



Cerebellum
Get the balance right

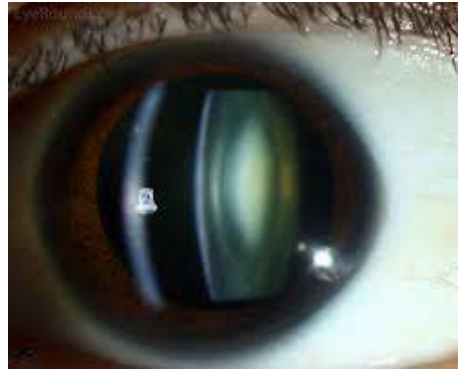
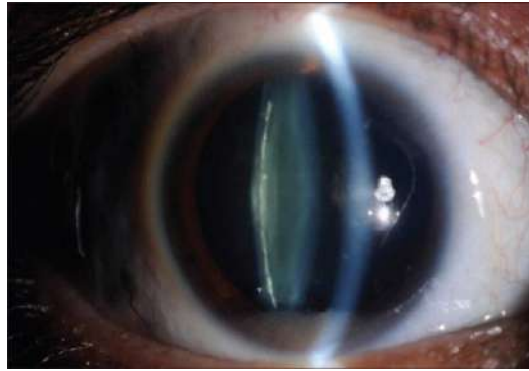
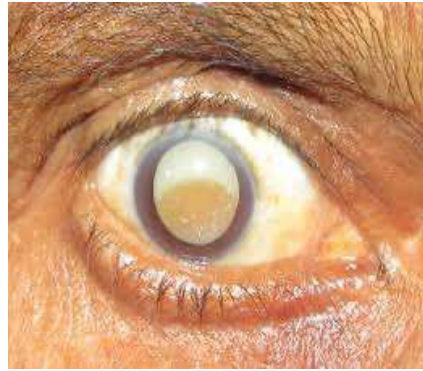
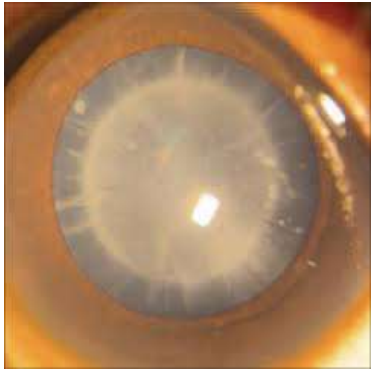
BTR Ophthalmology

08-10-2025

Dr. Zainab Vora

1. A 55-year-old woman has difficulty seeing in bright light and is diagnosed with a cataract. Which cataract type is not typically associated with this symptom?

- A. Nuclear cataract**
- B. Cuneiform cataract**
- C. Posterior subcapsular cataract**
- D. Steroid-induced cataract**



2. The following image is an indication of toxicity due to:

- A. Amiodarone
- B. Digoxin
- C. Chloroquine
- D. Ethambutol



3. A patient recently underwent LASIK surgery for her myopia. She is now complaining of headaches and eye pain. Identify the test being performed on her:

- A. Pachymetry**
- B. Tonometry**
- C. Auto-refractometry**
- D. Slit lamp examination**





4. A 23-year-old male presents with progressive proptosis of his right eye. The proptosis increases on bending forward and is compressible. No thrill or bruit was present. MRI is shown below. The most likely diagnosis is:

- A. Orbital A-V fistula**
- B. Orbital venolymphatic**
- C. Neurofibromatosis**
- D. Orbital encephalocele**



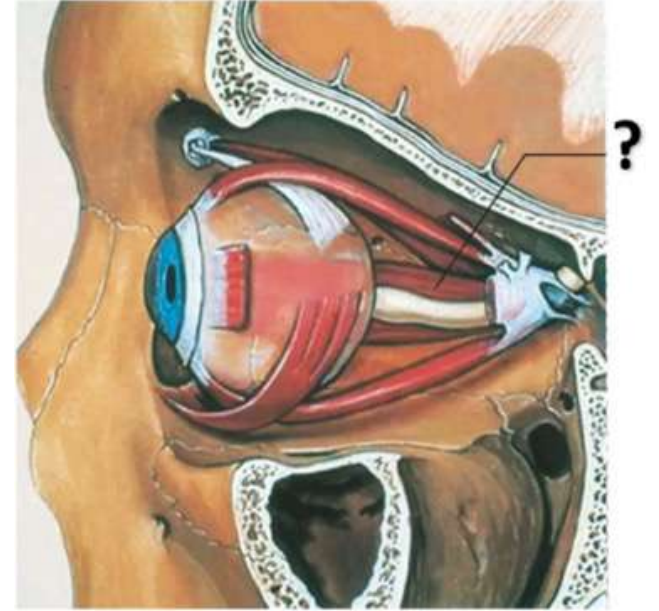
5. Which of the systemic diseases is associated with the following appearance?

- A. Sarcoidosis
- B. Vit A deficiency
- C. TB
- D. JIA



6. Name the location of the nucleus supplying the muscle marked with the question mark in the image given below.

- A. Superior olivary**
- B. Inferior colliculus**
- C. Superior colliculus**
- D. Fascial colliculus**



7. The most common cause of proptosis in middle-aged individuals is:

- A. Cavernous hemangioma**
- B. Orbital varix**
- C. Thyroid eye disease**
- D. Retinoblastoma**

8. Which of the following is not a feature of complicated cataracts?

- A. Krukenberg spindle**
- B. Polychromatic lustre**
- C. Occurs after uveitis**
- D. Breadcrumb appearance**

9. A 62-year-old woman is brought to the emergency department because of acute chest pain. Her blood pressure is 90/60 mm Hg and pulse is 42/min. An ECG reveals ST-segment elevation in the inferior leads. The appropriate therapy is initiated, including a medication to treat her bradycardia. After initial treatment, her blood pressure is 120/70 mm Hg and pulse is 76/min. However, she now complains of severe right-sided eye pain. Which of the following is the most likely cause for this patient's eye pain?

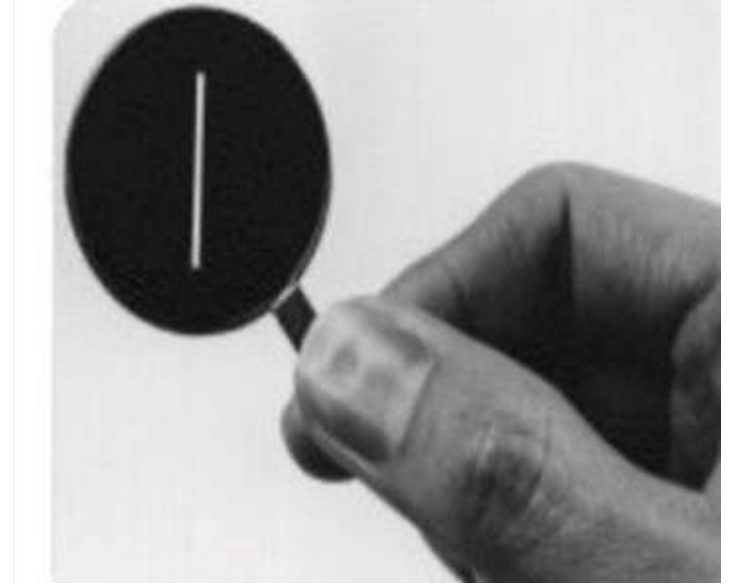
- A. Iridocyclitis**
- B. Retinal artery thrombosis**
- C. Acute conjunctivitis**
- D. Glaucoma**

10. A patient came to the ophthalmology OPD with corneal abrasion, corneal ulcer, corneal perforation and foreign body. Which of the following will not cause hypotonic maculopathy in this patient?

