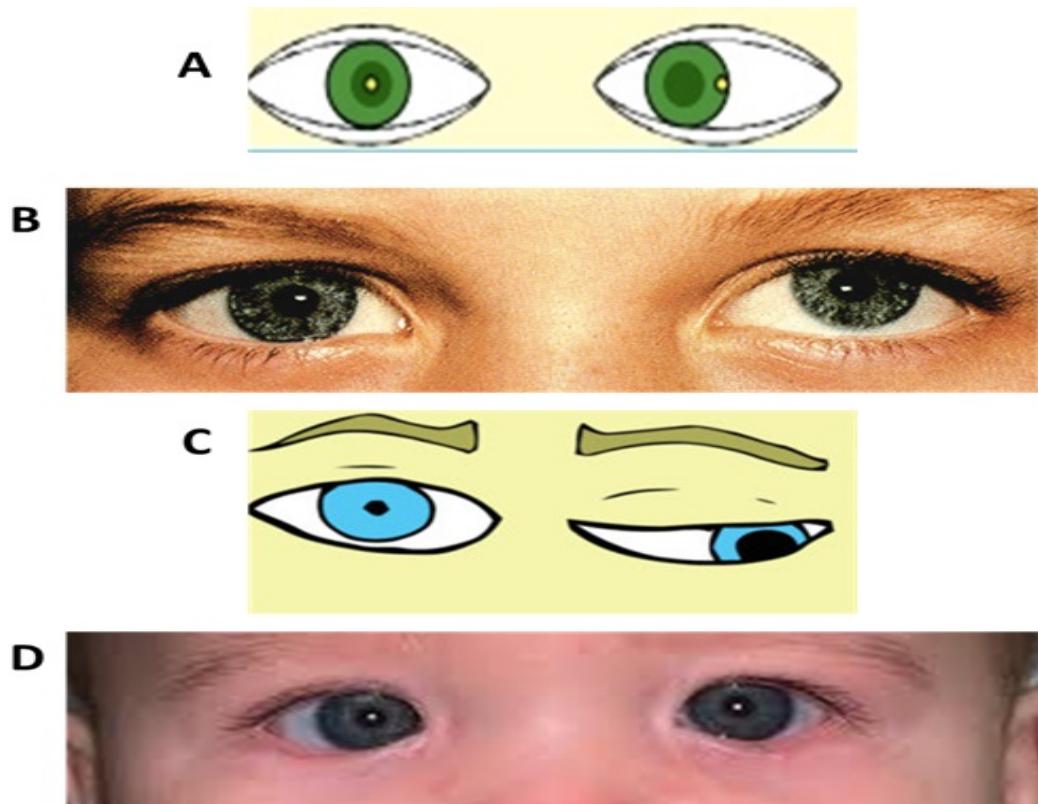
- A. 10 degrees
- B. 15 degrees
- C. 30 degrees
- D. 45 degrees

70. Nerve palsy is not seen in which of these?

- A. A
- B. B

C. C

D. D



71. A 10-year-old child presents with sudden onset inward deviation of one eye following fever. He complains of horizontal diplopia that increases on looking toward the affected side. Diagnosis?

A. Exotropia

B. Third nerve palsy

C. Sixth nerve palsy

D. Convergence insufficiency

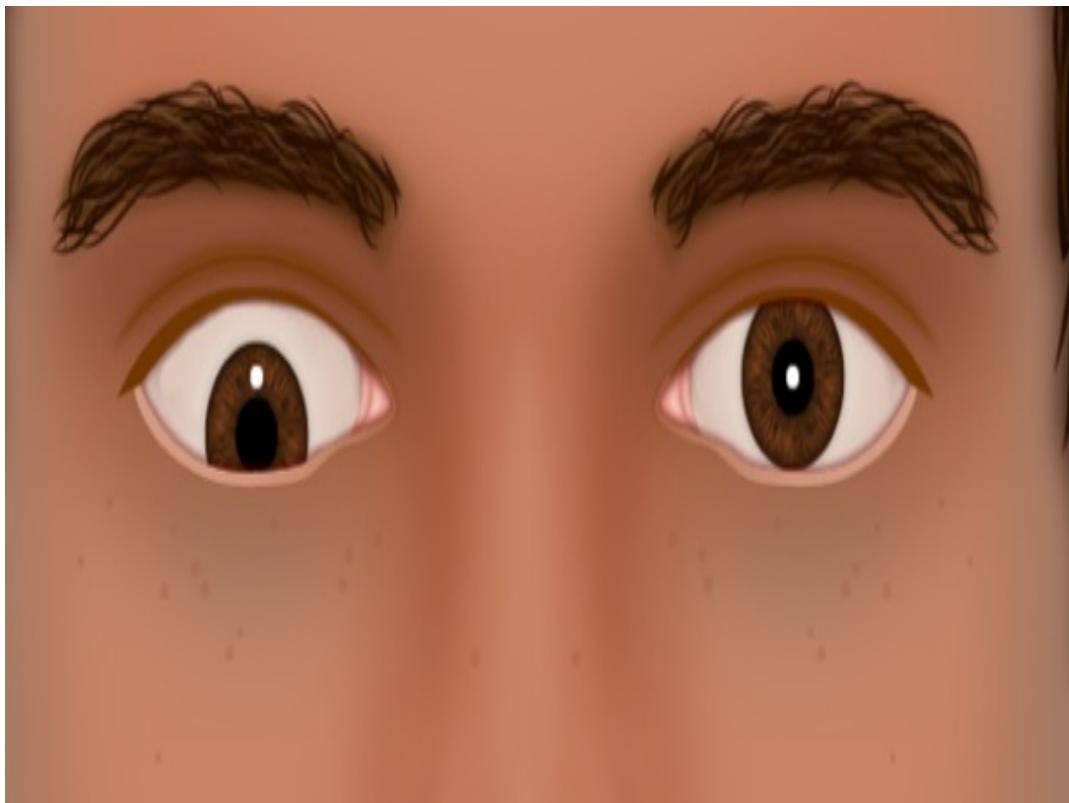
72. For this patient, diplopia was increasing on looking up and right, which muscle is paralysed among the following?

A. Lt. Sup. rectus

B. Lt. inf. oblique

C. Rt. sup. rectus

D. Rt. inf rectus



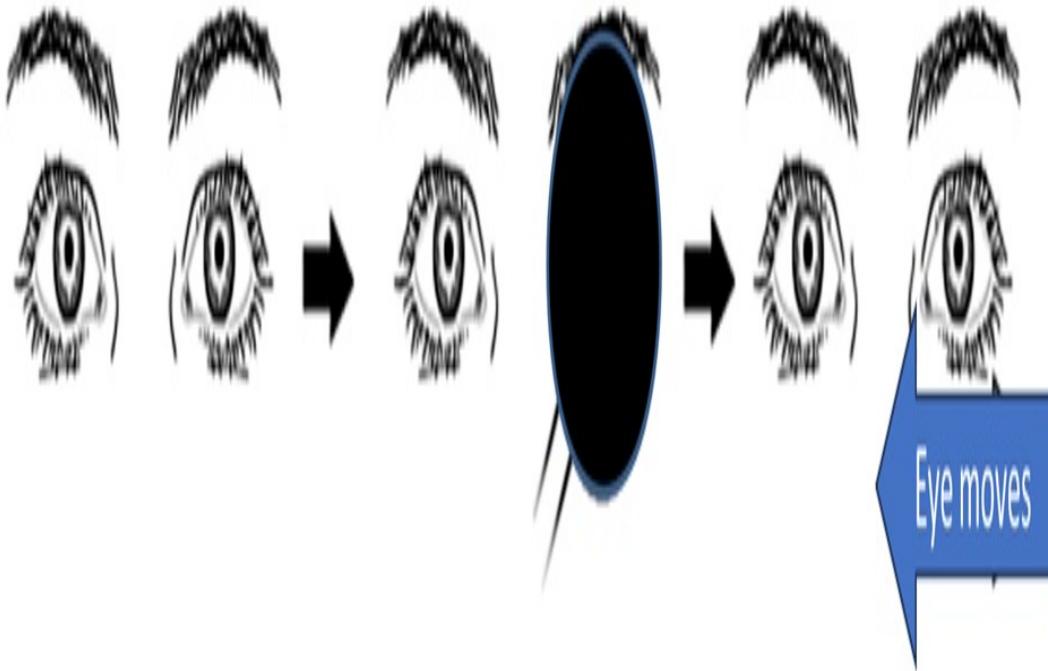
73. All of the following are true for the given test except ?

A. The test done is cover un-cover test

B. While doing Hirshberg reflex test, the reflex is seen at center of cornea in both eyes

C. It is a type of comitant squint

D. There is Esophoria described here



74. Which component of cover uncover differentiates between comitant and incomitant squints?

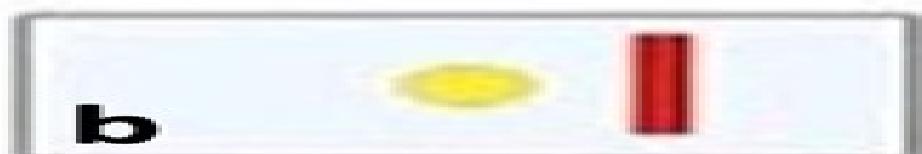
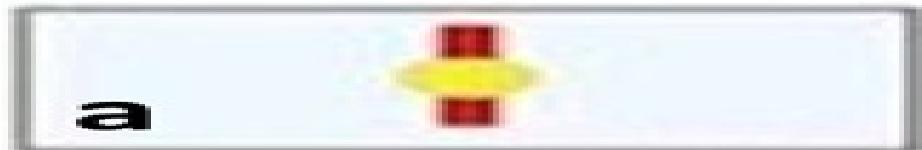
- A. Covering of fixating eye
- B. Uncovering of fixating eye
- C. Covering of deviated eye
- D. Uncovering of deviated eye

75. Which is correct interpretation of an esophoria patient in which Maddox rod is placed in front of right eye with axis horizontal?

- A. A
- B. B

C, C

D, D



SOLUTION

Q1. Which of these is not a part of anterior segment of eyeball?

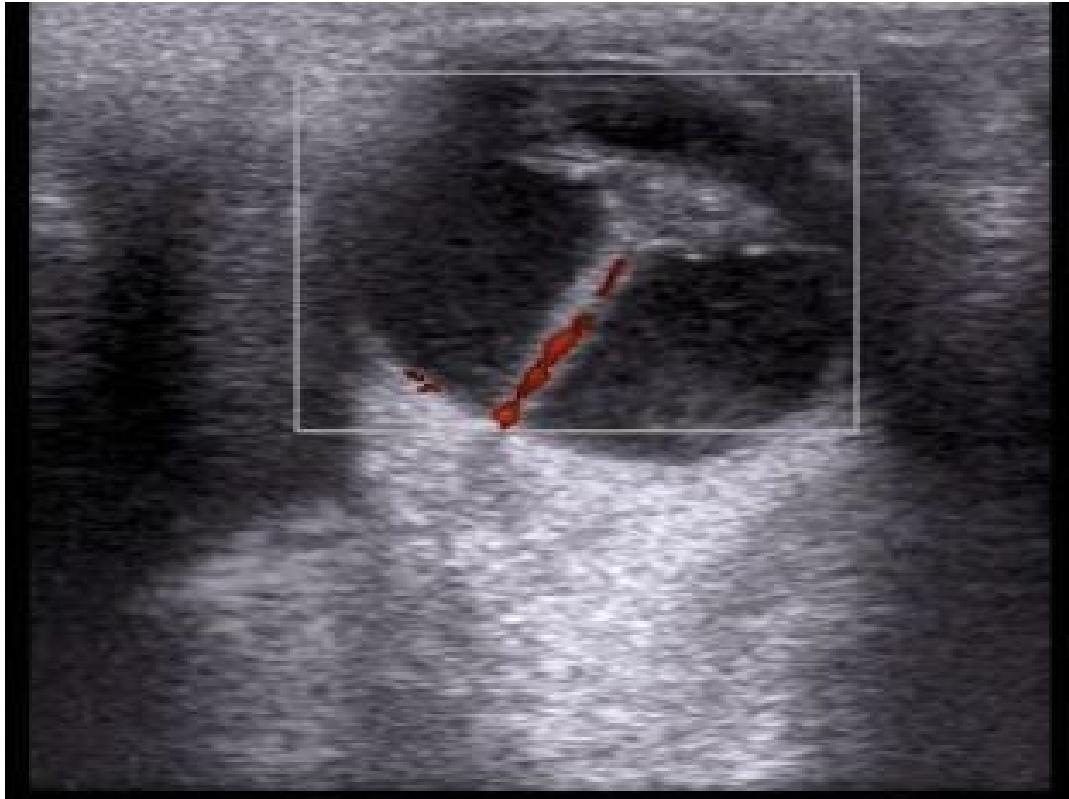
- A. Cornea*
- B. Posterior chamber*
- C. Hyaloid vessel*
- D. Zonules*

Correct Answer: C. Hyaloid vessel

Explanation: Correct Answer (C) Cloquet canal contains hyaloid vessel (primary vitreous) and is in posterior segment

Q2. A child was born at 34 weeks of gestation. Ophthalmologist review was sort to look for any eye abnormalities. There was a white reflex in one eye. On further evaluation, the doctor observed finding as shown in figure. This could be due to abnormality in which embryonic structure?

- A. Mesoderm*
- B. Neural crest*
- C. Surface ectoderm*
- D. Neuro-ectoderm*



Correct Answer: A. Mesoderm

Explanation: Correct Answer (A) The given picture shows ultrasound doppler suggestive of persistent hyperplastic hyaloid vessel which is remnant of hyaloid vessel, derivative of mesoderm

Q3. Which structure lies in the intraconal space?

A. Lacrimal gland

B. Optic nerve

C. Levator palpebrae

D. Orbicularis oculi

Correct Answer: B. Optic nerve

Explanation: Correct Answer (B) Intraconal = within muscle cone Contents:Optic nerveOphthalmic artery CN III, VI, nasociliary nerve

Q4. Parasympathetic fibers for pupillary constriction originate from:

- A. Edinger-Westphal nucleus
- B. Superior colliculus
- C. Lateral geniculate body
- D. Red nucleus

Correct Answer: A. Edinger-Westphal nucleus

Explanation: Correct Answer (A) The afferent of light reflex (parasympathetic): ipsilateral optic nerve
Efferent: Bilateral 3rd nerve Pathway: Edinger-Westphal nucleus CN III -- Ciliary ganglion to Short ciliary nerves → sphincter pupillae

Q5. In a complete lesion of the right optic nerve, shining light in the right eye will produce:

- A. No constriction in either eye
- B. Right pupil constriction only
- C. Left pupil constriction only
- D. Both pupils constrict

Correct Answer: A. No constriction in either eye

Explanation: Correct Answer (A) Optic nerve is afferent Oculomotor nerve is efferent of pupillary pathway
In 2nd nerve transection - On shining a torch light in fellow eye, there will be constriction seen in both eyes, but when light was shown to affected eye, neither of pupil will constrict.

Q6. A 25 year old female was diagnosed to have left eye optic neuritis due to demyelination. MRI was normal. What will be the pupil reaction when torch light will be

swung in left eye during swinging flash light examination?

- A. No reaction in both pupils
- B. Dilatation of both pupils
- C. No reaction in left, constriction in right
- D. No reaction in right, constriction in left

Correct Answer: B. Dilatation of both pupils

Explanation: Correct Answer (B) Marcus Gunn pupil is seen in optic nerve compression or optic neuritis. Its also known as relative afferent pupillary defect and tested by swinging flash light examination. There is dilatation in both pupils when light is swung to affected side

Q7. During pupil examination of a patient, anisocoria was noted which was more in bright light. Slit lamp examination revealed normal iris pattern and pupil shape. There was no pupil constriction in left eye with diluted pilocarpine. Even there was no constriction was noted after instillation of 1% pilocarpine. What's the possible diagnosis

- A. Adie pupil
- B. 3rd nerve palsy
- C. Damage to iris sphincter
- D. Atropine use

Correct Answer: D. Atropine use

Explanation: Correct Answer (D) Adie pupil – constricts with diluted pilocarpine 3rd nerve palsy- constricts with 1% pilocarpine Damage to iris sphincter –examined on slit lamp Atropine blocks sphincter receptors on which pilocarpine works

Q8. The afferent pathway of the reflex needed while doing this testing passes through:

- A. Pretectal nucleus
- B. Oculomotor nerve
- C. Visual cortex
- D. Edinger-Westphal nucleus



Correct Answer: C. Visual cortex

Explanation: Correct Answer (C) The accommodation reflex (or accommodation-convergence reflex) is a reflex action of the eye, in response to focusing on a near object, comprising coordinated changes convergence, lens shape (accommodation) and pupil size. Near reflex is a cortical reflexPathway:Retina → Optic nerve → LGB → Visual cortex (occipital lobe)This is the key difference from light reflex. The ciliary muscle constricts, zonules relax making the lens thicker antero-posteriorly, shortening its equatorial length. The anterior curvature of lens increases and anterior chamber shallows.

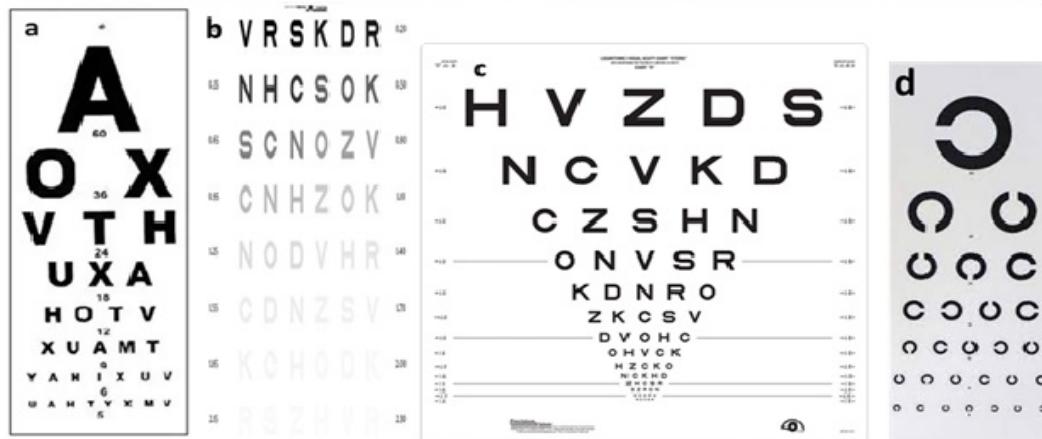
Q9. A child with visual acuity of 6/6 in right eye and 6/60 in other eye with best possible correction. Both eyes had refractive error of +4D. No structural abnormality was there in eyes other than shown in pic. Which chart shown gives accurate visual acuity here?

A. A

B. B

C. C

D. D



Correct Answer: C. C

Explanation: Correct Answer (C) Patient has anisometropic amblyopia left eye A- Snellen chart B- Pielli Robson chart (for contrast sensitivity) C- ETDRS chart (better vision in amblyopia due to crowding phenomenon) D- Landolts C/E chart

Q10. A patient reads 6/18 with right eye. This implies:

- A. Patient can read at 6 m what a normal person reads at 18 m
- B. Patient can read at 18 m what a normal person reads at 6 m
- C. Minimal angle of resolution is 30 minutes of arc
- D. The total minimal angle of resolution subtends is 3 minutes of arc

Correct Answer: A. Patient can read at 6 m what a normal person reads at 18 m

Explanation: Correct Answer (A) For 6/18MAR will be 3 min Total angle subtended will be 15 min

Q11. Which of the following statements is incorrect regarding the device shown?

- A. The image seen by observer is real and inverted
- B. Condenser lens is needed
- C. It is used to view optic disc changes in glaucoma
- D. The magnification provided depends on the refractive error of patient



Correct Answer: C. It is used to view optic disc changes in glaucoma

Explanation: Correct Answer (C) Indirect ophthalmoscope Magnification= power of eye of patient/power of lens used For optic disc evaluation: slit lamp + lenses> direct ophthalmoscope

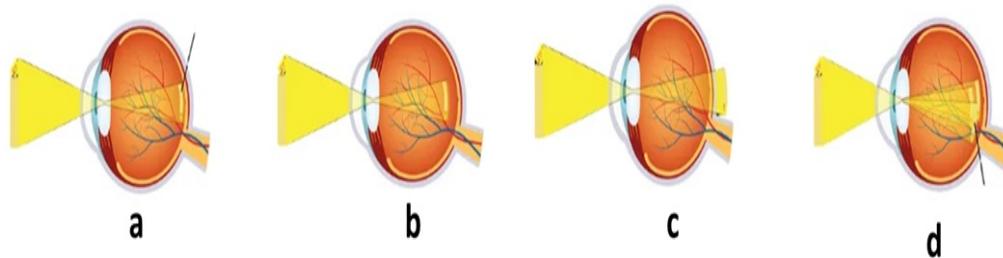
Q12. A young patient with frequent change of glasses with this sign. What is the likely refractive error in the patient?

A. A

B. B

C. C

D. D

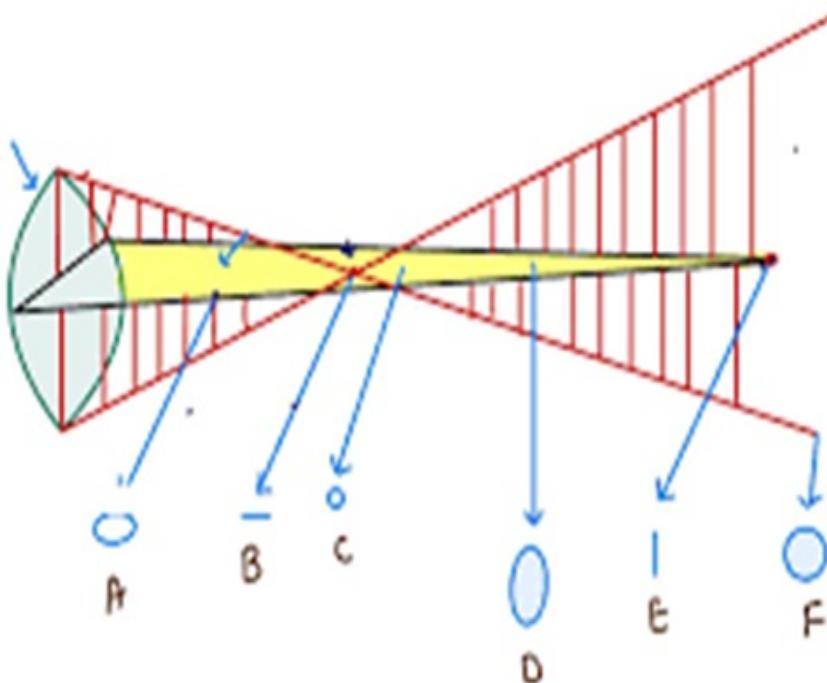


Correct Answer: D. D

Explanation: Correct Answer (D) Munson sign in KERATOCONUS A- emmetropia B- simple myopia C- simple hypermetropia D- astigmatism (compound myopic) Keratoconus patients have myopic astigmatism

Q13. What is false for the given pic

- A. The interval between the two focal points B and F is called Sturm's conoid
- B. If retina is at point A, its compound hypermetropic astigmatism
- C. Circle of least confusion should be when retina is at point D
- D. It against the rule astigmatism depicted here



Correct Answer: D. It against the rule astigmatism depicted here

Explanation: Correct Answer (D) Space between them = Sturm's conoid Circle of least confusion lies between them Both rays are focussed in front point A and G Get different points Vertical axis is focussed before horizontal, steeper axis is vertical (with the rule)

Q14. A patient has a far point of 50 cm in front of eye. What is the refractive error?

A. -1 D

B. -2 D

C. +1 D

D. +2 D

Correct Answer: B. -2 D

Explanation: Correct Answer (B) Far point (myopia) = 0.5 m Refractive error = $-1 / \text{far point (in meters)}$ = $-1 / 0.5 = -2 \text{ D}$

Q15. $-4.00\text{DS} +1.00\text{DC} \times 90$ degrees. What type of refractive error is this?

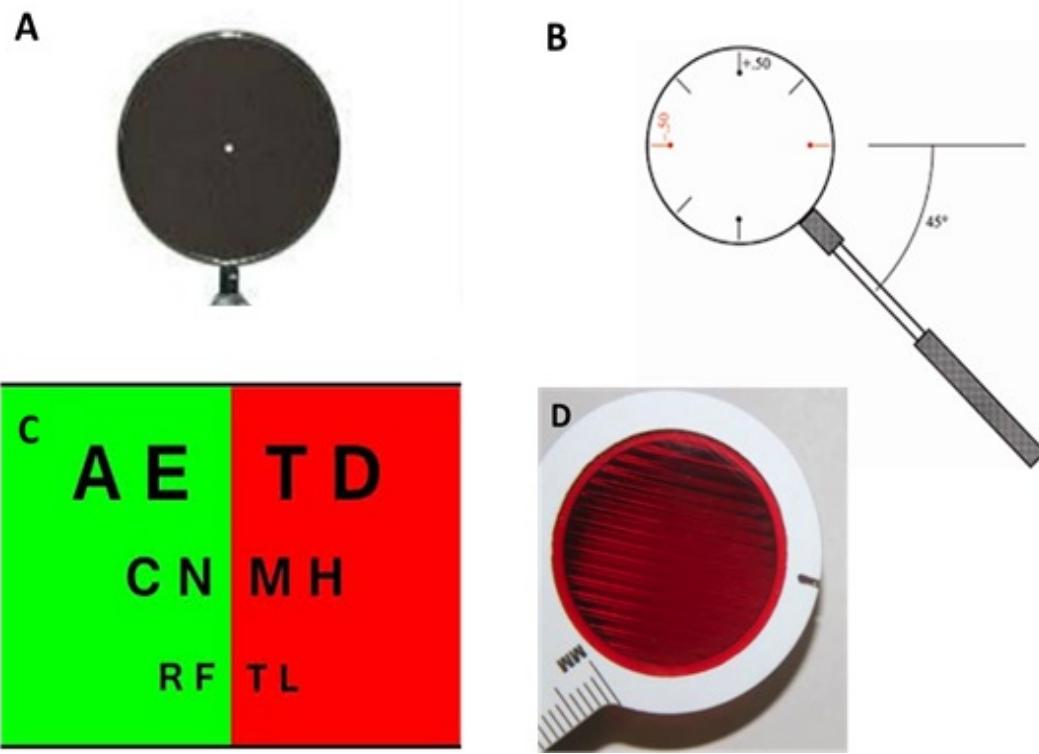
- A. Mixed astigmatism with the rule
- B. Simple myopic astigmatism against the rule
- C. Compound myopic astigmatism against the rule
- D. Compound myopic astigmatism with the rule

Correct Answer: D. Compound myopic astigmatism with the rule

Explanation: Correct Answer (D) $-4.00\text{DS} +1.00\text{DC} \times 90$ degrees, means -4d in both axis and $+1\text{d}$ in horizontal axis (cylinder acts at 90 degrees to its axis). It becomes -4 d in vertical axis and -3 d in horizontal axis. Its compound myopic astigmatism with the rule as vertical axis is steeper.

Q16. Which of these is of no use in subjective refraction?

- A. A
- B. B
- C. C
- D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A-Pinhole B-Jackson cross cylinder C-Duochrome test D-Maddox rod
 Pinhole and duochrome testing are used for refinement of spherical power Jackson cross cylinder testing is used for refinement of cylinder power and axis The 2 axes of Jackson cross cylinder are of same power and opposite signs like +0.5D and -0.5D (-0.5DS with +1DC at 90 degrees), +1D and -1D (-1DS with +2DC at 90 degrees) Maddox rod is used for binocularly (see Squint chapter)

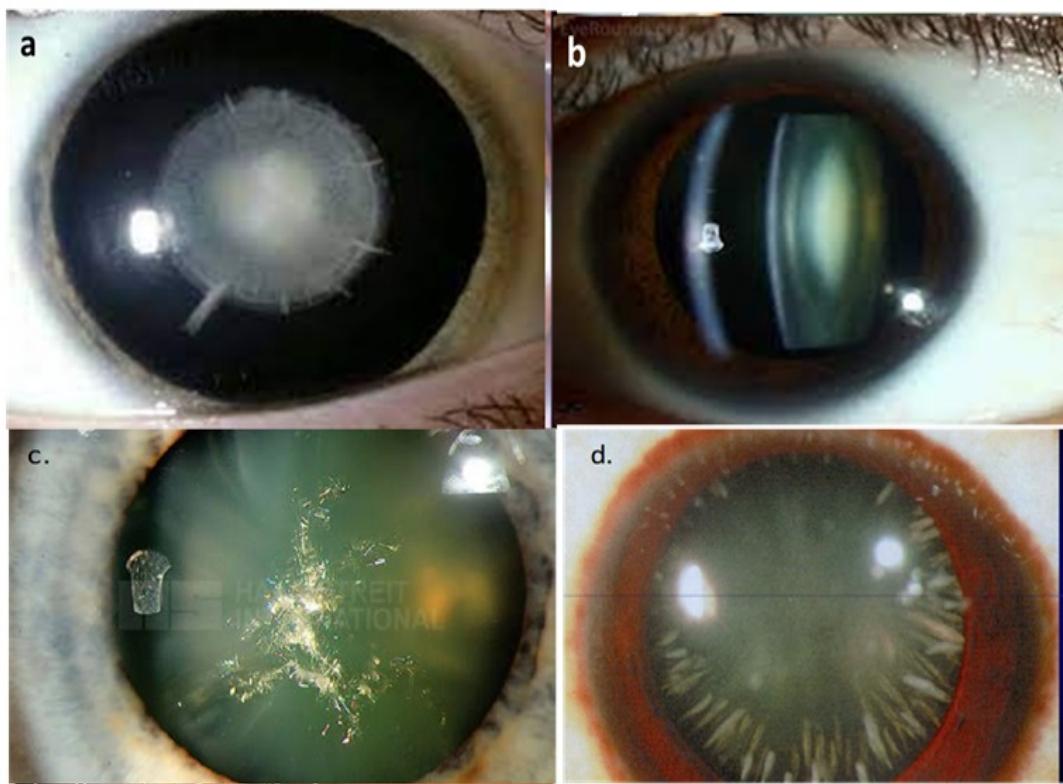
Q17. Which of the following patient will have stimulus deprivation amblyopia?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) A- zonular congenital cataract (Mx asap to prevent amblyopia) B- nuclear sclerosis C- Christmas tree cataract D- Cuneiform shape senile cataract

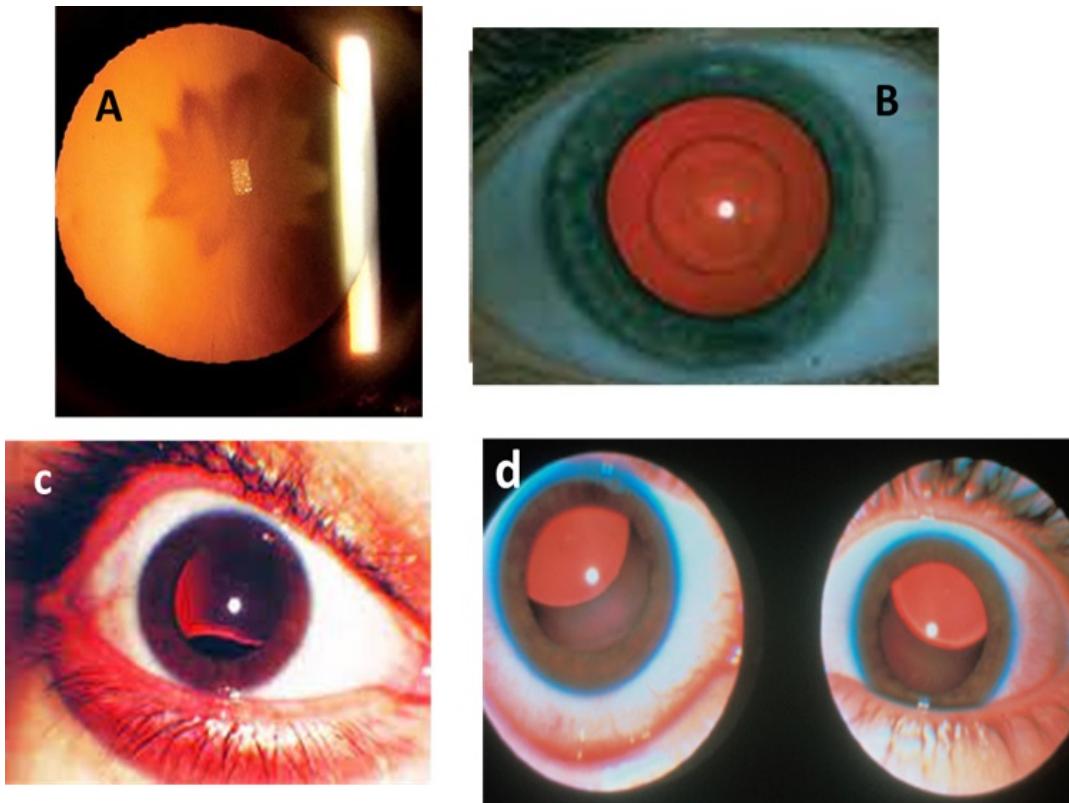
Q18. A child presents with bilateral cataract and failure to thrive. Most likely cause among options is?