- A. Suprachoroidal hemorrhage**
- B. Cyclodialysis of uvea**
- C. Corneal perforation**
- D. Filtration site leak**

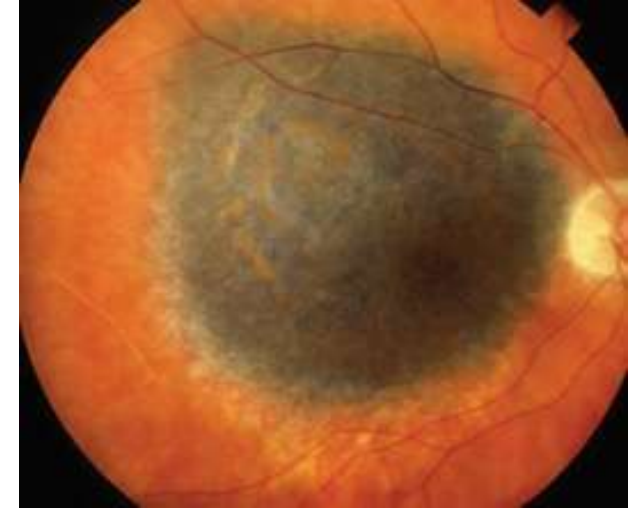
11. The following device is used for all of the following indications except:

- A. Fincham test**
- B. Find out axis of astigmatism**
- C. Corneal tattooing**
- D. Optical iridectomy**



12. A patient presented with painless decrease in vision and metamorphopsia. Fundus examination revealed the lesion shown in the image. What is the expected finding on ultrasonography?

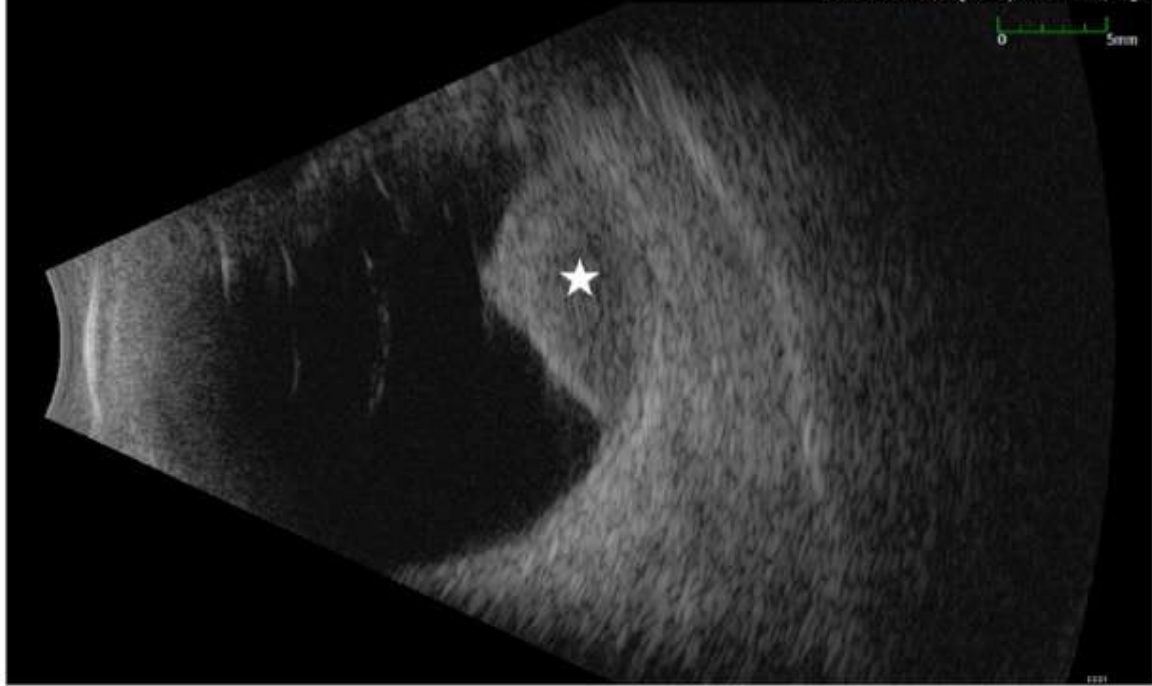
- A. Smoke-stack appearance**
- B. Inkblot appearance**
- C. Collar stud appearance**
- D. Double circulation**



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1560ms LOG [Tx: 0.0dB] [Rx: 90dB] + TGC Probe: Posterior B 10MHz ENH: OFF
Examiner: Harrie, Roger Physician: Harrie, Roger

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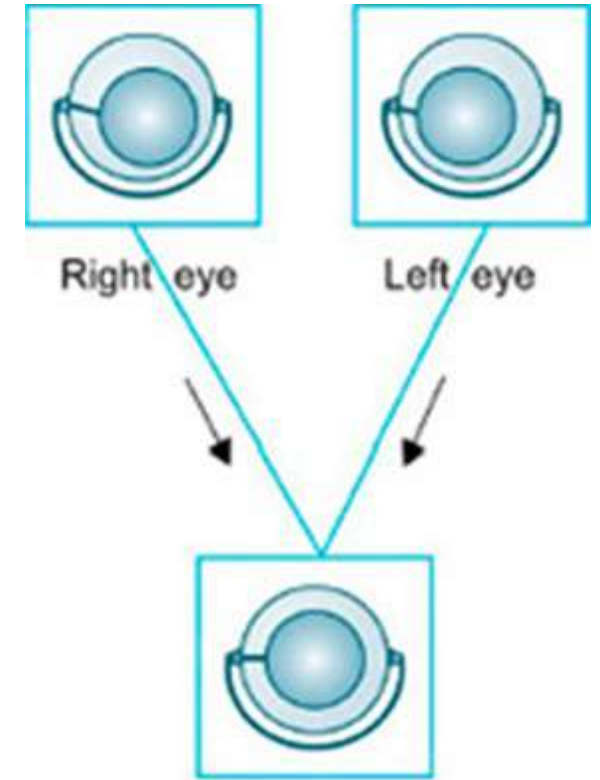
13. All of the following are features of asteroid hyalosis except?