A. A

B. B

C. C

D. D



Correct Answer: B. B

Explanation: Correct Answer (B) A- Rosette cataract B- oil droplet cataract (seen in galactosemia in the Q)
C- lens coloboma D- lens subluxation Galactose → galactitol accumulation in lensCauses oil-droplet cataractAssociated with systemic illness

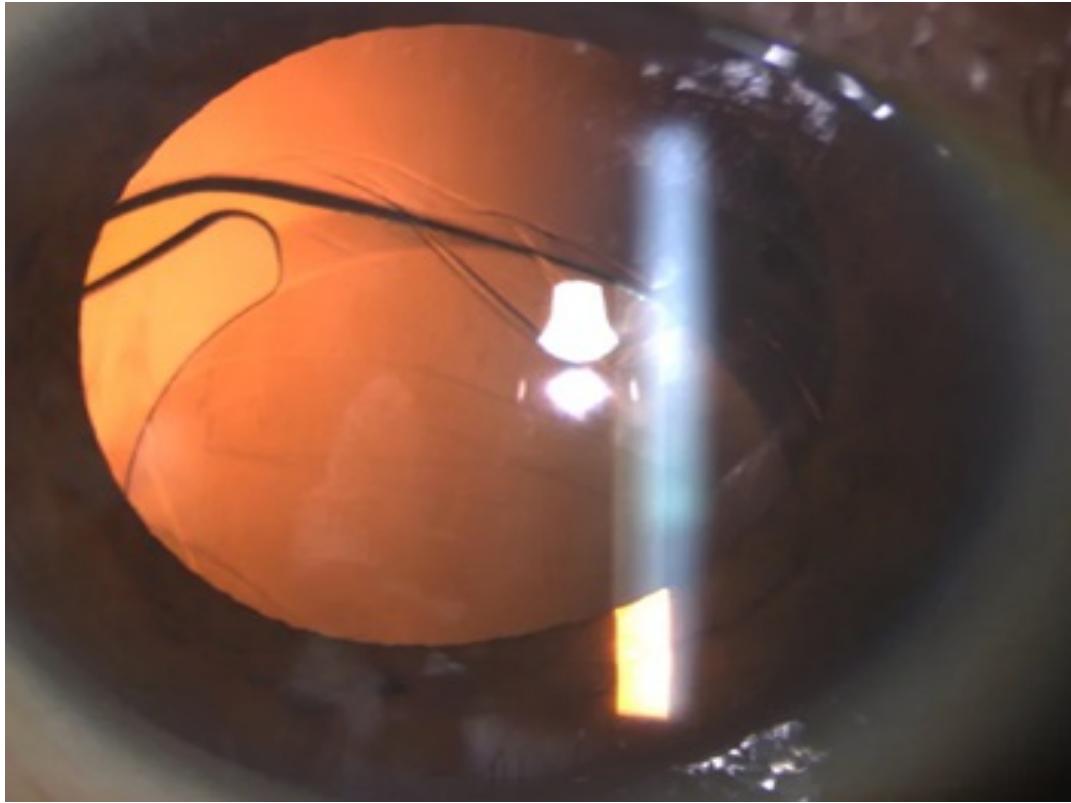
Q19. A patient was seen after cataract surgery and following was observed on slit lamp. What could be diagnosis

A. Posterior capsule opacification

B. Aphakia

C. IOL subluxation

D. Lens opacification

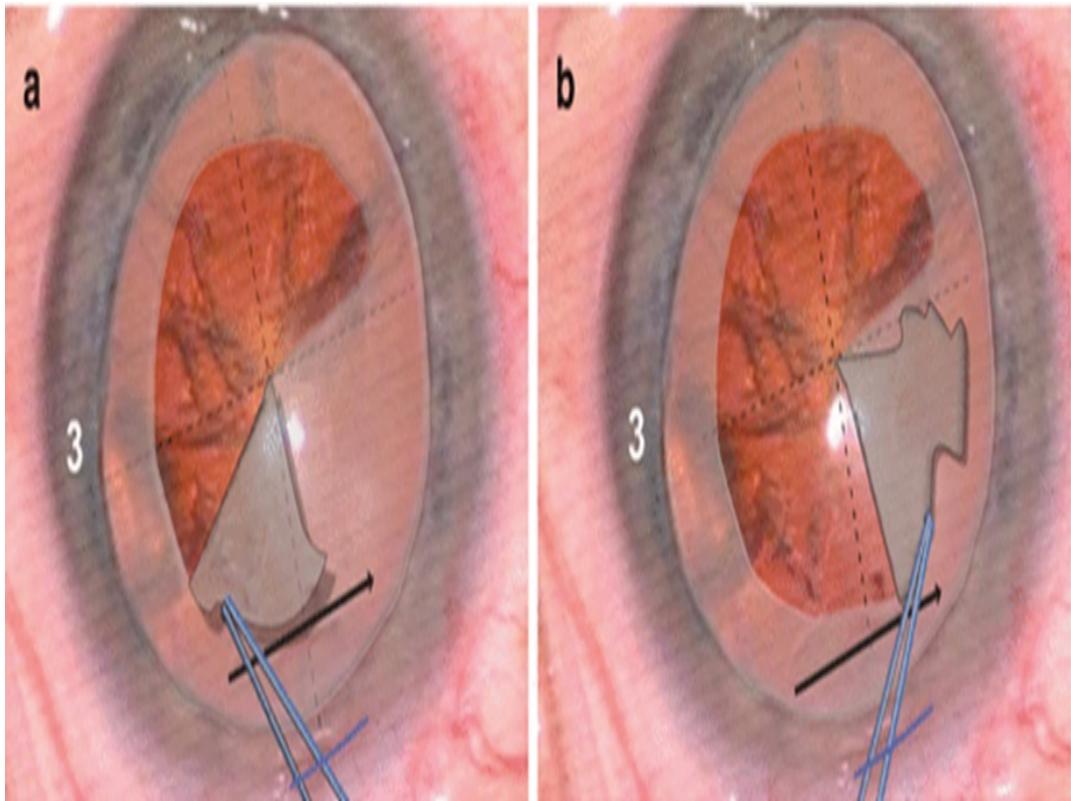


Correct Answer: C. IOL subluxation

Explanation: Correct Answer (C) The image shows IOL displacement. The edge of IOL can be seen. Here it's inferiorly subluxated

Q20. The given step of cataract surgery is important because it:

- A. Prevents posterior capsular rupture
- B. Allows controlled nucleus delivery
- C. Prevents posterior capsular opacification
- D. Reduces endothelial damage



Correct Answer: B. Allows controlled nucleus delivery

Explanation: Correct Answer (B) Continuous curvilinear capsulorhexis (CCC) Provides strong, elastic anterior capsular rim Essential for safe nucleus manipulation and IOL placement

Q21. On the first post-op day after complicated cataract surgery, the doctor noticed the following findings. The visual acuity was 1/60. There were restricted eye movements and severe pain. The intraocular pressure was high with cornea and scleral abscess. Ultrasound B scan revealed vitreous exudates. What should be management now in order to save the eye?

A. Systemic antimicrobials

B. Eviseration

C. Enucleation

D. Intravitreal tap and antimicrobials

Correct Answer: A. Systemic antimicrobials

Explanation: Correct Answer (A) Post op pandophthalmitis (infection of all layers of eyeball) Eviseration is done if painful blind eye

Q22. A patient with cataract complains of severe glare while driving at night and marked difficulty in bright sunlight. Vision worsens more for near work than distance. Which cataract is most likely?

A. Nuclear

B. Cortical

C. Posterior subcapsular

D. Hypermature

Correct Answer: C. Posterior subcapsular

Explanation: Correct Answer (C) PSC lies in visual axis Causes:Glare-Worse in bright light Near vision affected early

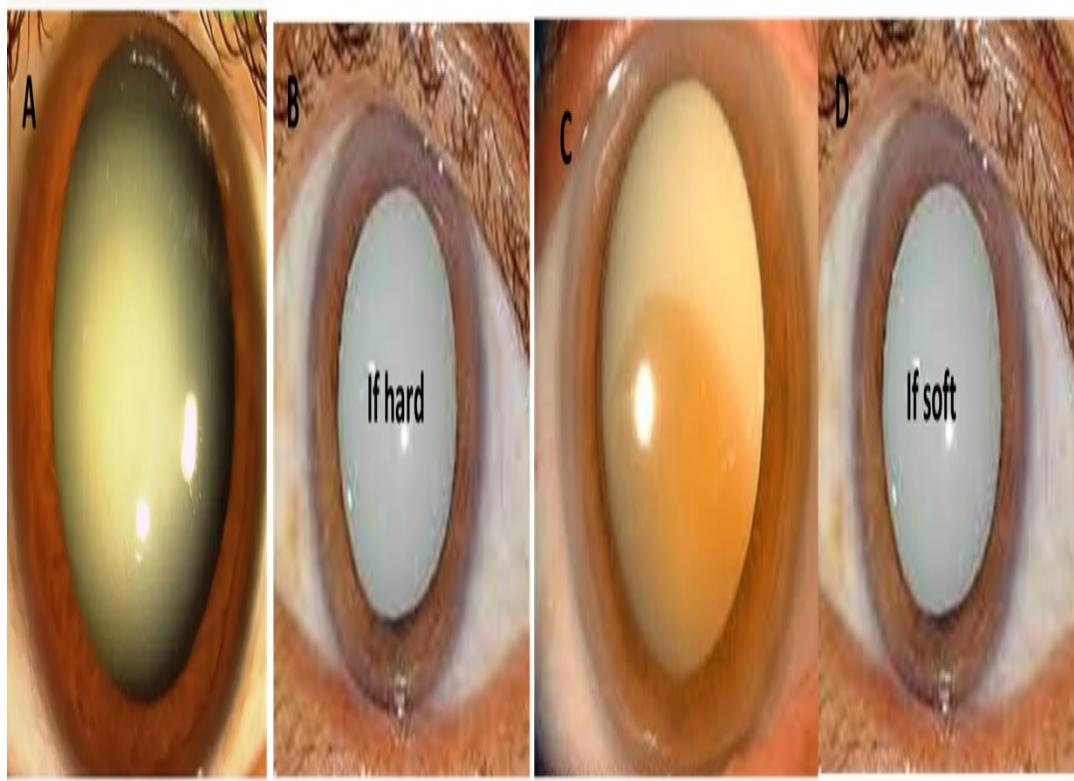
Q23. A patient presents with acute pain, redness, shallow anterior chamber, raised IOP, and an intumescent cataract.

A. A

B. B

C. C

D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A- Immature senile cataract B- Mature senile cataract C- Morgagnian cataract D- Intumuscent cataract (swollen lens can push iris forward)

Q24. Which of the following is false for a 55 year old pseudophakic person with Fuch corneal endothelial dystrophy?

- A. The amplitude of accommodation is lost
- B. Specular microscopy pre and post surgery is important investigation
- C. Topical hypertonic saline eye drops or ointment is given for post op corneal edema
- D. For evaluation of refractive power for far after cataract surgery, tropicamide is used as cycloplegia

Correct Answer: D. For evaluation of refractive power for far after cataract surgery, tropicamide is used as cycloplegia

Explanation: Correct Answer (D) Specular microscopy reveals endothelium of cornea As accommodation is lost, cycloplegia is not required

Q25. Cataract surgery was planned in a diabetic patient of Mature senile cataract. An intern was asked to do some necessary investigations. Which investigation is not useful?

A. Keratometry

B. Ultrasound A scan

C. Biometry

D. Fundoscopy

Correct Answer: D. Fundoscopy

Explanation: Correct Answer (D) As there is no view of posterior segment, fundoscopy cannot be done USG B scan is needed Keratometry and Axial length for calculating IOL power

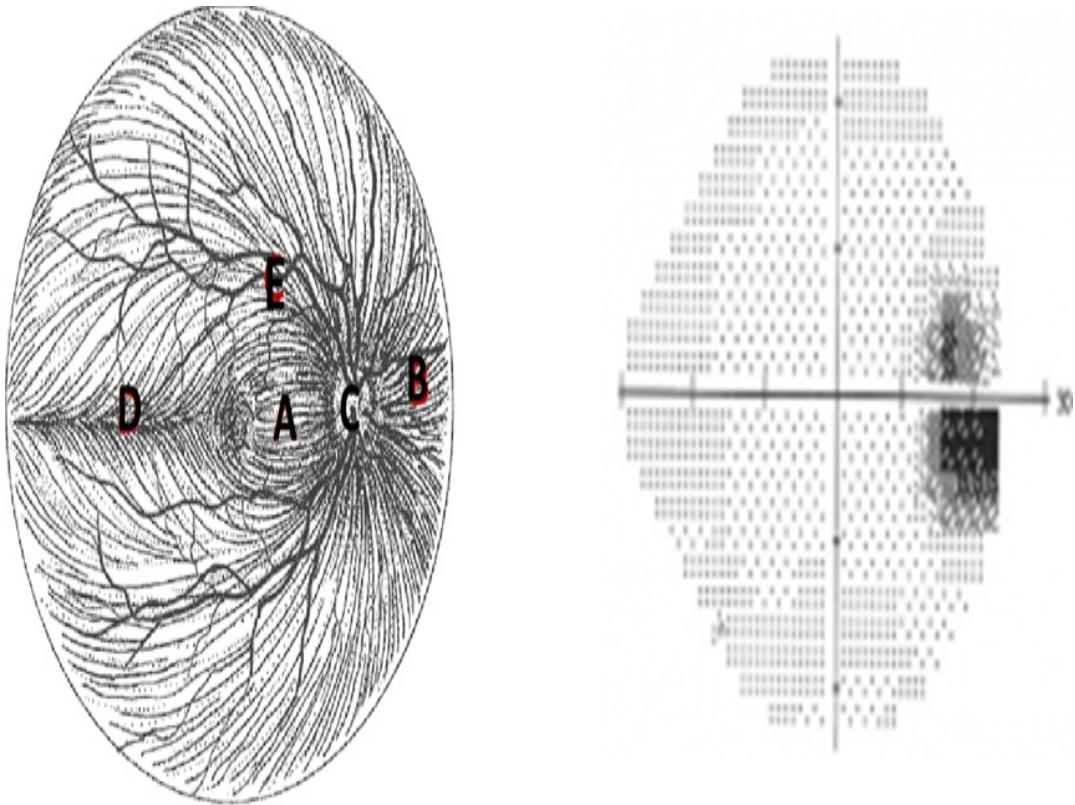
Q26. The abnormality in given visual field is related to?

A. A

B. B

C. C

D. D

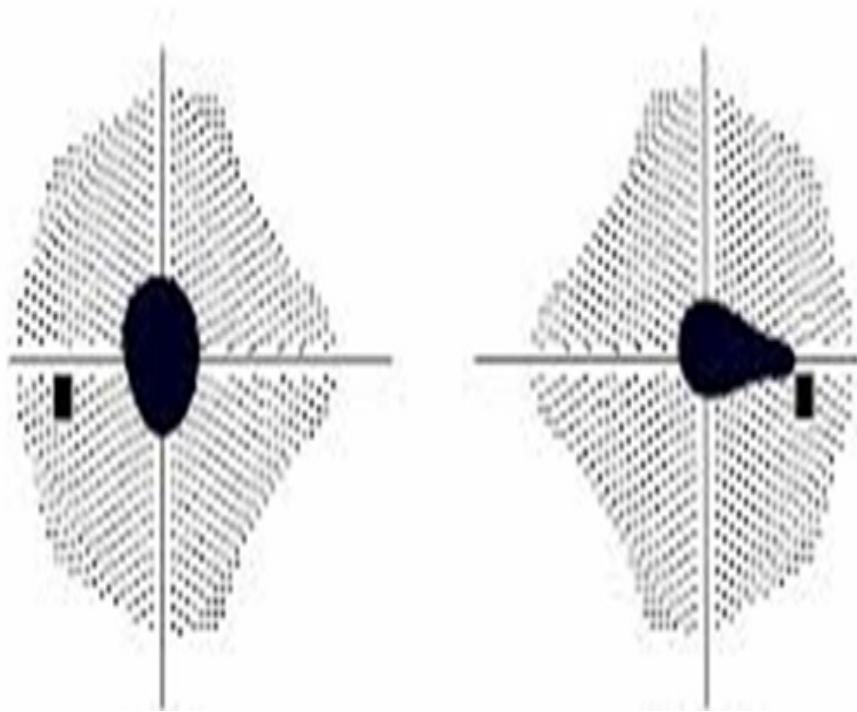


Correct Answer: C. C

Explanation: Correct Answer (C) A- papillomacular bundle fibres B- radiating fibres C- optic disc D,E- arcuate fibres Enlargement of blind spot is shown in visual field

Q27. A 45-year-old alcoholic presents with visual difficulty. Perimetry shows such defects. Fundoscopy reveals temporal pallor of optic discs. Most likely diagnosis?

- A. Glaucoma
- B. Tunnel vision
- C. Pituitary adenoma
- D. Toxic optic neuropathy



Correct Answer: D. Toxic optic neuropathy

Explanation: Correct Answer (D) Right field shows centro-caecal scotoma Left shows central scotoma
Alcohol + tobacco → toxic optic neuropathy Central scotoma + temporal pallor = classic

Q28. A visual field chart shows: Left eye: loss of temporal field Right eye: loss of temporal field Central vision preserved Lesion location?

A. Left optic nerve

B. Right optic tract

C. Optic chiasm

D. Occipital cortex

Correct Answer: C. Optic chiasm

Explanation: Correct Answer (C) Temporal fields in both eyes → bitemporal hemianopia

Q29. A 58-year-old man presents with difficulty in looking right side from both eyes. On testing shown here, he has right homonymous hemianopia with macular sparing. He can still read small print. Motor and sensory exams are normal. Which artery is MOST likely involved?

A. Right middle cerebral artery

B. Left middle cerebral artery

C. Left posterior cerebral artery

D. Right posterior cerebral artery



Correct Answer: C. Left posterior cerebral artery

Explanation: Correct Answer (C) Confrontation is bedside visual field testing Right homonymous hemianopia → left hemisphere lesion Macular sparing → occipital cortex Occipital cortex blood supply → PCA

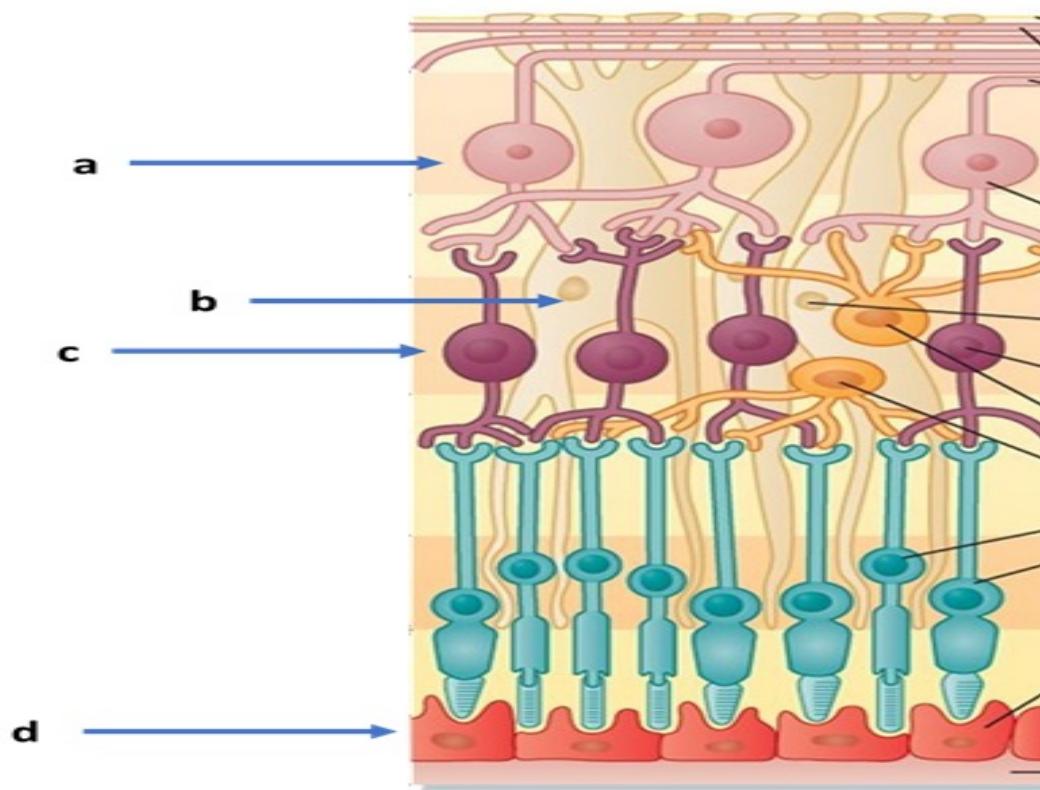
Q30. A 55-year-old man with no visual complaints is found to have IOP of 26 mmHg, cup-disc ratio of 0.8, and open angles on gonioscopy. Which cells are primarily damaged here?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) Diagnosis is Primary open angle glaucoma A- Ganglion cell (axons forms the optic nerve, primarily damaged in glaucoma) B- Muller cell (microglia) C- Inner nuclear layer (bipolar) D- Retinal pigment epithelium

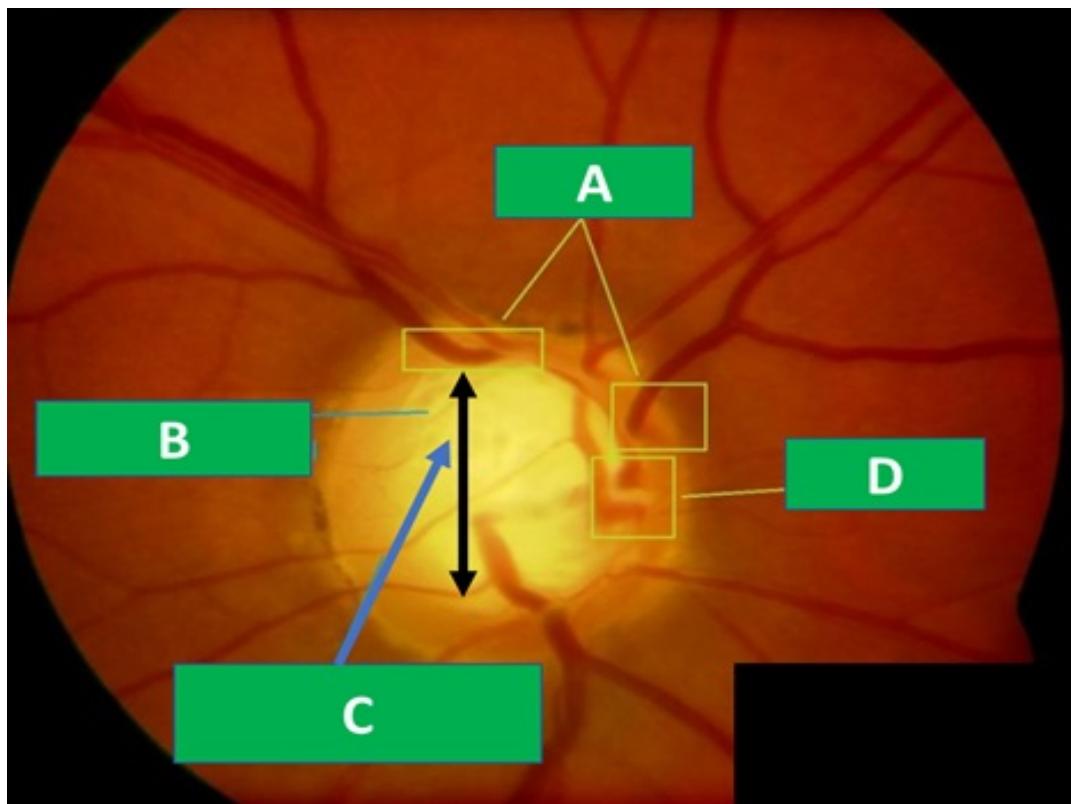
Q31. Which of the following is not a vascular sign in glaucoma?

A. A

B. B

C. C

D. D



Correct Answer: C. C

Explanation: Correct Answer (C) a- Bayonetting sign b- Baring of circumlinear vessels c- Increase in cup:disc ratio d- Nasalization of vessels Increase cup disc ratio is not a vascular sign

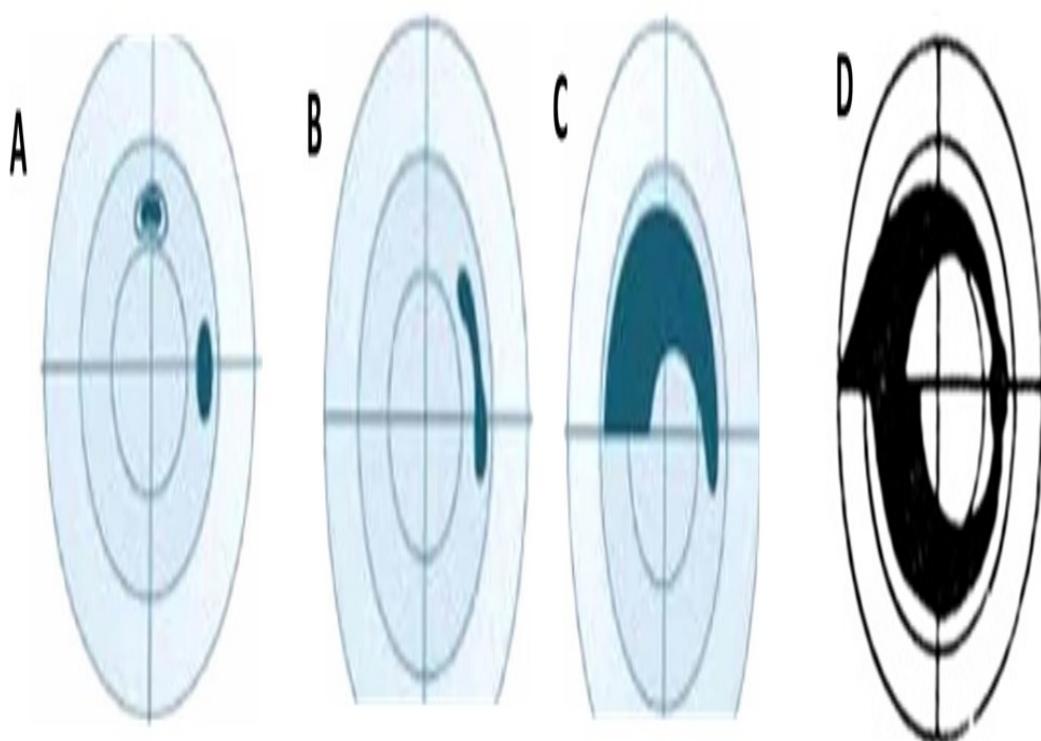
Q32. Which of the following is 1st defect in glaucoma?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) A- paracentral scotoma B- Siedel C- arcuate D- double arcuate

Q33. Which finding differentiates glaucomatous optic atrophy from optic neuritis?

A. Visual field loss

B. Loss of color vision

C. Cupping of disc

D. Reduced visual acuity

Correct Answer: C. Cupping of disc

Explanation: Correct Answer (C) Increased cup: disc ratio is seen in glaucoma, not in optic neuritis

Q34. An intern on his 1st day of Ophthalmology posting saw a resident measuring intraocular pressure of a patient of glaucoma. The intern checked notes of the resident and saw that he mentioned corneal opacity. He then observed that the resident measured IOP. Which of the following tonometers was being used by the resident?

A. A

B. B

C. C

D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A- Goldmann tonometer B- Schiotz C- Rebound tonometer D- Tonopen (preferred in patients with irregular corneal surface/corneal opacity)

Q35. A 50-year-old man has progressive peripheral vision loss. Fundus: CDR 0.7, neuroretinal rim thinning inferiorly. Visual field: nasal step superiorly. IOP = 16 mmHg. History: migraine, Raynaud's phenomenon. Most likely diagnosis?

A. Primary open angle glaucoma, starts topical meds

B. Ocular hypertension, observe

C. Normal tension glaucoma, starts topical meds

D. Normal tension glaucoma, observe

Correct Answer: C. Normal tension glaucoma, starts topical meds

Explanation: Correct Answer (C) Normal pressure with optic disc or field changes is suggestive of Normal tension glaucoma

Q36. A patient presents with sudden onset severe eye pain, headache, blurred vision, and coloured haloes. Examination reveals a small irregular pupil, steamy cornea and 60 mm Hg. What is the most likely diagnosis?

A. Secondary angle closure due to anterior uveitis

B. Neovascular glaucoma

C. Phacomorphic glaucoma

D. Acute primary angle closure

Correct Answer: A. Secondary angle closure due to anterior uveitis

Explanation: Correct Answer (A) Pupil is small irregular in anterior uveitis When pupil is mid dilated such as in dim light, prone position or by cycloplegics (mydriatics), there is increased apposition surface contact between iris and lens, causing relative pupillary block with aqueous in posterior chamber pushing the iris forward and blocks the angle of the anterior chamber, leading to an attack of acute angle closure. Pupil is dilated in acute angle closure

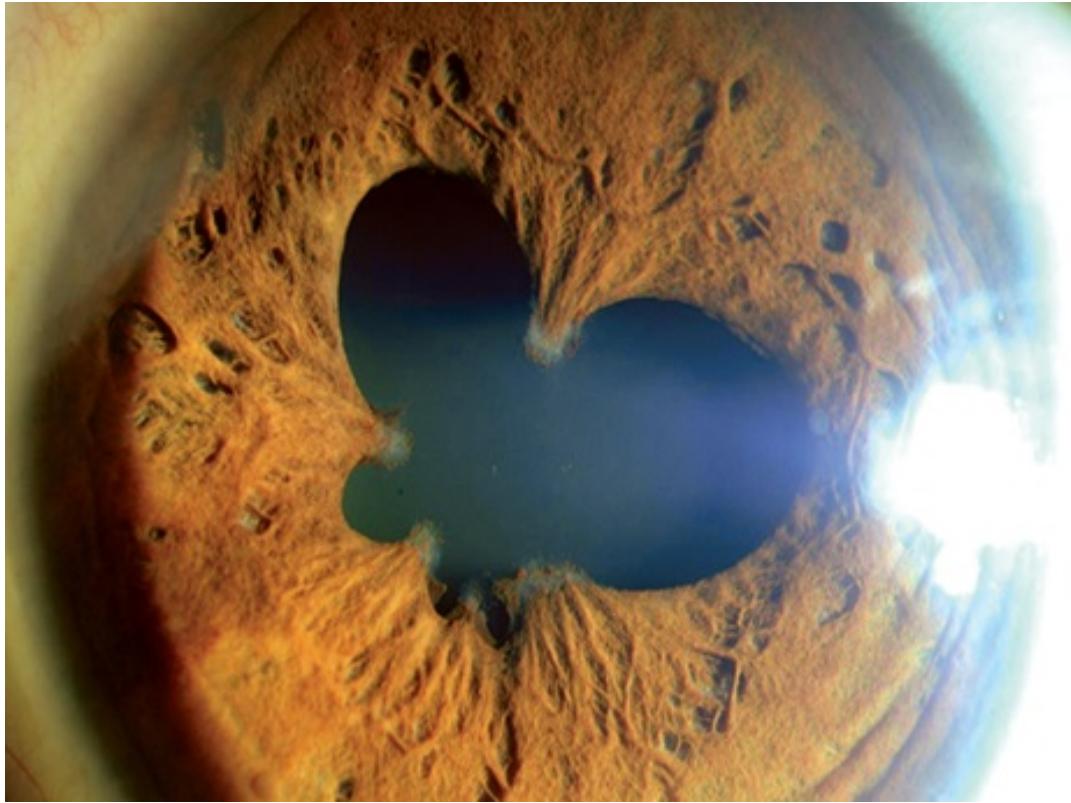
Q37. This was seen in a patient on slit lamp. Which of the following drugs can cause this?

A. Atropine

B. Prostaglandins

C. Phenylephrine

D. Pilocarpine



Correct Answer: A. Atropine

Explanation: Correct Answer (A) Festooned pupil in anterior uveitis is seen after dilatation with cycloplegics Strongest is atropine

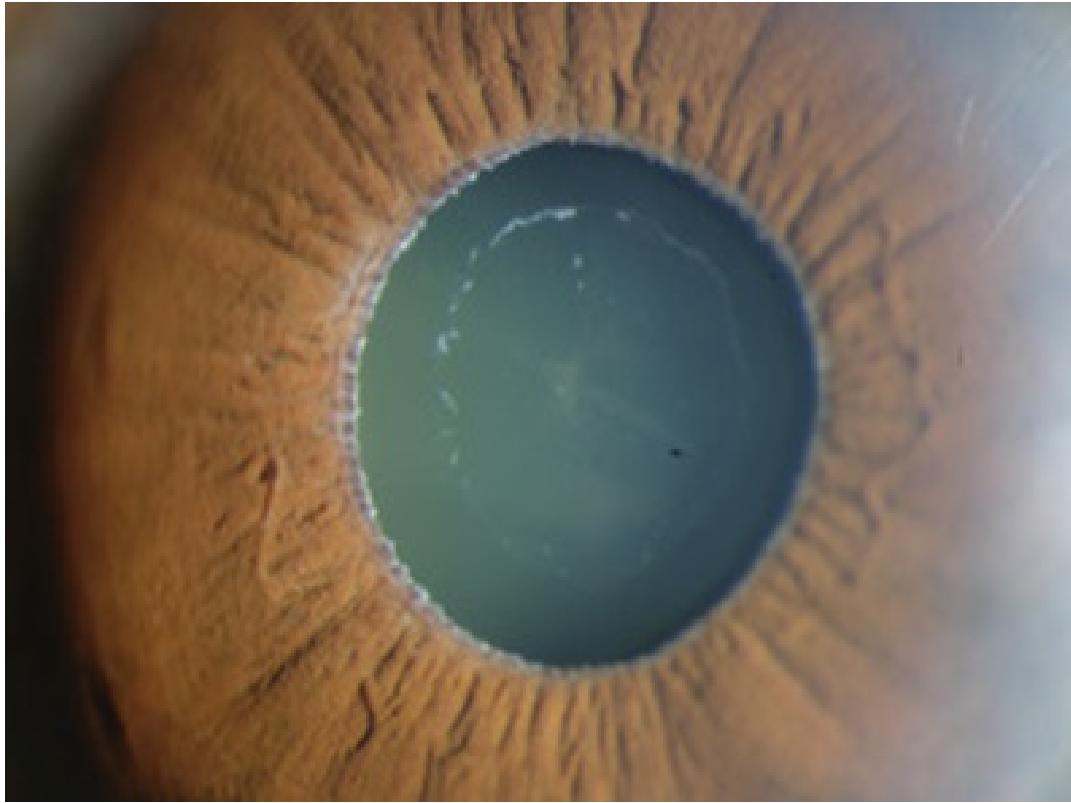
Q38. A 65-year-old man presents with gradually decreasing peripheral vision. On slit-lamp: the given image was seen. IOP = 28 mmHg. Gonioscopy: open angles. Visual field: arcuate defect. Most likely mechanism of raised IOP?