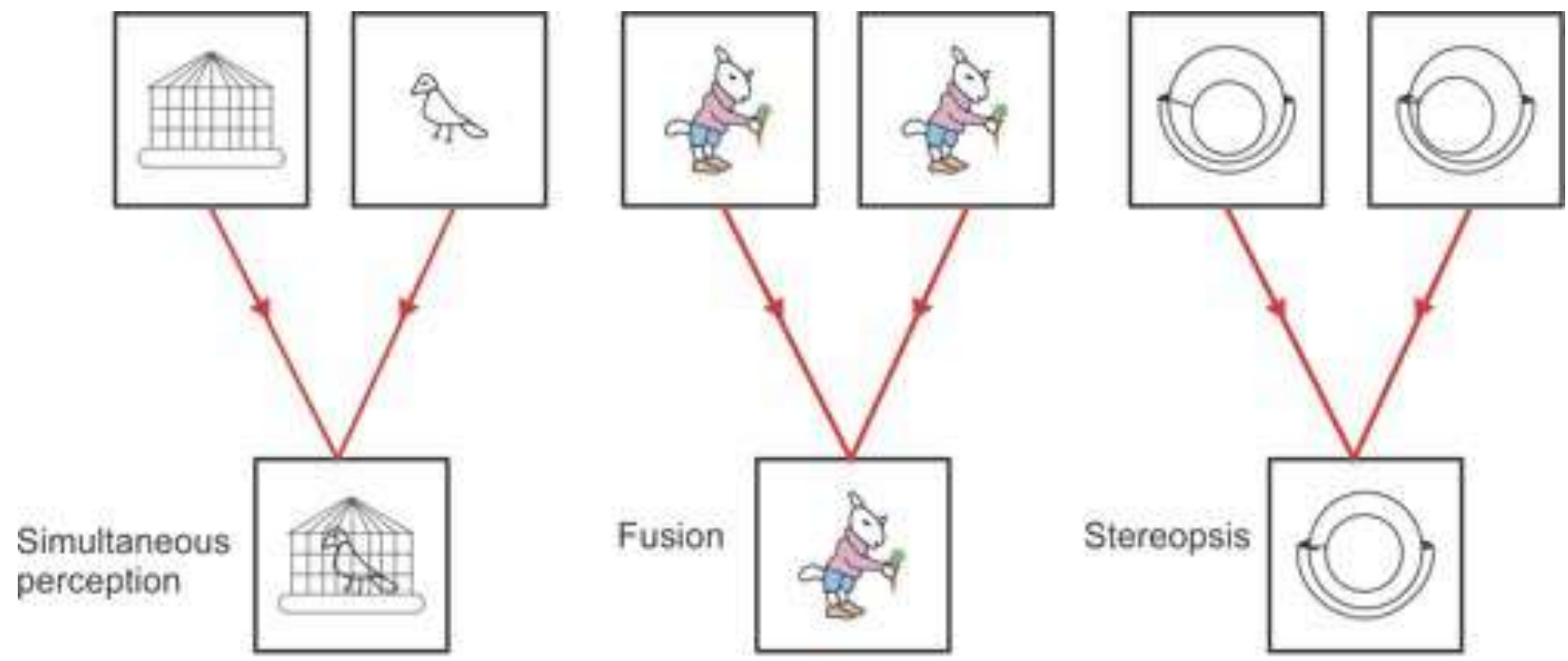
- A. Occurs due to a degenerative process**
- B. Consists of calcium pyrophosphate particles**
- C. Seen as tiny round yellow-white opacities**
- D. Particles sediment inferiorly when the eye is immobile**

Feature	Asteroid Hyalosis	Synchysis Scintillans
Definition	Benign degenerative condition with calcium–lipid (calcium phosphate) deposits suspended in the vitreous	Cholesterol crystals in liquefied vitreous, usually after ocular trauma or hemorrhage
Mobility	Particles <i>suspended in gel</i> , move little with eye movement	Crystals <i>freely mobile</i> and settle inferiorly when the eye is still
Composition	Calcium-lipid (mainly calcium phosphate or calcium soaps)	Cholesterol crystals
Associated with	Aging, diabetes mellitus	Old vitreous hemorrhage, phthisis bulbi, trauma, chronic inflammation
Fundus view	Fundus visible; media not significantly hazy	Fundus often not clearly seen due to severe liquefaction
Treatment	No treatment needed	Treat underlying cause; vitrectomy if severe

14. The binocular vision grade shown in the image corresponds to:

- A. Grade III**
- B. Grade IV**
- C. Grade II**
- D. Grade I**





Simultaneous perception

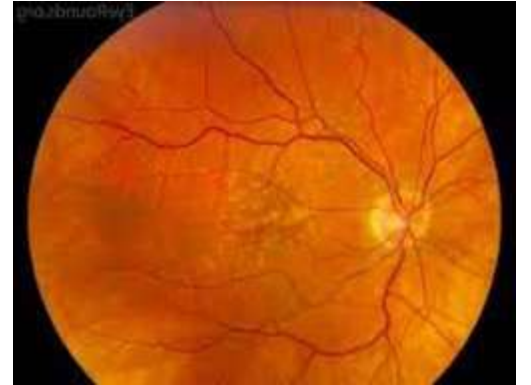
Fusion

Stereopsis

Three grades of binocular vision

15. A 65-year-old male complains of painless bilateral visual difficulty that has progressed over the last year. Fundoscopy is shown. Which of the following would you expect most on visual field examination?

- A. Bitemporal-hemianopsia**
- B. Arcuate scotomas**
- C. Central scotomas**
- D. Macular sparing**



16. All of the following are procedures for involutional ectropion except:

A. Medial conjunctivoplasty

B. Horizontal lid shortening

C. Byron-Smith modified Kuhnt-Szymanowski operation

D. Palpebral sling operation

17. Which of the following is supplied by contralateral nerve nuclei?

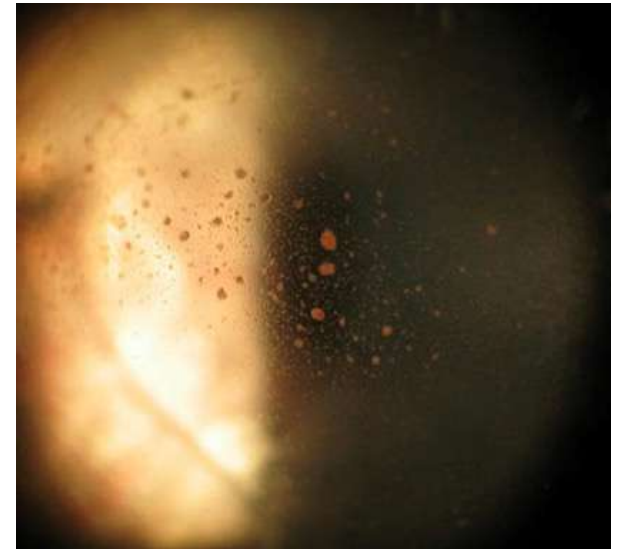
- A. Superior rectus**
- B. Inferior rectus**
- C. Medial rectus**
- D. Inferior oblique**

18. A patient came from a factory with a chemical injury to the eye a few hours back. Which is the first step in the management?

- A. IOP measurement**
- B. Visual acuity**
- C. Copious irrigation of eyes**
- D. Take history**

19. A 47-year-old man presents with a 2-day history of sudden painless visual loss in his right eye. The patient describes the loss of vision as a veil covering the visual field. He is slightly myopic and had a successful cataract extraction with intraocular lens implantation 3 years ago. The examination finding is shown below. What is the most likely diagnosis?

- A. Breaks in Descemet membrane**
- B. Exudative retinal detachment**
- C. Tractional retinal detachment**
- D. Rhegmatogenous retinal detachment**



20. A young child suffering from fever and sore throat began to complain of lacrimation. On examination, follicles were found in the lower palpebral conjunctiva with tender preauricular lymph nodes. The most probable diagnosis is:

- A. Trachoma**
- B. Staphylococcal conjunctivitis**
- C. Adenoviral conjunctivitis**
- D. Phlyctenular conjunctivitis**

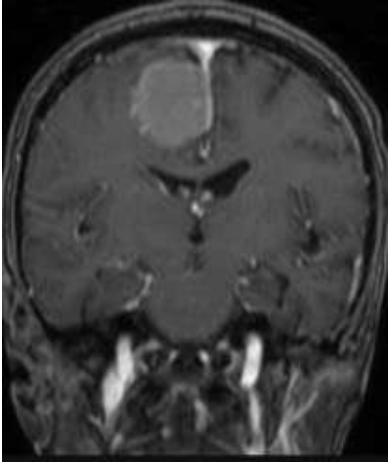
**TABLE 58-2****Diseases associated with various serotypes of adenoviruses**

Disease	Serotypes
Acute respiratory disease	4, 7, 14, 21
Acute febrile pharyngitis	
Endemic	1, 2, 5, 6
Epidemic	3, 4, 7
Pneumonia	1-3, 7
Pharyngoconjunctival fever	3, 4, 7
Acute follicular conjunctivitis	3, 4, 11
Epidemic keratoconjunctivitis	19, 37
Gastroenteritis and diarrhea	40, 41
Intussusception	1, 2, 5
Acute hemorrhagic cystitis	11, 21
Disseminated infection	5, 34, 35, 43-47

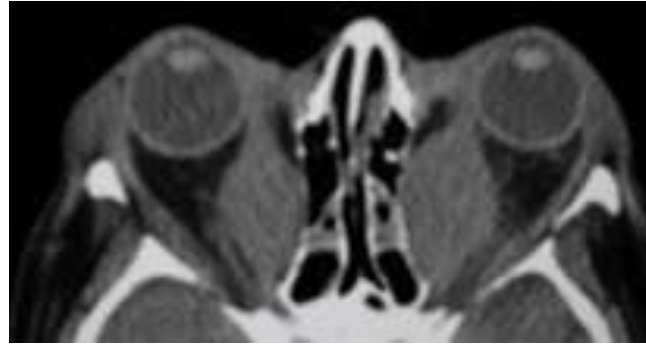
21. What would you expect to see on the instillation of 1% hydroxyamphetamine into both the eyes of a patient with right-sided postganglionic Horner syndrome?