A. Pupillary block

B. Reduced trabecular outflow due to exfoliative material

C. Disruption of trabecular meshwork due to trauma

D. Decreased aqueous flow due to primary resistance at trabecular meshwork



Correct Answer: B. Reduced trabecular outflow due to exfoliative material

Explanation: Correct Answer (B) Pseudoexfoliation (most common cause of secondary glaucoma) shown in picture

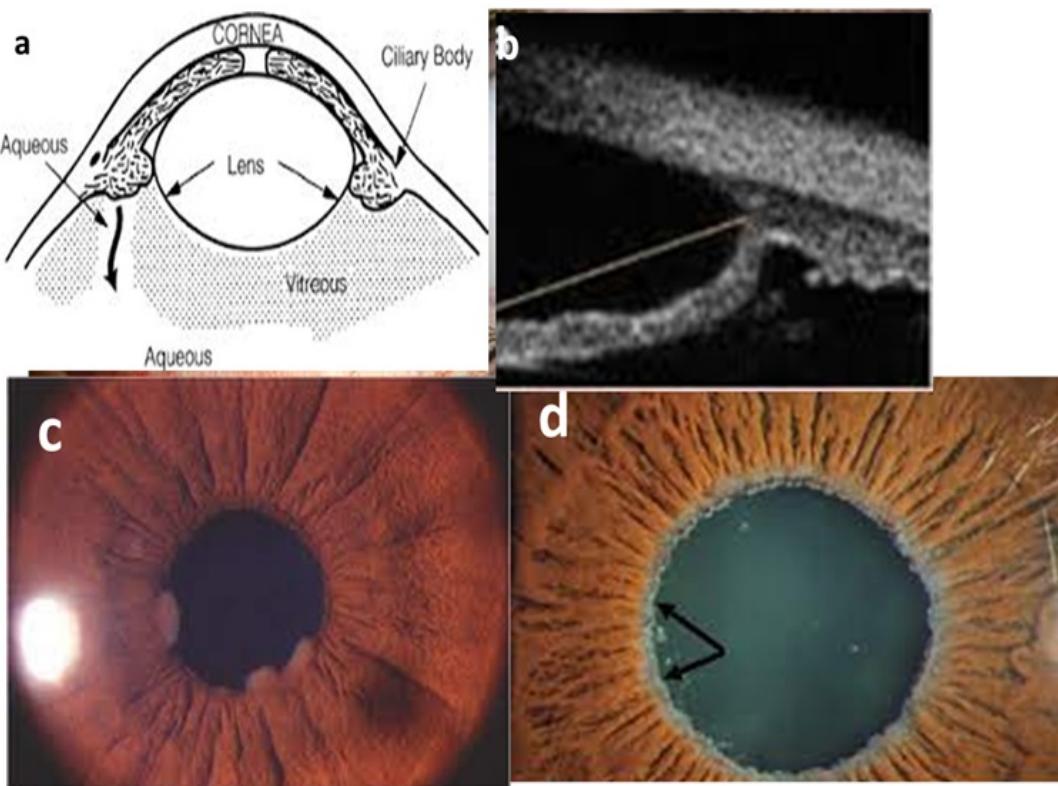
Q39. Krukenberg spindles can be seen in which of the following?

A. A

B. B

C. C

D. D

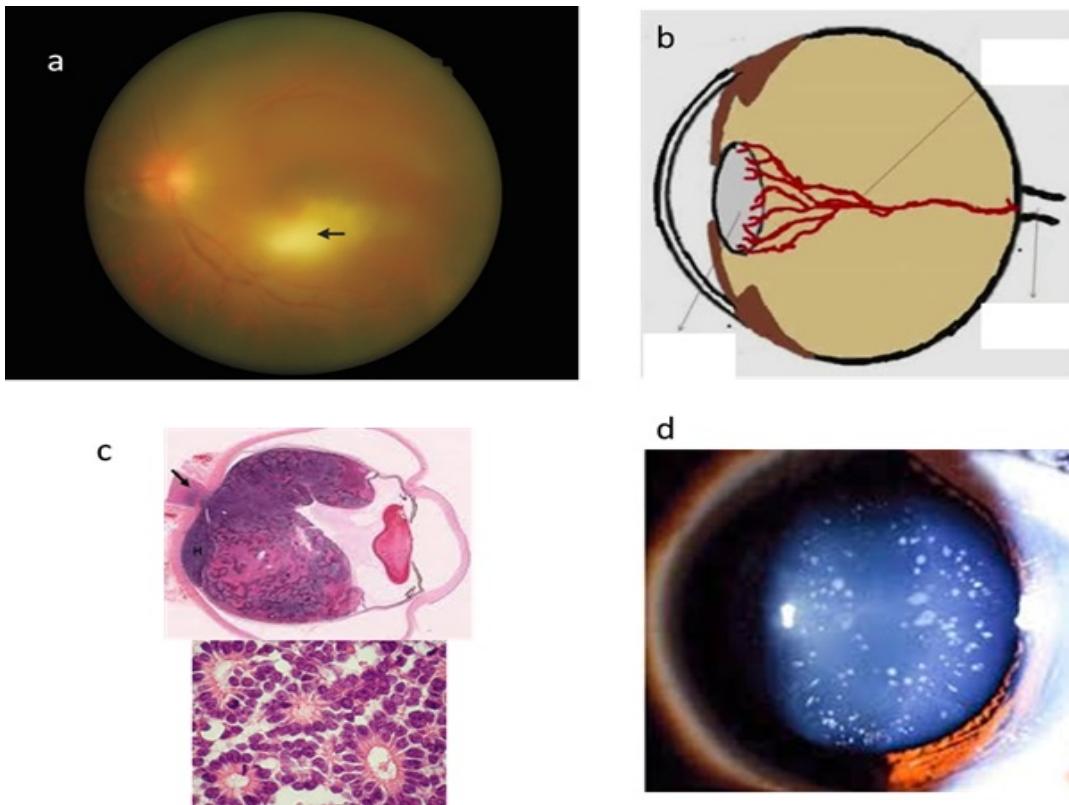


Correct Answer: B. B

Explanation: Correct Answer (B) A- Malignant glaucoma B- Pigmentary glaucoma (Reverse): has Krukenberg spindles C- Koeppe nodules in uveitis D- Pseudoexfoliation (most common cause of secondary glaucoma)

Q40. In which of the following, the presentation is absolutely different from others?

- A. A
- B. B
- C. C
- D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A- Headlight in fog appearance in Toxoplasmosis B- Persistent hyperplastic primary vitreous C- Retinoblastoma D- Blue dot cataract (asymptomatic) Rest all others can present as leukocoria

Q41. A patient presents with mutton-fat keratic precipitates, hypopyon, iris nodules, and chronic granulomatous uveitis. Most likely cause?

- A. HLA-B27 disease
- B. Sarcoidosis
- C. Viral uveitis
- D. Rheumatoid arthritis

Correct Answer: B. Sarcoidosis

Explanation: Correct Answer (B) Mutton fat KPs seen in granulomatous inflammation Rhematoid arthritis has scleritis/episcleritis

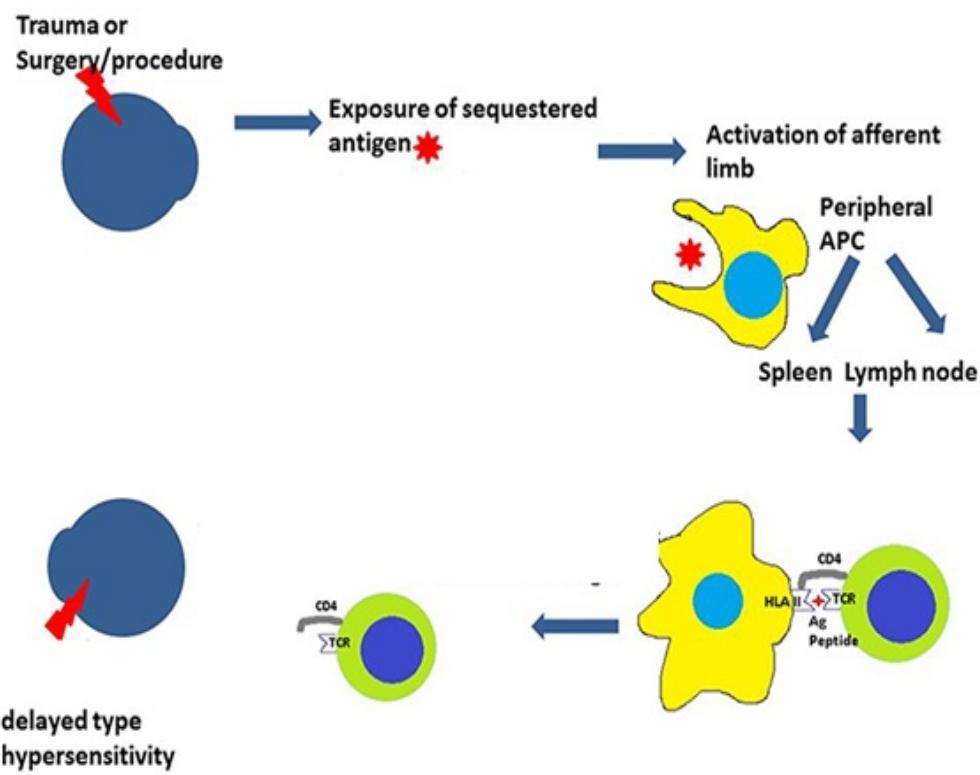
Q42. What will be the management if there is trauma in 1 eye with vision of 1/60 and other eye has vision of 2/60 with granulomatous panuveitis ?

A. Intravenous steroids

B. Intravenous antimicrobials

C. Enucleate the injured eye

D. Enucleate the other eye



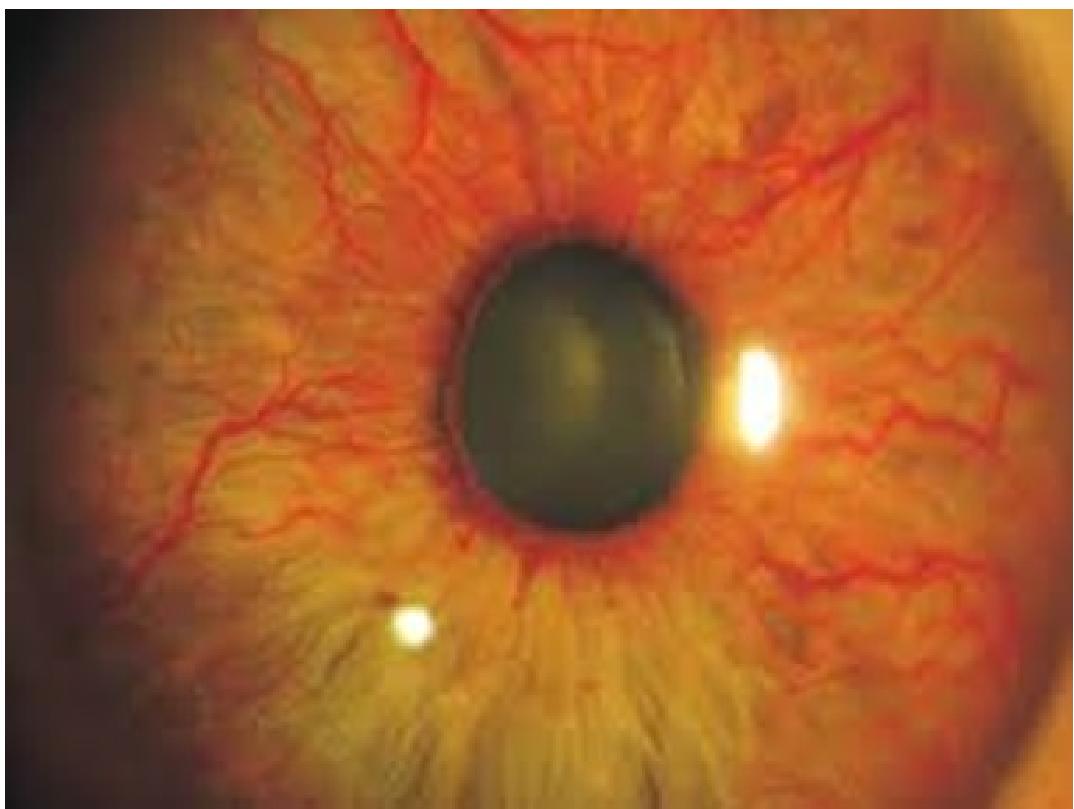
Correct Answer: A. Intravenous steroids

Explanation: Correct Answer (A) Sympathetic ophthalmia bilateral diffuse granulomatous intraocular inflammation that occurs after surgery or penetrating trauma to one eye with a subsequent autoimmune

response to this tissue. The injured or operated eye is the exciting eye and the contralateral eye is the sympathizing eye. Rx is by intravenous steroids

Q43. A 55-year-old patient with long-standing diabetes complains of painful, red eye with gradually decreasing vision. Slit-lamp shows following image, IOP = 42 mmHg. Which is false here?

- A. Its seen in advanced diabetic retinopathy stage
- B. Pupil block mechanism causing high IOP
- C. This sign suggests extensive retinal ischemia
- D. IOP control with Pan retinal photocoagulation to be done here



Correct Answer: B. Pupil block mechanism causing high IOP

Explanation: Correct Answer (B) Rubeosis iridis in Proliferative diabetic retinopathy Neovascular membrane obstructing trabecular meshwork

Q44. What is not included in a Proliferative diabetic retinopathy?

A. Retinal detachment

B. 100 day glaucoma

C. Rubeosis iridis

D. Vitreous hemorrhage

Correct Answer: B. 100 day glaucoma

Explanation: Correct Answer (B) 100 day glaucoma seen in CRVO CME can be seen in any stage of diabetic retinopathy

Q45. On normal angiography, which is not true

A. The dye is injected in antecubital vein in forearm

B. Choroidal vessels are filled last in angiography

C. Arm-retinal time is 11s

D. Fovea is hypofluorescence

Correct Answer: B. Choroidal vessels are filled last in angiography

Explanation: Correct Answer (B) Fovea is dark on angiography because of -Absence of blood vessels in the Foveal avascular zone -Blockage of background choroidal fluorescence due to the high density of xanthophyll at the fovea. -Blockage of background choroidal fluorescence by the RPE cells at the fovea, which contain more melanin than elsewhere in the retina Choroidal vessels are filled earlier than retinal vessels in angiography

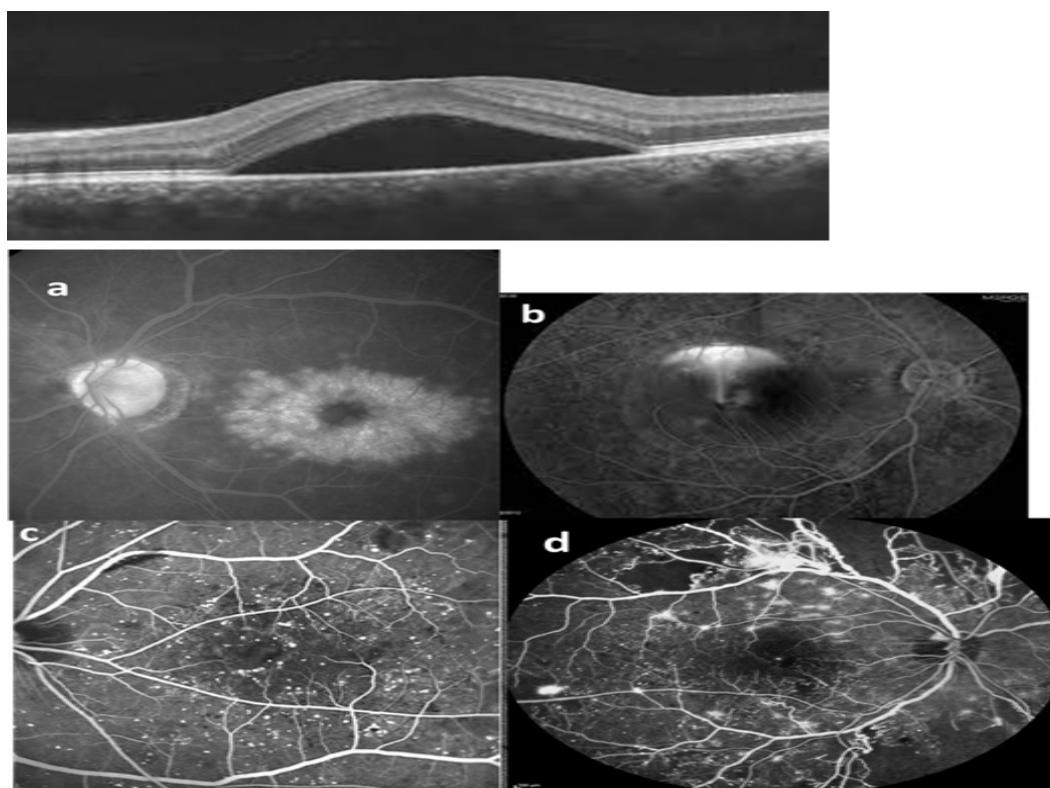
Q46. With which of the following angiography images, the given Optical coherence tomography images matches?

A. A

B. B

C. C

D. D



Correct Answer: B. B

Explanation: Correct Answer (B) A- cystoid macular edema (flower petal appearance) B- ink blot in central serous retinopathy C- microaneurysms in early stages of diabetic retinopathy D- New vessels also seen in PDR stage

Q47. A patient develops CME following cataract surgery. What is the most likely pathophysiological mechanism?

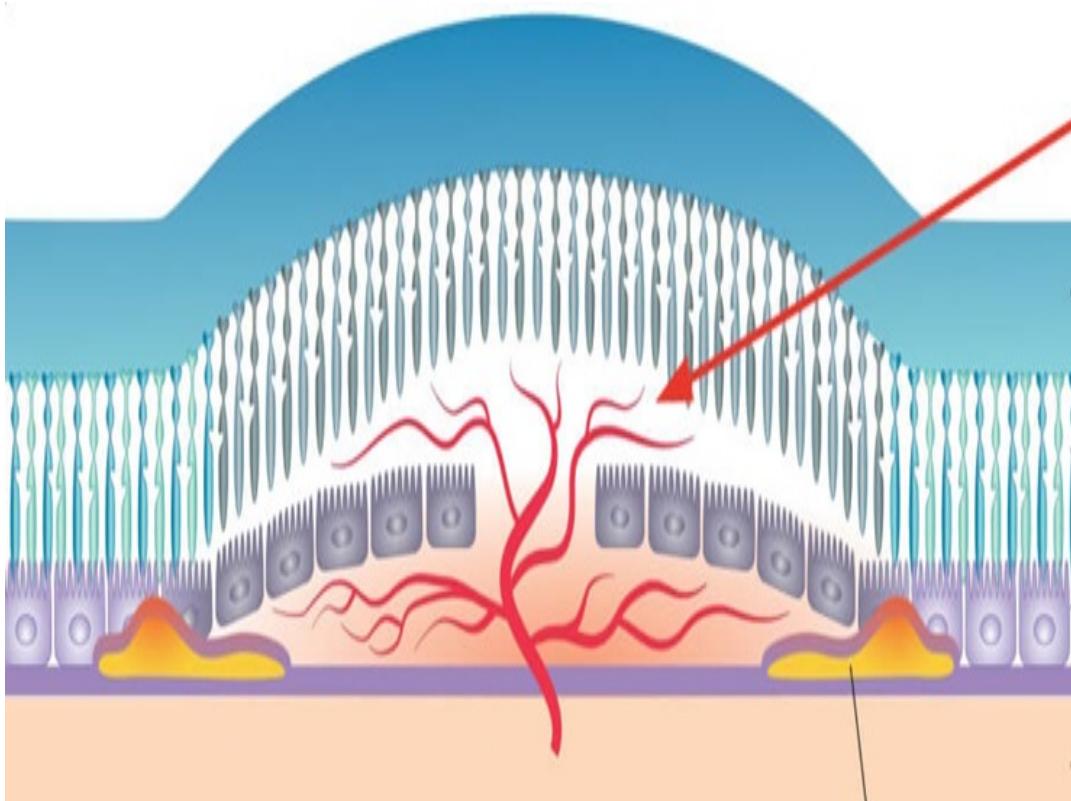
- A. Increased choroidal permeability
- B. Breakdown of blood-retinal barrier
- C. Vitreomacular traction
- D. Retinal ischemia

Correct Answer: B. Breakdown of blood-retinal barrier

Explanation: Correct Answer (B) Cystoid macular edema due to inner blood retinal barrier Flower petal appearance is due to outer plexiform layer Seen in diabetic retinopathy Retinal vein occlusion Post cataract surgery Uveitis (intermediate and posterior) Drugs – Niacin. Adrenaline, pilocarpine, prostaglandins

Q48. Which of the following is wrong regarding given picture

- A. Blue arrow indicates deposits under retina
- B. Red arrow indicates retinal new vessels
- C. Angiography reveals hyperfluorescence due to leakage of dye
- D. Photodynamic therapy has additive effect when anti-VEGF is given



Correct Answer: B. Red arrow indicates retinal new vessels

Explanation: Correct Answer (B) Choroidal neovascularization describes the growth of new blood vessels that originate from the choroid through a break in the Bruch membrane into the sub-retinal pigment epithelium (sub-RPE) or subretinal space. As new vessels have propensity to leak dye, they are hyperfluorescence

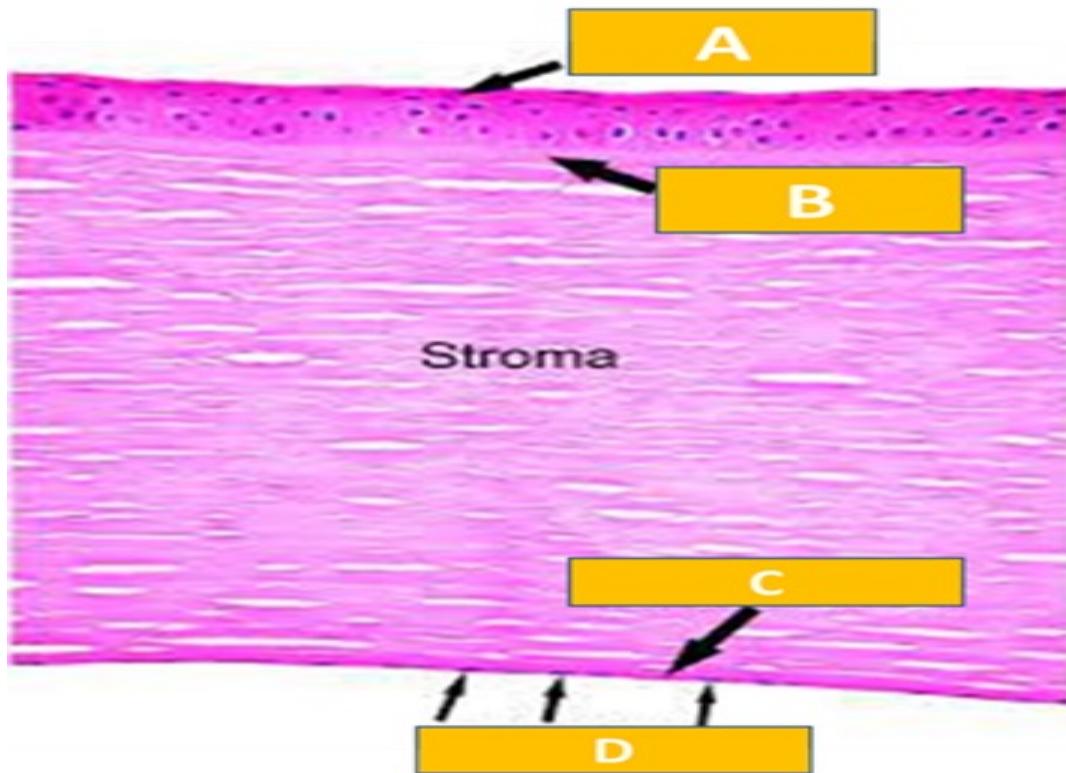
Q49. Which corneal layer is has embryologic origin different from others?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) A: Epithelium, derived from surface ectoderm B: Bowman membrane C: Descemet's membrane D: Endothelium All other corneal layers are derived from neural crest

Q50. A patient with corneal ulcer has copious purulent discharge, rapid stromal necrosis, and greenish infiltrate. He is a contact-lens wearer. Most likely organism?

A. *Staphylococcus aureus*

B. *Streptococcus pneumoniae*

C. *Pseudomonas aeruginosa*

D. *Candida albicans*

Correct Answer: C. *Pseudomonas aeruginosa*

Explanation: Correct Answer (C) Rapid Greenish infiltrate Contact lens All goes in favour of Pseudomonas

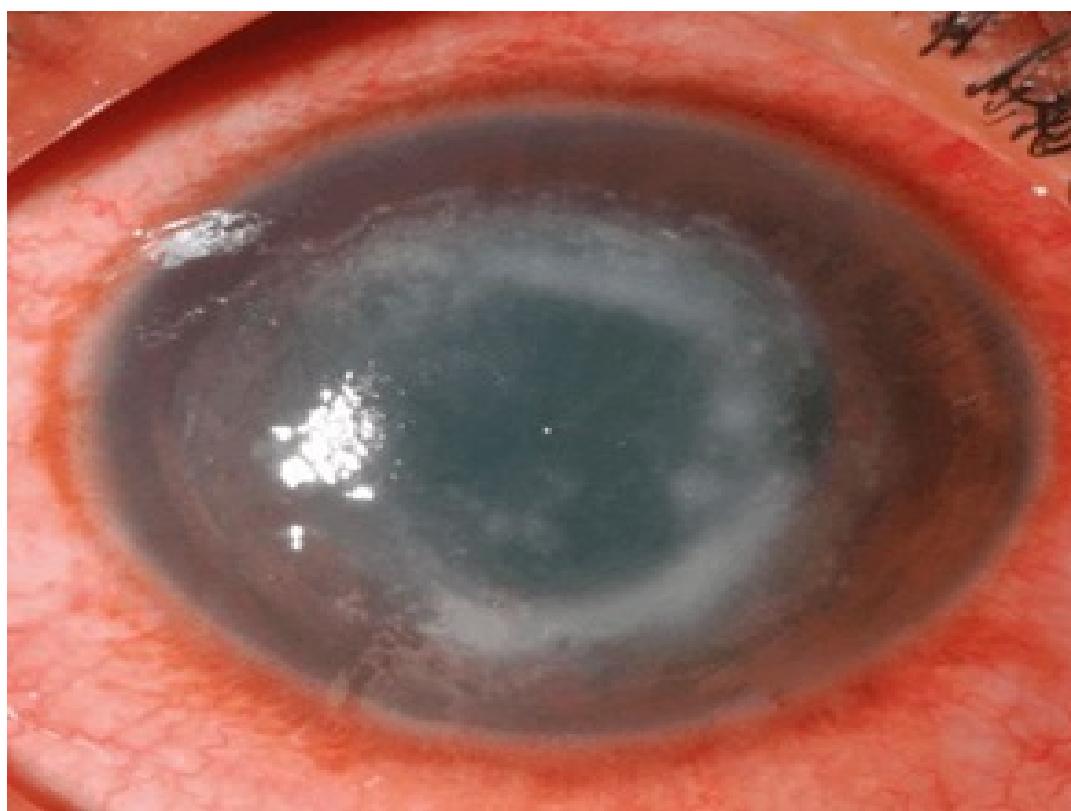
Q51. A patient presented with painful blurred vision with photophobia after wearing contact lens. Slit-lamp picture is given. What is the stain used?

A. Ziehl Neelsen

B. Calcoufor white

C. Gram

D. Gomori Methamine Silver



Correct Answer: B. Calcoufor white

Explanation: Correct Answer (B) Ring infiltrates associate dwith corneal ulcer is most likely Acanthamoeba keratitis Stain used in acridine orange/Calcoufor white Culture is non nutrient E Coli medium

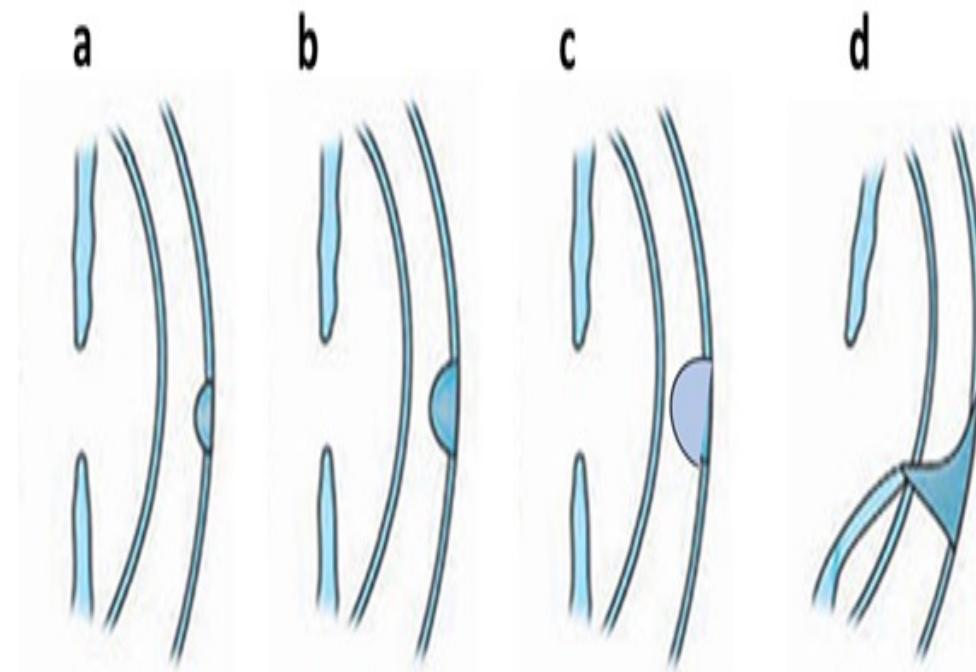
Q52. Through which of the following corneal opacities, the anterior segment details are visible

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) a. Nebula b. Macula- details are faintly visible c. Leukoma-details are not visible d. Adherent leukoma-details are not visible

Q53. A 17-year-old boy presents with progressive blurring of vision in both eyes. He frequently changes spectacles but vision never becomes perfect. On retinoscopy, a scissoring reflex is seen. Slit-lamp shows fine vertical lines in deep stroma. Which investigation is MOST sensitive here?

A. Slit-lamp examination

B. Retinoscopy

C. Keratometry

D. Corneal topography

Correct Answer: D. Corneal topography

Explanation: Correct Answer (D) Keratoconus Corneal topography like PENTACAM/ORBSCAN is investigation of choice

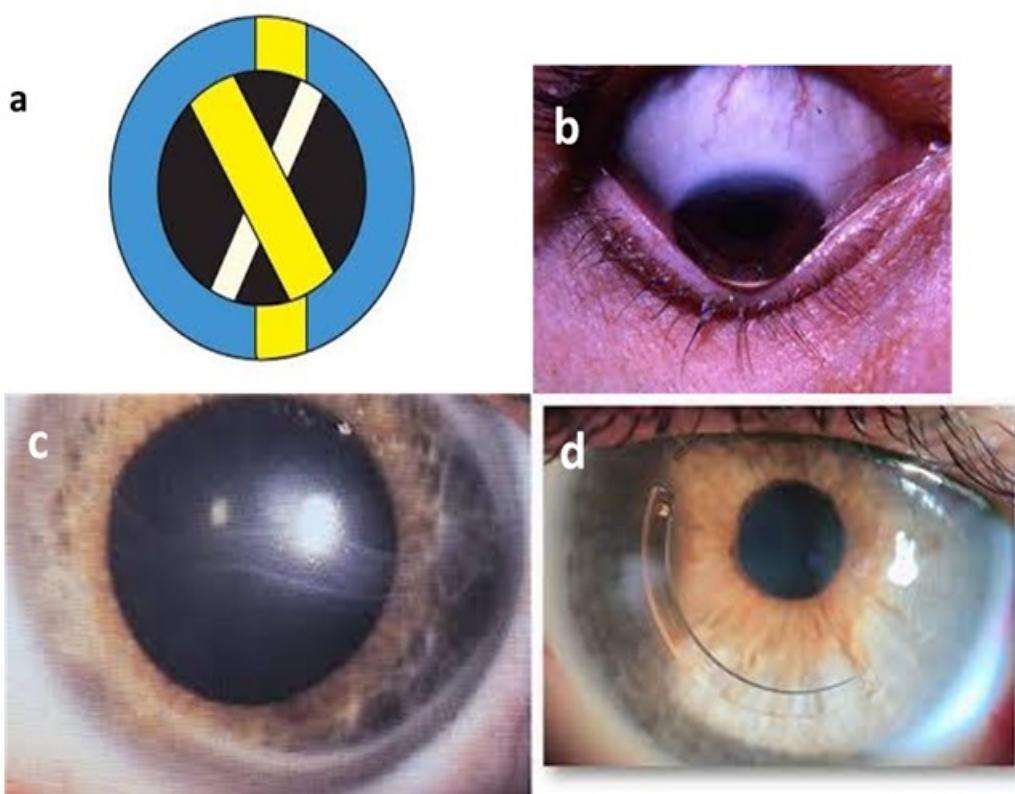
Q54. Which is not seen in a patient of keratoconus

A. A

B. B

C. C

D. D



Correct Answer: C. C

Explanation: Correct Answer (C) A- scissor reflex on retinoscopy B- Munson sign in keratoconus C-Habberton striae in Congenital glaucoma D- INTACS done in keratoconus

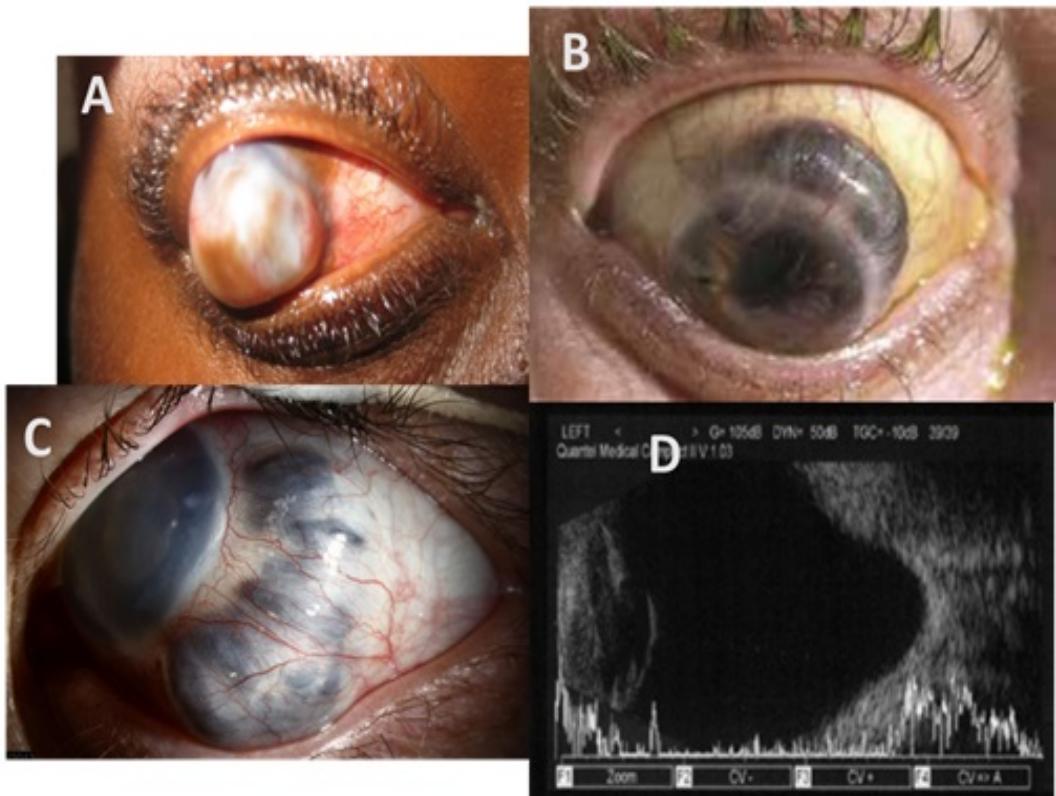
Q55. Which of the following is seen as a complication of corneal ulcer?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) A- Anterior staphyloma B- Intercalary staphyloma C- Ciliary staphyloma D- Posterior staphyloma

Q56. A 10 year old presents with decreased vision. On slit-lamp examination, superotemporal lens dislocation was seen. Posterior staphyloma was seen on Indirect ophthalmoscopy. What is the most likely underlying condition?