- A. Both pupils dilate**
- B. No change observed in both eyes**
- C. Only left eye dilates**
- D. Only right eye dilates**

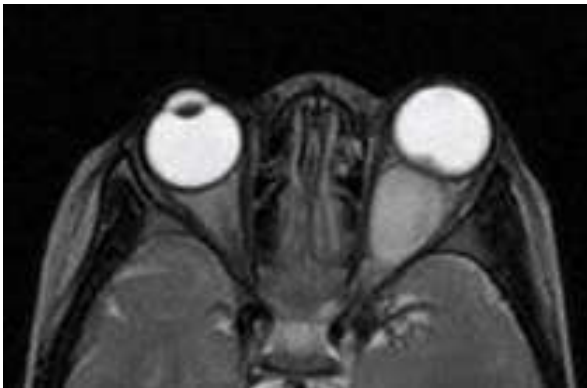
22. Identify the incorrect diagnosis pair:



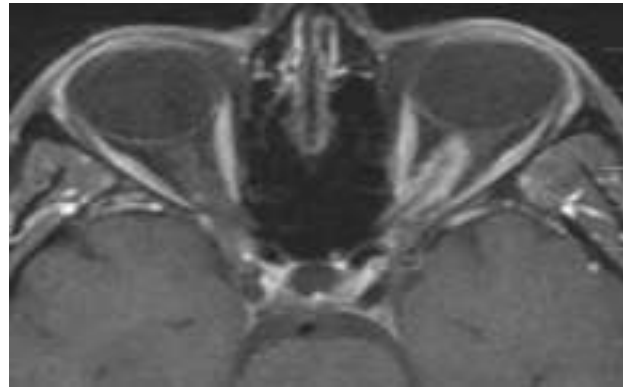
A) Meningioma



B) Orbital pseudotumor



C) Optic nerve glioma



D) Optic nerve meningioma

23. What is the first step in the management of an 18-month-old child with both eyes deviated medially?

- A. Forced ductions test**
- B. Examination under anesthesia**
- C. Refractive error testing**
- D. Examination of fundus**

24. All of the following are used as indicators of a xerophthalmia problem in the community except:

- A. Night blindness prevalence $>1\%$ in 6 months–6 years**
- B. Bitot's spots prevalence $>0.5\%$ in 6 months–6 years**
- C. Corneal ulcer prevalence $>0.1\%$ in 6 months–6 years**
- D. Corneal scar prevalence $>0.05\%$ in 6 months–6 years**

Stage	Features
XN	Night blindness >1% in 6mon-6yrs
X1A	Conjunctival Xerosis
X1B	Bitot's spots >0.5%
X2	Corneal xerosis
X3A	Corneal ulceration affecting < 1/3 of the corneal surface >0.01%
X3B	Corneal ulceration affecting > 1/3 of the corneal surface
XS	Corneal scar >0.05%
XF	Xerophthalmic fundus

25. All of the following organisms can penetrate an intact cornea except:

- A. Haemophilus aegyptius**
- B. Corynebacterium diphtheriae**
- C. Neisseria meningitidis**
- D. Klebsiella pneumoniae**

Organisms that can penetrate intact cornea

- **Haemophilus aegyptius**
- **Listeria**
- **Corynebacterium diphtheriae**
- **Neisseria**
- **Shigella**

26. A 52-year-old man comes to the OPD after his wife noted that his eyes appeared different. Medical history is significant for hypertension and type 2 diabetes mellitus. On physical examination, the right pupil is 3 mm, and the left pupil is 5 mm. When the light in the examination room is dimmed, the anisocoria increases. Which of the following is the most likely location of the lesion?

- A. Left oculomotor nerve**
- B. Left parasympathetic pathway**
- C. Left Optic nerve**
- D. Right sympathetic pathway**

27. A 2-day-old neonate born at 28 weeks of gestation had developed respiratory distress syndrome at birth. You want to screen for retinopathy of prematurity. How many weeks from now would you schedule the screening?

A. 4 weeks

B. 2 weeks

C. 8 weeks

D. 12 weeks

Who to screen:

- Birth weight \leq 2000 g
- Gestational age \leq 34 weeks
- Sick infants (oxygen therapy, sepsis, blood transfusions, etc.)

Stage	Description
Stage 1	Demarcation line between vascular and avascular retina
Stage 2	Elevated ridge at the demarcation line
Stage 3	Ridge with extraretinal fibrovascular proliferation
Stage 4A	Partial retinal detachment not involving the macula
Stage 4B	Partial retinal detachment involving the macula
Stage 5	Total retinal detachment

Plus Disease

- Definition:** Arteriolar tortuosity and venous dilation in posterior pole
- Indicates active, progressive disease
- Can occur with any stage, requires prompt treatment

Condition	Management
No ROP or Stage 1/2 without plus disease	Observation and serial retinal exams
Stage 3 with plus disease (Threshold ROP)	Laser photocoagulation of avascular retina (gold standard)
Zone I or posterior Zone II with plus disease	Intravitreal anti-VEGF agents (e.g., bevacizumab) preferred
Stage 4 or 5	Surgical intervention (e.g., vitrectomy)
APROP	Early anti-VEGF + laser combination therapy

28. A 35-year-old male Anand Jain on slit lamp shows keratic precipitates & aqueous flare in his right eye. No synechiae but a complicated cataract is seen. The probable diagnosis would be:

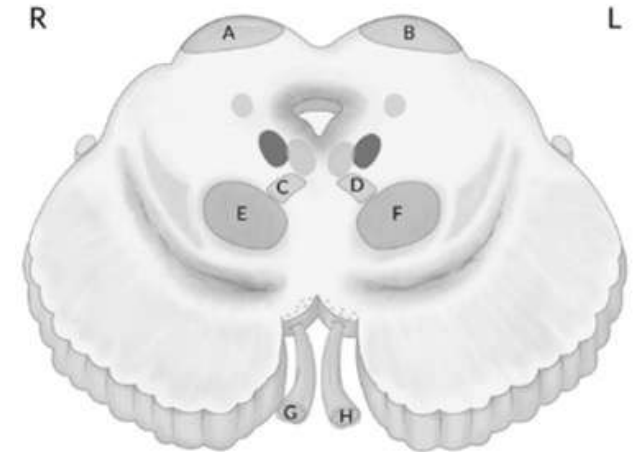
- A. Intermediate uveitis**
- B. Heerfordt's syndrome**
- C. Subacute iridocyclitis**
- D. Heterochromic iridocyclitis of Fuch's**

29. Which of the following statements is false about corneal epithelium?

- A. Bowman's membrane ends peripherally as Schwalbe's ring**
- B. Descemet's membrane regenerates.**
- C. Lined by stratified squamous epithelium.**
- D. Consists of Superficial cells which have microvilli**

30. A 30-year-old woman comes to the physician for the evaluation of a 2-day history of intermittent dizziness and double vision. She reports double vision whenever she looks to the left. Last summer, she had an episode of weakness in her left leg that resolved spontaneously. Ophthalmologic examination shows weak adduction of the right eye on left lateral gaze. Attempted left lateral gaze results in horizontal nystagmus of the left eye. Convergence testing is normal. This patient most likely has a lesion in which of the following labeled areas of the schematic overview of a transverse section of the midbrain?