A. Homocystinuria

B. High myopia

C. Ehlers-Danlos syndrome

D. Marfan syndrome

Correct Answer: D. Marfan syndrome

Explanation: Correct Answer (D) Pathological myopia is associated with a high myopic of more than 6 D of myopia Superotemporal lens dislocation with myopia goes in favour of Marfans Features include: Lattice is area of retinal thinning Lacquer crack are cracks in Bruch membrane Choroidal new vessels can develop from it Foster Fuch spots: remnant of bleeding Chorioretinal atrophy: tigroid fundus (due to prominent choroid vessels) Posterior staphyloma: Degenerative high axial myopia is a major cause Peripapillary atrophy Tilted disc due to oblique insertion of optic nerve to disc

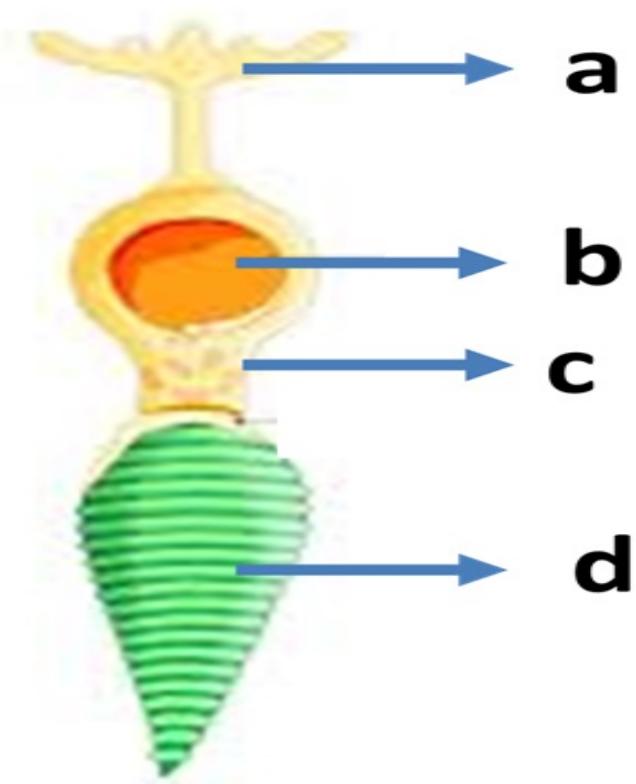
Q57. Mitochondria, Endoplasmic reticulum and Golgi apparatus are present in which of the marked structures?

A. A

B. B

C. C

D. D



Correct Answer: C. C

Explanation: Correct Answer (C) Cone cell is shown a- Outer plexiform b- Outer nuclear layer of cone c- Inner segment d- Outer segment

Q58. After 6 months of uneventful cataract surgery, a patient presented with floaters, followed by curtain falling from above his eyes. Most probable diagnosis?

A. Posterior vitreous detachment

B. Vitreous hemorrhage

C. Rhegmatogenous retinal detachment

D. Central serous retinopathy

Correct Answer: C. Rhegmatogenous retinal detachment

Explanation: Correct Answer (C) The symptoms in a classic case of rhegmatogenous retinal detachment are floaters – flashes – visual field defect followed by vision loss. Liquified vitreous can escape from the retinal break/hole into subretinal space and push the neurosensory retina (concave configuration)

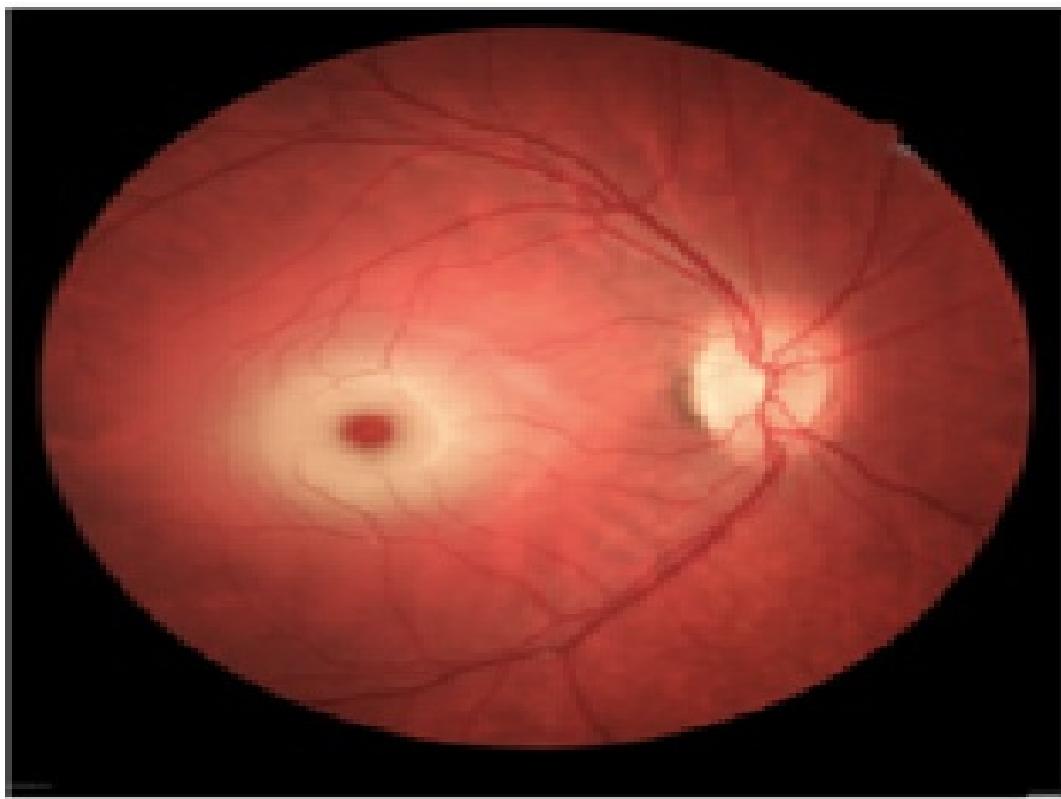
Q59. A patient with sudden painless loss of vision presents within 2 hours. Fundus finding is shown. The pathophysiology in this condition?

A. Hyperemia of macula

B. Retinal hemorrhage

C. Transparency of fovea due to absence of inner retinal layers

D. Increased choroidal blood flow



Correct Answer: C. Transparency of fovea due to absence of inner retinal layers

Explanation: Correct Answer (C) Cherry red spot Transparency of fovea due to absence of inner retinal layers Cherry red spot has pathology in ganglion layer of retina Different Diagnosis of CHERRY-RED SPOT:
1. CRAO 2. Tay Sachs Ds (no organomegaly) 3. Niemann-pick (with organomegaly) 4. Gangliosidosis – type 1 and 2 5. Sialidosis: (cherry-red spot myoclonus syndrome) 6. Sandoffs 7. Berlins edema

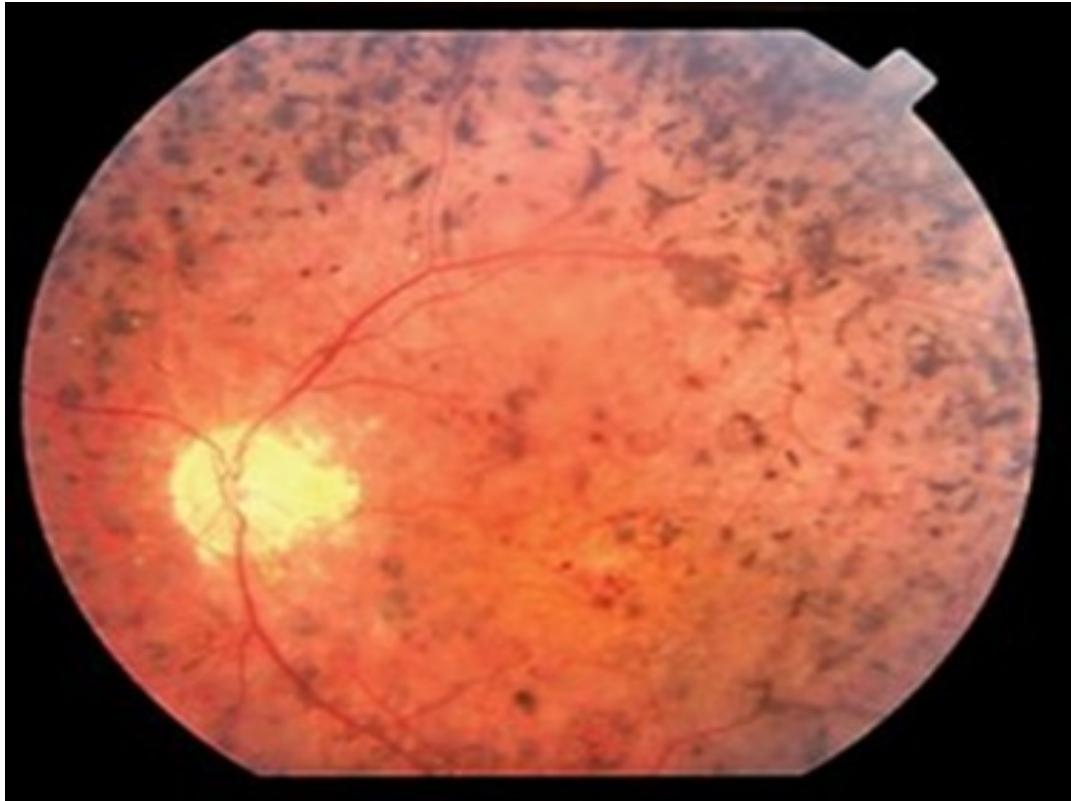
Q60. The earliest and most sensitive investigation to confirm diagnosis is:

A. Electrooculography

B. Optical coherence tomography

C. Electroretinography

D. Visual evoked potential



Correct Answer: C. Electroretinography

Explanation: Correct Answer (C) ERG shows reduced/absent rod response early, even before fundus changes. Bony spicules are characteristic in peripheral retina Classical TRIAD of: • Bone-spicule pigmentation • Arteriolar attenuation • Waxy optic disc pallor Tubular fields is late finding in RP a wave of ERG is represented by rods and cones, which are early affected in RP

Q61. A 45-year-old patient with long-standing Thyroid eye disease presents after 2 years with stable proptosis and persistent diplopia, but no redness or pain. There was difficulty in looking upward and diplopia This patient is most likely in which phase?

A. Acute inflammatory phase

B. Active congestive phase

C. Inactive fibrotic phase

D. Thyrotoxic crisis

Correct Answer: C. Inactive fibrotic phase

Explanation: Correct Answer (C) Stable proptosis without pain/redness rules out active stage

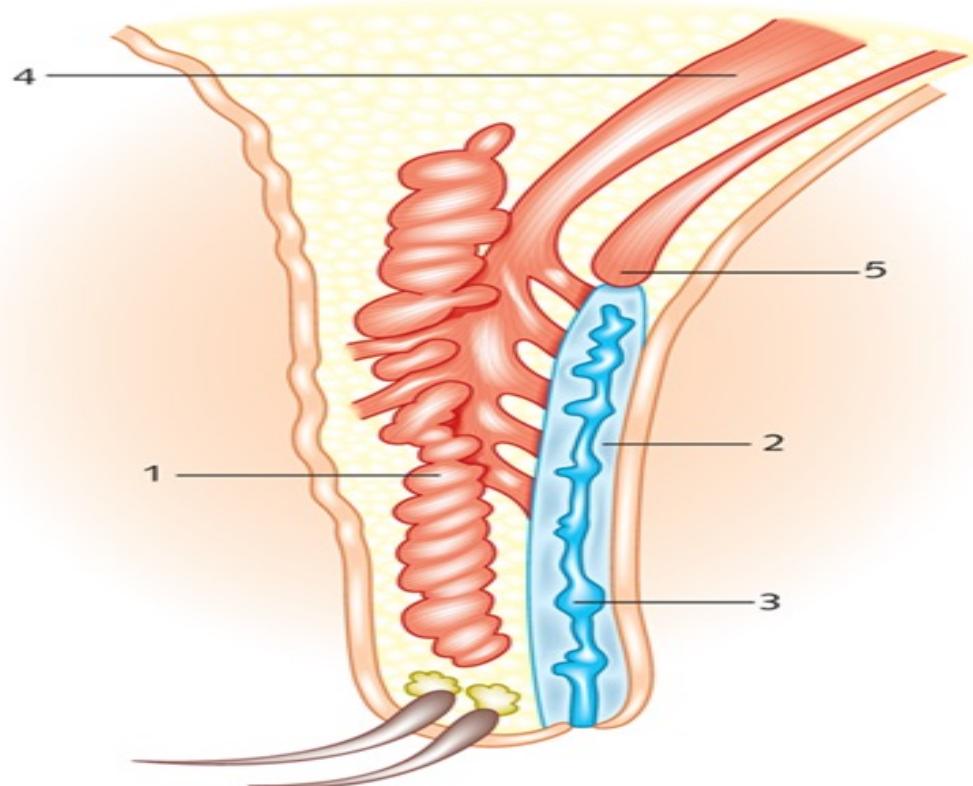
Q62. A 28-year-old woman presents with a painless, slowly enlarging swelling on the upper eyelid for the past 2 months. There is no redness or tenderness. On everting the lid, a firm, localized nodule is seen on the tarsal conjunctiva. Which structure is likely involved?

A. 1

B. 2

C. 3

D. 5



Correct Answer: C. 3

Explanation: Correct Answer (C) Muller muscle is involved in Horner syndrome 1- orbicularis oculi 2- tarsus 3- meibomian gland 4- levator muscle 5- muller muscle

Q63. A patient presents with a painful eyelid swelling with pus pointing at the base of the eyelash. On examination, there were restricted eye movements. Vision was 6/6. what is likely diagnosis?

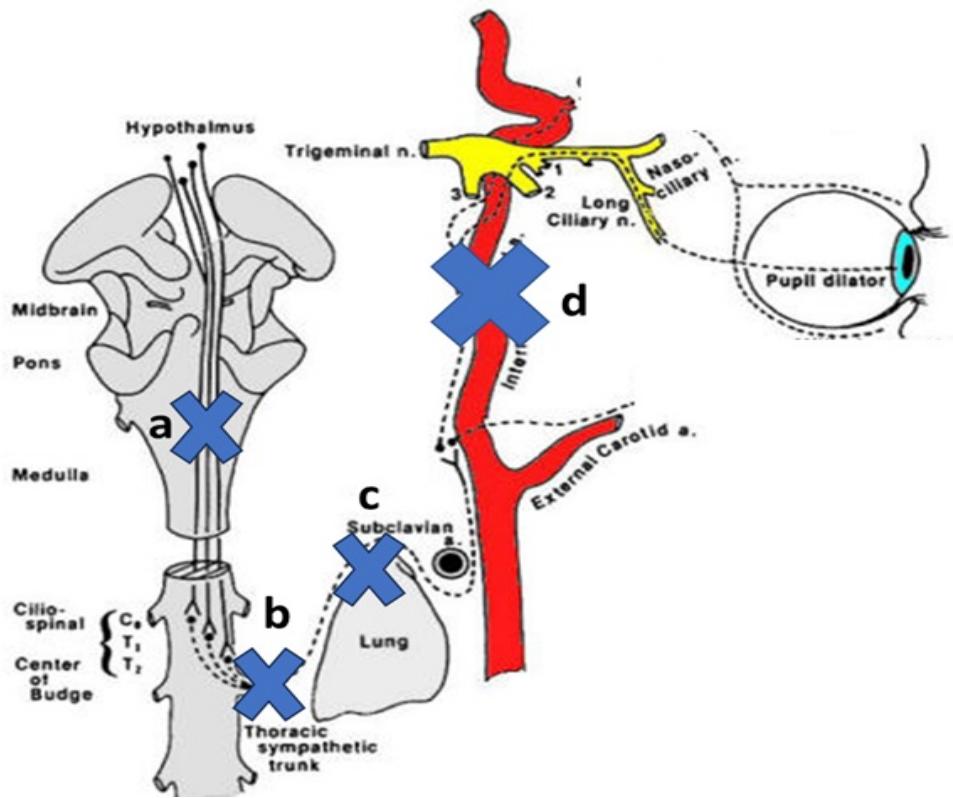
- A. Extrenal hordeolum
- B. Preseptal cellulitis
- C. Orbital celulitis
- D. Cavernous sinus thrombosis

Correct Answer: C. Orbital celulitis

Explanation: Correct Answer (C) Restricted eye movements suggest involvement of orbita It rules out preseptal cellulitis (external hordeolum) No extra information regarding cavernous sinus involvement

Q64. A patient with miosis, ptosis and absence of anhidrosis presented to the clinic. Which structure is most likely compressed in such a scenario?

- A. A
- B. B
- C. C
- D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A- central lesion B,c- pre ganglion lesion C- post ganglion lesion
 Anhydrosis is not a feature of post ganglion Horner syndrome Absence of anhydrosis suggests post ganglion lesion

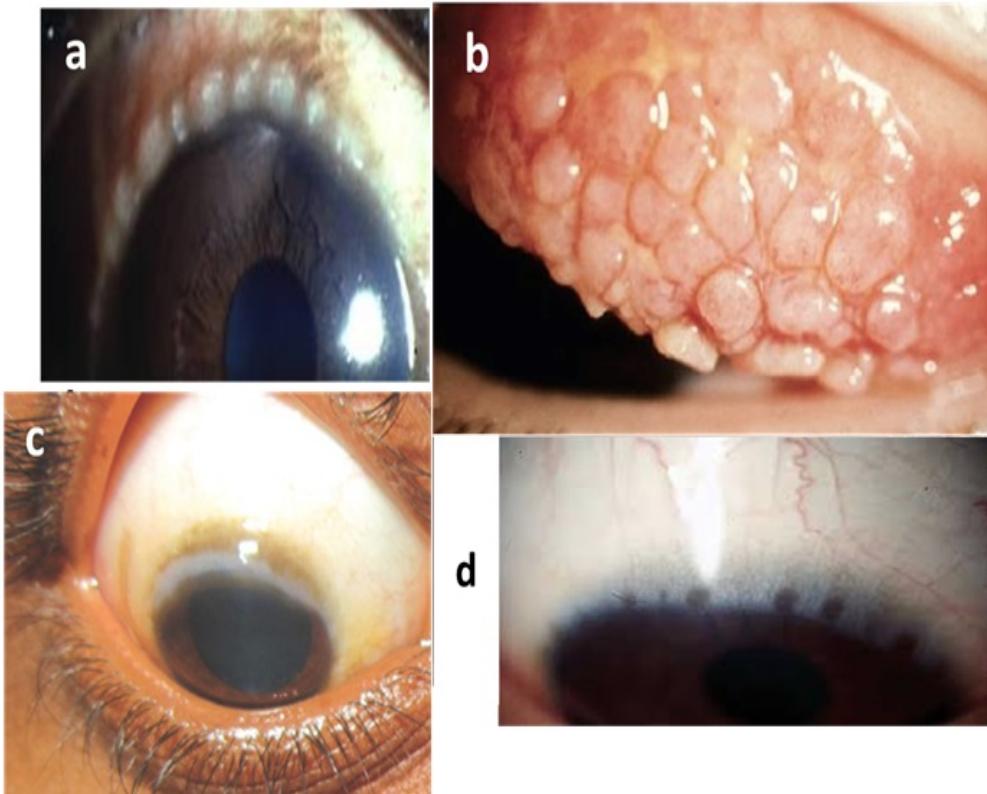
Q65. A 10-year-old boy presents in spring with intense itching, photophobia, and thickropy discharge from both eyes. Which among these is not to be seen in his eyes?

A. A

B. B

C. C

D. D



Correct Answer: D. D

Explanation: Correct Answer (D) Vernal keratoconjunctivitis A- Horner Tranta dots B- papillae in upper palpebral conjunctiva C- Pseudogonatropin D- Herbert pits in Trachoma

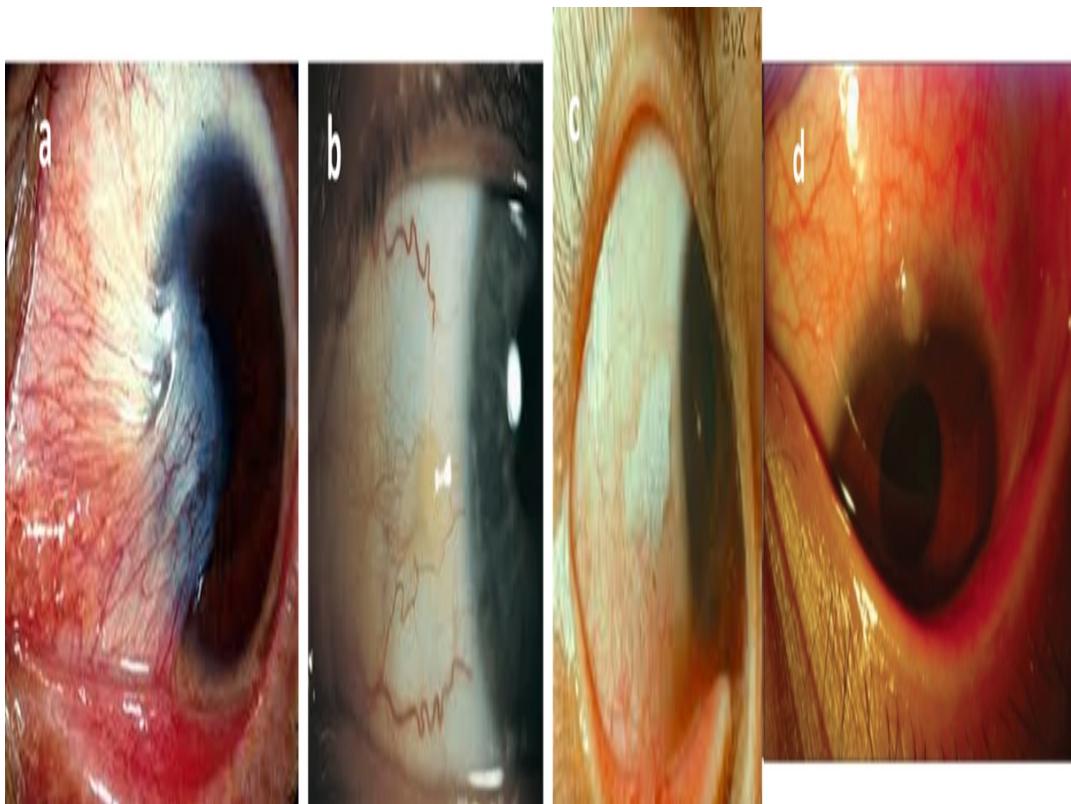
Q66. A laborer was working outdoors since many years. He has complains of progressive increasing growth in eyes which was associated with gradual decrease in vision. On examination, a mass was seen growing on to the cornea. What could be the diagnosis among these?

A. A

B. B

C. C

D. D



Correct Answer: A. A

Explanation: Correct Answer (A) A- pterygium B- pingencula C- Bitot spot D- Phlyctenular conjunctivitis
Pterygium is fibrovascular growth of conjunctiva over cornea. It has a head, neck and body. The head encroaches onto the cornea, invading the Bowman layer. Iron deposition (Stocker line) may be seen in the corneal epithelium anterior to the head of the pterygium. Pterygium induces corneal flattening in its axis (horizontal). Thus, it makes vertical cornea steeper (with the rule astigmatism). Later the growth can cause irregular astigmatism due to irregular corneal surface. Pterygium is progressive when it has vascular growth. Later it becomes pale and atrophic (regressive)

Q67. True for muscles marked are all except:

- A. Muscle 'b' only works in horizontal axis
- B. Origin of 'c' muscle is from the apex of the orbit
- C. Maximum elevation of 'a' muscle is in 23 degree abducted position

D. Maximum depression of 'c' muscle is in 51 degree abducted position

Muscle	Primary	Secondary	Tertiary
Medial rectus	Adduction	-	-
Lateral rectus	Abduction	-	-
Inferior rectus	Depression	Extorsion	Adduction
Superior rectus	Elevation	Intorsion	Adduction
Inferior oblique	Extorsion	Elevation	Abduction
Superior oblique	Intorsion	Depression	Abduction

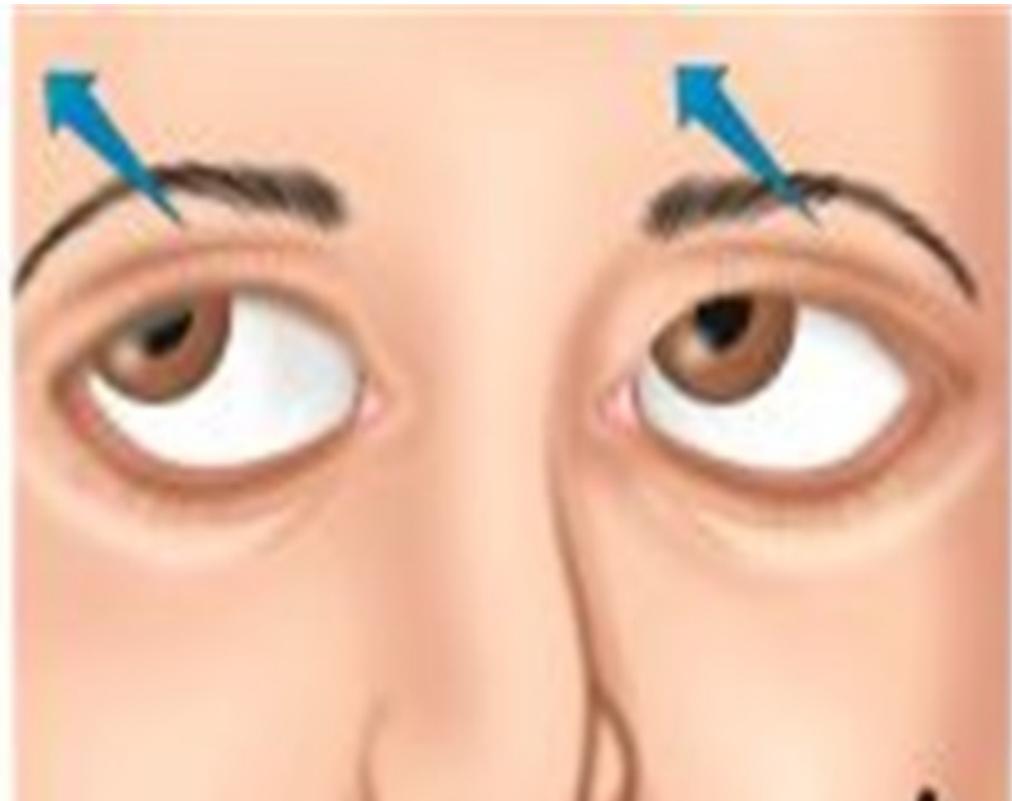
Muscle	Primary	Secondary	Tertiary
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Lateral rectus	Abduction	-	-
Inferior rectus	Depression	Extorsion	Adduction
Superior rectus	Elevation	Intorsion	Adduction
Inferior oblique	Extorsion	Elevation	Abduction
Superior oblique	Intorsion	Depression	Abduction

Correct Answer: D. Maximum depression of 'c' muscle is in 51 degree abducted position

Explanation: Correct Answer (D) A- SR B- LR C- SO When the globe is abducted to 23°, eyeball is aligned to SR and IR. In this position SR has no subsidiary actions and can act only as a elevator. When the globe is adducted to 51°, eyeball is aligned to SO and IO. In this position SO has no subsidiary actions and can act only as a depressor.

Q68. Which is true for the action shown in the figure?

- A. It is a type of version
- B. Herring law applies here
- C. Dextro-elevation is shown here
- D. Right inferior oblique and left superior rectus are working here



Correct Answer: D. Right inferior oblique and left superior rectus are working here

Explanation: Correct Answer (D) Dextro-elevation Yoke muscles are right SR and left IO

Q69. During Hirschberg testing, the corneal light reflex is displaced 2 mm nasally in the left eye compared to the right eye. The approximate angle of deviation is:

A. 10 degrees

B. 15 degrees

C. 30 degrees

D. 45 degrees

Correct Answer: B. 15 degrees

Explanation: Correct Answer (B) 1 mm of decentration of the corneal light reflex from the center of the pupil typically corresponds to approximately 7° to 8° of deviation, which is roughly equivalent to 15 prism diopters (PD)

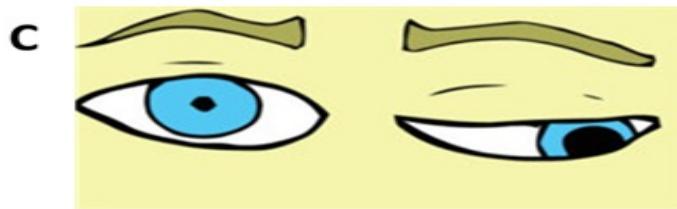
Q70. Nerve palsy is not seen in which of these?

A. A

B. B

C. C

D. D



Correct Answer: D. D

Explanation: Correct Answer (D) A- Left 6th nerve palsy B- Left 4th nerve palsy C- Left 3rd nerve palsy D- Pseudoesotropia (epicanthus/telecanthus)

Q71. A 10-year-old child presents with sudden onset inward deviation of one eye following fever. He complains of horizontal diplopia that increases on looking toward the affected side. Diagnosis?

A. Exotropia

B. Third nerve palsy

C. Sixth nerve palsy

D. Convergence insufficiency

Correct Answer: C. Sixth nerve palsy

Explanation: Correct Answer (C) Inward deviation points towards esotropia Seen in 6th nerve palsy

Q72. For this patient, diplopia was increasing on looking up and right, which muscle is paralysed among the following?

A. Lt. Sup. rectus

B. Lt. inf. oblique

C. Rt. sup. rectus

D. Rt. inf rectus



Correct Answer: C. Rt. sup. rectus

Explanation: Correct Answer (C) Right SR palsy will have right hypotropia, diplopia increasing on looking towards right and up

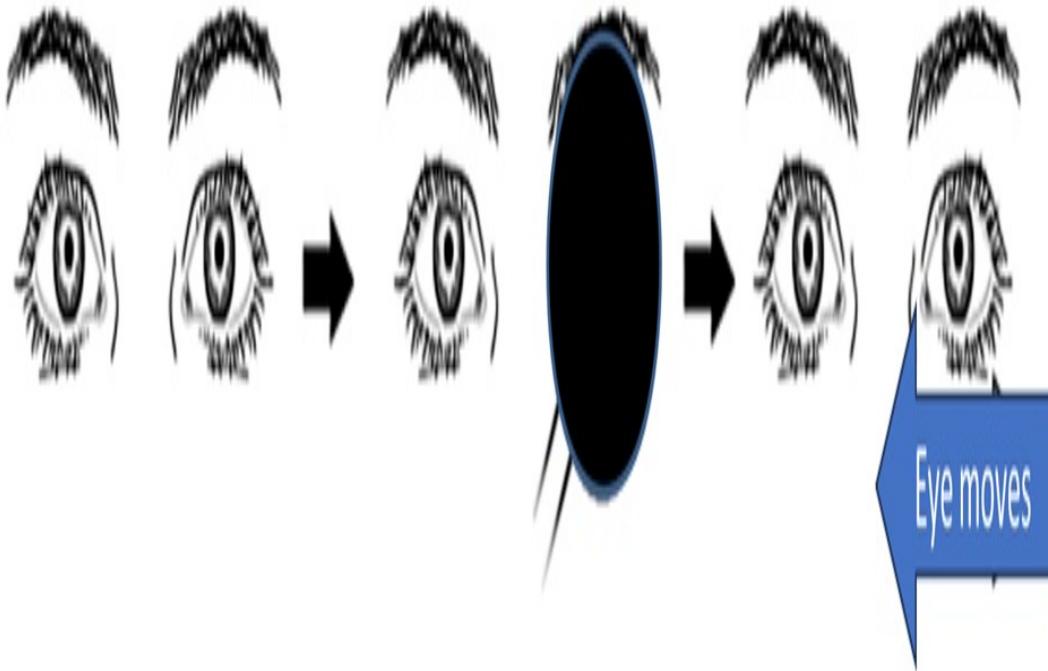
Q73. All of the following are true for the given test except ?

A. The test done is cover un-cover test

B. While doing Hirshberg reflex test, the reflex is seen at center of cornea in both eyes

C. It is a type of comitant squint

D. There is Esophoria described here



Correct Answer: D. There is Esophoria described here

Explanation: Correct Answer (D) On uncovering of left eye, it was seen to move inside – means under cover it was going inside- left exophoria (hidden squint)

Q74. Which component of cover uncover differentiates between comitant and incomitant squints?

A. Covering of fixating eye

B. Uncovering of fixating eye

C. Covering of deviated eye

D. Uncovering of deviated eye

Correct Answer: A. Covering of fixating eye

*Explanation: Correct Answer (A) On covering fixated eye, if other eyes remains in same position- its incomitant
On covering fixated eye, if other eyes takes up fixation-its comitant*

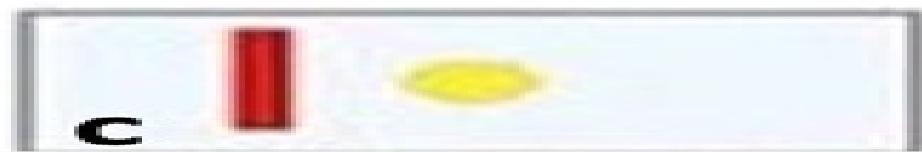
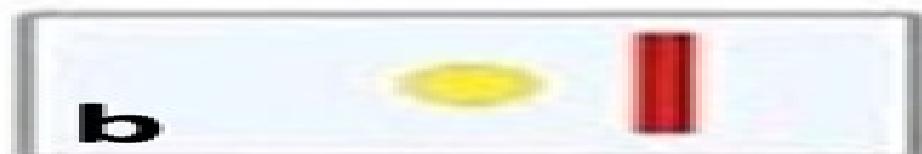
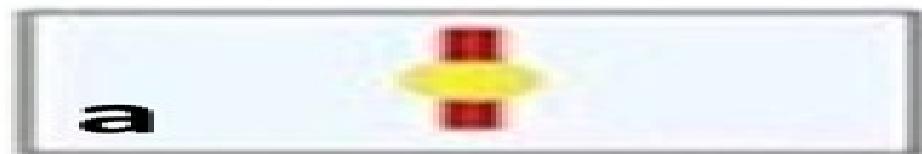
Q75. Which is correct interpretation of an esophoria patient in which Maddox rod is placed in front of right eye with axis horizontal?

A. A

B. B

C. C

D. D



Correct Answer: B. B

Explanation: Correct Answer (B) Maddox rod is placed in front of the right eye. The Maddox rod consists of a series of fused cylindrical red glass rods that convert the appearance of a white spot of light into a red

streak. The optical properties of the rods cause the streak of light to be at an angle of 90° with the long axis of the rods; when the glass rods are held horizontally, the streak will be vertical and vice versa. Right eye will see vertical red line Left eye here will see dot Esophoria patient has uncrossed diplopia