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



31. A 62-year-old man presents with sudden onset diplopia and horizontal gaze palsy. On examination, he cannot move both eyes to the left, and when attempting to look right, the right eye abducts with nystagmus while the left eye fails to adduct. Vertical eye movements are normal. MRI shows a pontine lesion. Which of the following structures are involved?

- A. Ipsilateral paramedian pontine reticular formation (PPRF) and contralateral medial longitudinal fasciculus (MLF)**
- B. Ipsilateral abducens nucleus and ipsilateral MLF**
- C. Bilateral abducens nuclei**
- D. Contralateral PPRF and ipsilateral MLF**

32. Regarding herpes simplex keratitis, all of the following are true except:

- A. Dendritic ulcer is a typical lesion**
- B. Steroids are contraindicated in epithelial keratitis**
- C. Geographic ulcer is a complication of untreated dendritic ulcer**
- D. Steroids are first-line therapy for necrotising stromal keratitis even with epithelial defect**

33. A newborn child presents with the following finding in the right eye as shown in the image below. The left eye is normal. What is the ideal age to take this patient up for elective surgery?

- A. 2 years
- B. 6 weeks
- C. 20 weeks
- D. 1 year

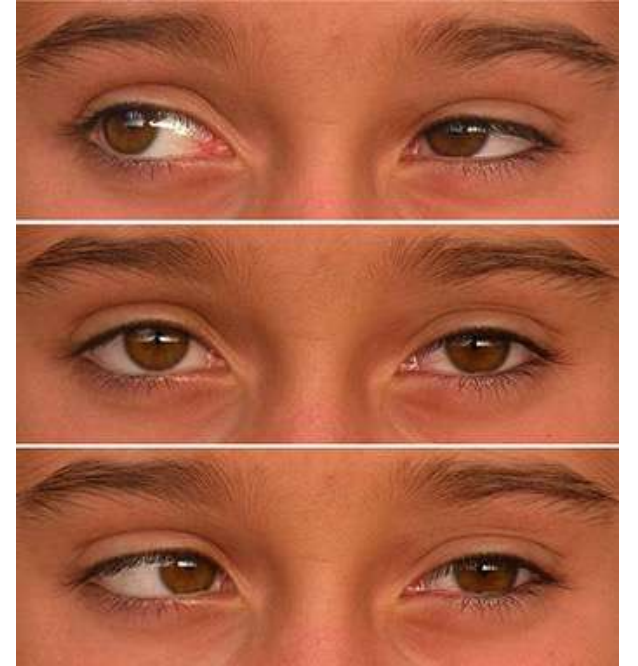


34. A female presents with loss of vision in the right halves of both eyes. Where is the lesion located in the optic pathway?

- A. Left optic tract**
- B. Right optic radiation**
- C. Optic chiasma**
- D. Right optic tract**

35. Identify the syndrome:

- A. Duane's retraction syndrome type 1
- B. Duane's retraction syndrome type 2
- C. Duane's retraction syndrome type 3
- D. Internuclear ophthalmoplegia



36. A 64-year-old woman is brought to the clinic by her husband due to a fall. She was walking in her living room when she tripped over an electrical cord. The patient has had several other ground-level falls in the last 6 months but has had no significant injuries. She also gave up driving a year ago following a near-miss motor vehicle accident. Ophthalmic examination reveals reduced vision in her peripheral visual fields bilaterally and an elevated intraocular pressure. After discussion of treatment options, the patient is initiated on timolol ophthalmic drops. Which of the following structures is the most likely target of this medication?

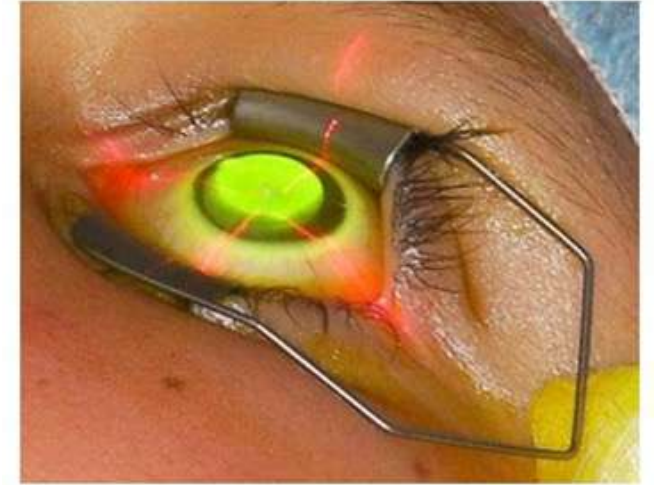
- A. Ciliary epithelium**
- B. Ciliary muscle**
- C. Pupil sphincter**
- D. Trabecular meshwork**

37. A patient presents with endophthalmitis 5 days after cataract surgery. All of the following treatments can be used, except:

- A. Intravitreal antibiotic injection**
- B. Intravenous steroids**
- C. Pars plana vitrectomy**
- D. Topical antibiotics**

38. Identify the disease and procedure being performed:

- A. Cataract-Phacoemulsification
- B. Corneal Ulcer-Fluorescein staining
- C. Keratoconus- C3R
- D. Myopia-Lasik



39. A patient presents with left-sided head tilt which on straightening leads to right hypotropia. This increases on dextroversion and right head tilt. Paralysis of which of the following muscles is involved?

- A. Right superior oblique**
- B. Right superior rectus**
- C. Right inferior oblique**
- D. Left inferior oblique**

40. In the following enteroviruses, which cause acute hemorrhagic conjunctivitis?

- 1. Coxsackie A**
- 2. Coxsackie B**
- 3. Polio virus**
- 4. Enterovirus 70**

A. 1, 2, 3, 4

B. 1, 2

C. 1, 4

D. 1, 3

41. A patient presented with unilateral proptosis and bilateral abducent palsy. What is the most probable cause?

- A. Retinoblastoma**
- B. Orbital pseudotumor**
- C. Orbital cellulitis**
- D. Cavernous sinus thrombosis**

42. All of the following are true regarding acquired color vision defects except:

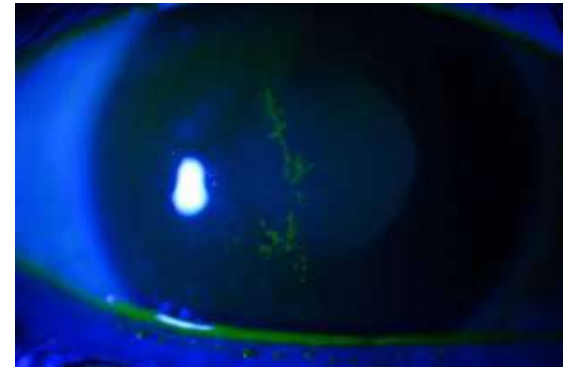
- A. Blue-yellow defects are seen in retinal diseases like CSR and macular edema**
- B. Red-green defects are seen in optic nerve lesions**
- C. Congenital dyschromatopsia is more common in males**
- D. Tritanopia is the most common congenital color vision defect**

43. A patient with 1.5D myopia undergoes streak retinoscopy. The patient is seated one meter from the light source and is asked to fixate on a distant object as the retinoscopy is performed. With respect to the movement of the plane mirror in the retinoscope, the red reflex in the eye exhibits:

- A. Movement with the plane**
- B. Movement against the plane**
- C. No movement**
- D. Oblique movement**

44. An 85-year-old woman comes to the emergency department due to worsening eye pain. Physical examination shows scattered vesicles on the left side of the forehead and nose and on the left upper and lower eyelids. Fluorescein staining is shown below. Which of the following pathogens is most likely responsible for this patient's current condition?

- A. Adenovirus
- B. *Candida albicans*
- C. Herpes simplex virus
- D. Varicella-zoster virus



45. A patient presented with foreign body sensation, redness, and excessive watering from the right eye for 15 days after a twig brushed against his eye. Examination is shown below. Which among the following is the appropriate treatment?

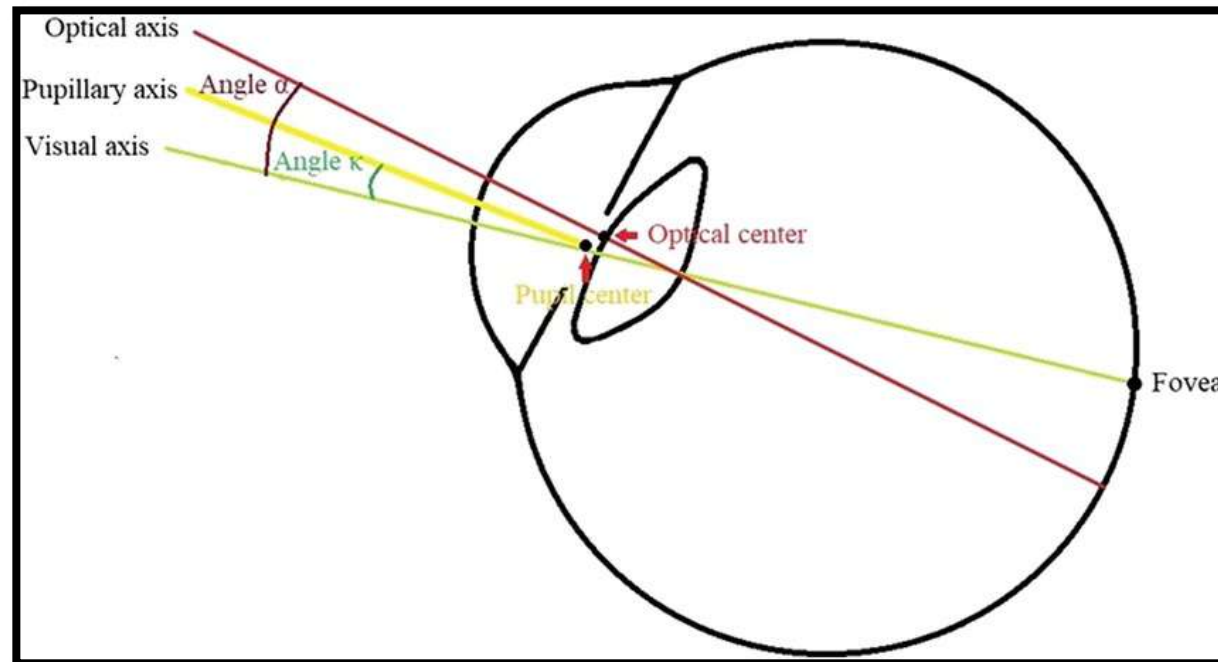
- A. Acyclovir ointment**
- B. Propamidine isethionate**
- C. Hydrocortisone ointment**
- D. Amphotericin B drops**



46. Regarding normal ocular axes and angles, all are correct except:

- A. Anatomical axis connects anterior and posterior poles of the eye**
- B. Visual axis passes from object through nodal point to fovea**
- C. Angle alpha is between pupillary and visual axes**
- D. Angle kappa is between pupillary and visual axes**

- Anatomical axis: Connects the anterior and posterior poles of the eye.
 - Visual axis: Passes from the object of fixation through the nodal points to the fovea.
- Pupillary axis (line perpendicular to cornea passing through the center of the pupil)
- Angle kappa: It is the angle between the pupillary axis and the visual axis
 - Angle alpha: The angle between the anatomical and the visual axis



47. A 45-year-old man presented with lagophthalmos, orbicularis oculi palsy, and loss of corneal sensation. Which of the following is the most likely causative organism?

- A. *Acanthamoeba castellanii***
- B. *Mycobacterium leprae***
- C. *Onchocerca volvulus***
- D. *Chlamydia A to C***

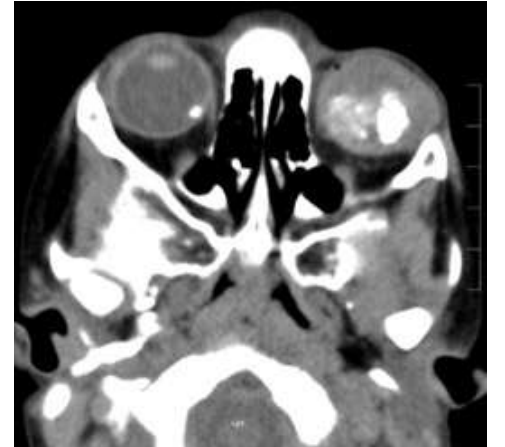
48. A 31-year-old woman comes to the office due to transient visual changes that are characterized by "loss of vision for a minute" and commonly precipitated by bending forward or lifting objects. During the last 3 months, she has had persistent headaches that she attributes to migraines. The patient takes over-the-counter analgesics as needed. Blood pressure is 140/90 mm Hg and pulse is 72/min and regular. BMI is 32.4 kg/m². Funduscopic findings of the left eye are shown in the image below, with similar findings in the right eye. Which of the following is the most likely cause of the observed funduscopic findings in this patient?

- A. Choroidal inflammation
- B. Elevated intracranial pressure
- C. Elevated intraocular pressure
- D. Optic nerve inflammation



49. A 2-year-old child presents with leukocoria in the left eye. The CT is shown below. The most likely mutated gene is on the same chromosome as which of the following genes:

- A. BRCA1**
- B. BRCA2**
- C. NF1**
- D. APC**



50. Which of the following is false:

- A. External hordeolum is an acute inflammation of the Zeis gland**
- B. Meibomian gland is a modified apocrine gland**
- C. Internal hordeolum is an acute suppurative inflammation of meibomian gland**
- D. Chalazion is a chronic granulomatous inflammation of the meibornian gland**

51. Which of these is a true statement?

- 1. Ferry's Line-corneal epithelial iron line at the edge of filtering blebs**
- 2. Stockers Line-Corneal epithelial iron line at the edge of pterygium**
- 3. Hudson-Stahli line- visible all around the base of cone in Keratoconus**
- 4. Fleischer's ring: Horizontal corneal epithelial iron line' at the inferior one third of cornea due to aging**
- 5. Coat's white ring- A form of iron deposit at the level of Bowman's layer of cornea**

A. 1, 2, 3, 4, 5

B. 2, 3, 4, 5

C. 1, 2, 4, 5

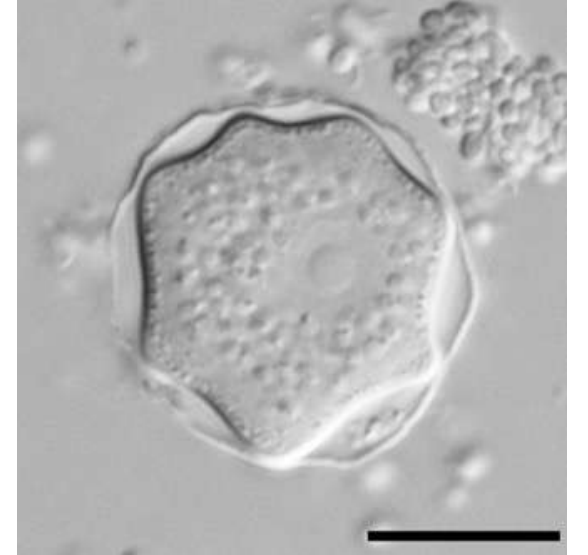
D. 1, 2, 5

52. A 21-year-old woman with a history of Bell's palsy presents with dryness in her left eye. Ocular examination shows mild punctate epithelial defects and corneal dryness. What is the most likely diagnosis?

- A. Exposure keratopathy**
- B. Neurotrophic keratopathy**
- C. Mooren ulcer**
- D. Herpes simplex keratitis**

53. A 21-year-old student presents with ocular redness, foreign body sensation, and excessive tearing, following the use of a contact lens. An interface contrast microscopy from his corneal scraping is shown below. Which of the following is false regarding the treatment of this condition?

- A. Topical Steroids**
- B. Oral NSAIDs**
- C. Topical polyhexamethylene biguanide (PHMB)**
- D. Debridement of epithelium**



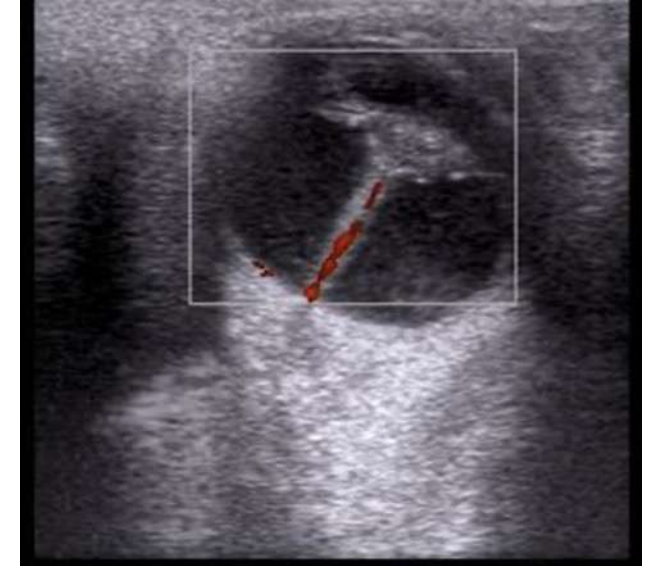
54. A 43-year-old man comes to the emergency department due to painless, progressive visual impairment. The patient was diagnosed with sexually acquired HIV infection 4 years ago. He was previously started on antiretroviral therapy but has been noncompliant with his prescribed medications. Funduscopy reveals the findings seen in the image below. Which of the following medications is the best initial therapy for this patient?

- A. Acyclovir**
- B. Amphotericin B**
- C. Clarithromycin**
- D. Ganciclovir**



55. A neonate with leukocoria and strabismus is found to have following USG finding. With which congenital disorder is this condition most commonly associated?

- A. Down syndrome
- B. Tuberous sclerosis
- C. Patau syndrome
- D. Osteosarcoma



56. A 75-year-old woman attends the emergency department with nausea and vomiting. She says that her right eye is painful and red. Vision is reduced. She is longsighted and wears glasses for near and distance vision. She is generally fit. There is no family history of medical problems. On examination the emergency doctor finds the vision to be reduced to counting fingers in the right eye. The eye is red, the cornea appears cloudy and edematous, and the pupil is oval and dilated on the affected side. No view of the fundus is obtained. What are the immediate and definitive treatment?

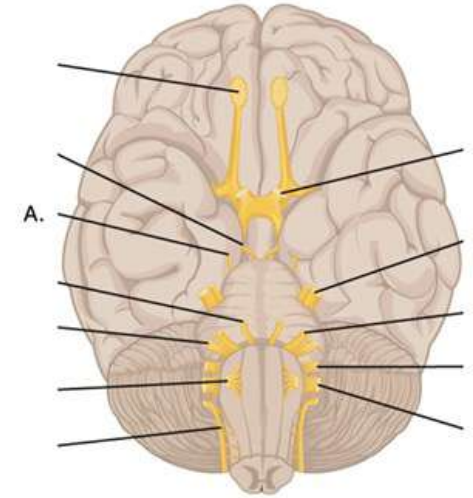
- A. Topical pilocarpine and Nd:YAG 532nm laser capsulotomy**
- B. Intravenous Acetazolamide, and Femtosecond laser Iridotomy**
- C. Intravenous Acetazolamide, and Nd:YAG 1064nm laser Iridotomy**
- D. Topical Beta-Blockers, and Trabeculectomy**

57. A 60-year-old man with a previous history of cataract surgery two weeks back presented with diminution of vision, visual acuity 5/60, anterior chamber cells, vitreous haze with no fundus details visible. What is the diagnosis and the organism causing it?

- A. Toxic anterior segment syndrome; No organism**
- B. Endophthalmitis; Propionibacterium cutis**
- C. Endophthalmitis; Staphylococcus**
- D. Sympathetic ophthalmia; Mucormycosis**

58. What is the action of the muscle supplied by the structure marked A. in the image?

- A. Extorsion, abduction, depression**
- B. Intorsion, adduction, elevation**
- C. Intorsion, abduction, depression**
- D. Extorsion, adduction, elevation**



59. A 34-year-old woman comes to the office due to double vision. The patient first experienced difficulty focusing her eyes while at work yesterday. On awakening this morning, her symptoms had progressed to frank diplopia. A complete physical examination is performed, including a full neurologic assessment. Shining light into the patient's right eye causes constriction of her right pupil, but not the left pupil. Shining light into her left eye causes constriction of only her right pupil. Which of the following additional physical examination findings is likely to be found in this patient?

- A. Absence of the left corneal reflex**
- B. Drooping of the left eyelid**
- C. Inability to close the left eye**
- D. Inward deviation of the left eye**

60. Identify the correct pair:

- A. Vogt triad-Open angle glaucoma
- B. Vogt striae-Congenital bupthalmos
- C. Shield ulcer-Atopic dermatitis
- D. Foster Fuch spots-Myopia

61. Which of the following can occur in a patient with prolactinoma?

- A. Superior quadrantanopia**
- B. Inferior quadrantanopia**
- C. Priapism**
- D. Failure of lactation**

62. Identify the correct statements:

- 1. Microaneurysms appear as hyperfluorescent branching pattern on FFA**
- 2. Hard exudates are found in outer plexiform layer**
- 3. Normal A:V ratio is 3:2 at the fundus**
- 4. IOC for best disease is EOG**

A. 1, 2, 3, 4

B. 2, 4

C. 2, 3, 4

D. 1, 4

63. A neonate was found to have the following finding on routine examination of the eye. All of the following may be differentials except:

- A. Congenital cataract**
- B. PHPV**
- C. Retinopathy of prematurity**
- D. Congenital glaucoma**



64. Amblyopia management includes all except:

- A. Patching**
- B. Video games**
- C. Refractive error correction**
- D. Strabismus surgery**

65. A patient's fundus photograph taken 48 hours after acute episode of pain abdomen is shown below. What is the most likely diagnosis?

- A. Hypertensive retinopathy**
- B. Diabetic retinopathy**
- C. Purtscher's retinopathy**
- D. Central retinal vein occlusion**



66. In optic neuritis, which of the following statements is true?

- 1. 70% patients of multiple sclerosis present with optic neuritis**
- 2. Oral steroids are an appropriate treatment**
- 3. It can have a normal fundus with no disc edema**
- 4. Colour vision and contrast are proportionally affected to vision impairment**

A. 1, 4

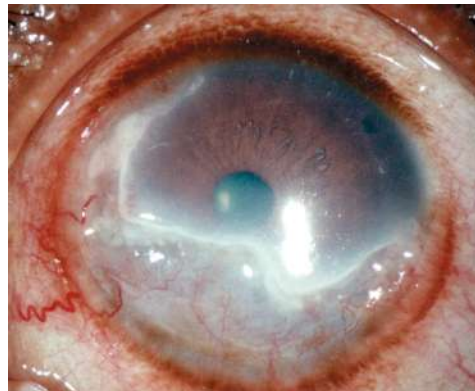
B. 2, 4

C. 1, 3, 4

D. 3 only

67. Which of the following statements correctly describes Mooren's ulcer?

- A. Painless superficial ulcer that may perforate
- B. Associated with autoimmune diseases
- C. Physical findings out of proportion to pain
- D. Serpiginous spread



68. Pseudopapillitis is typically seen in which of the following conditions?

A. Myopia

B. Hypermetropia

C. Aphakia

D. Presbyopia

69. A construction worker has unilateral facial anhidrosis after a back injury. Examination finding is shown below. Which location is the most likely site of lesion?

- A. Grey ramus of T1
- B. Grey ramus of C8
- C. White ramus of T1
- D. White ramus of C8



70. All are true about the oculocardiac reflex except:

- A. Mediated via V1 trigeminal afferent**
- B. Triggered during strabismus surgery**
- C. Most commonly due to inferior rectus stimulation**
- D. Managed by stopping surgical stimulation**

71. All are true about Foster–Kennedy syndrome except:

- A. Ipsilateral optic atrophy**
- B. Often caused by olfactory meningioma**
- C. Can be seen in occipital lobe neoplasms**
- D. Contralateral papilledema**

72. A student with myopia wishes to undergo surgery. Which option is not suitable for correcting her refractive error?

A. SMILE

B. Radial keratotomy

C. Intracorneal ring implantation

D. Conductive keratoplasty

Cornea based procedures	Lens-based procedure
Thermal laser keratoplasty (TLK)	Refractive lens exchange
Hyperopic photorefractive keratotomy	Phakic intraocular lens
Conductive keratoplasty	

Cornea-based procedures	Lens-based procedures
Laser-based:	
• Photorefractive keratectomy (PRK)	Refractive lens exchange
• Laser in-situ keratomileusis (LASIK) (<i>Most common</i>)	Phakic intraocular lens
• Refractive lenticule extraction (ReLEx) or Small incision lenticule extraction (SMILE)	Clear lens extraction
• Intracorneal ring segment (ICRS) implantation	
• Orthokeratology	
• Radial keratotomy (<i>obsolete</i>)	

73. The spectacles shown in the image are not used for the management of which of the following?

- A. Presbyopia**
- B. Aphakia**
- C. Pediatric pseudophakia**
- D. Hypermetropia**



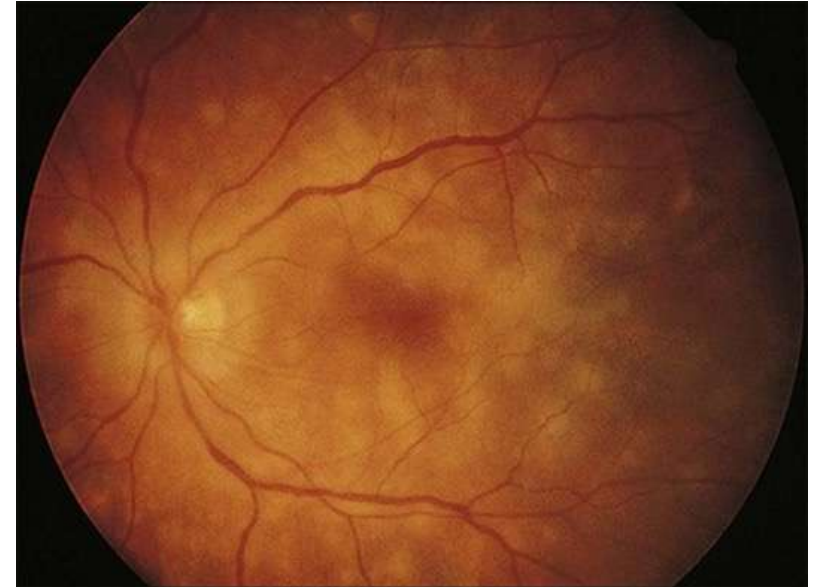
74. A 69-year-old man with hypertension shows silver wiring, papilledema, and arteriovenous nicking on fundoscopy, but no other findings. How should his hypertensive retinopathy be graded?

- A. Grade I retinopathy**
- B. Grade IV retinopathy**
- C. Grade III retinopathy**
- D. Grade II retinopathy**

- Grade 1 Mild arteriolar attenuation, broadening of arteriolar light reflex
- Grade 2 Severe arteriolar constriction associated with deflection of veins at arteriovenous crossings
- Grade 3 Copper wiring of arterioles, banking and tapering of veins, right-angled deflection of veins, haemorrhages, cotton-wool spots, hard exudates
- Grade 4 Changes of grade 3, silver wiring of arterioles, disc swelling

75. A carpenter develops bilateral eye irritation and vision loss after trauma to the right eye. Fundus exam reveals Dalen-Fuchs nodules. Which type of hypersensitivity is involved?

- A. Type 1
- B. Type 2
- C. Type 3
- D. Type 4



Thank You



Cerebellum
Get the balance right

BTR Ophthalmology

08-10-2025

Dr. Zainab Vora

1. A 55-year-old woman has difficulty seeing in bright light and is diagnosed with a cataract. Which cataract type is not typically associated with this symptom?

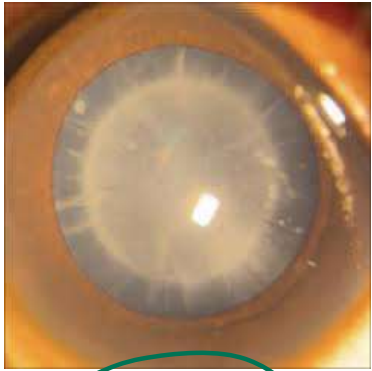
A. Nuclear cataract

B. Cuneiform cataract → night (↑)

C. Posterior subcapsular cataract

D. Steroid-induced cataract

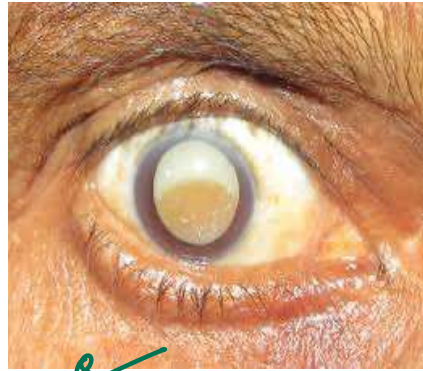




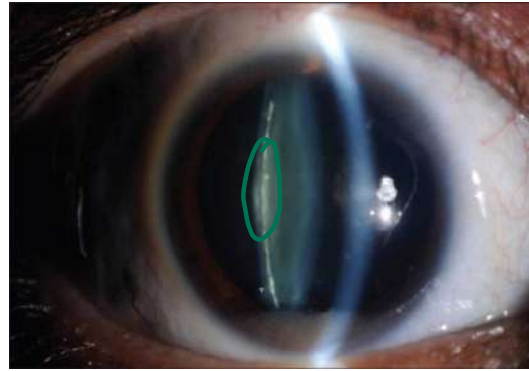
senile form



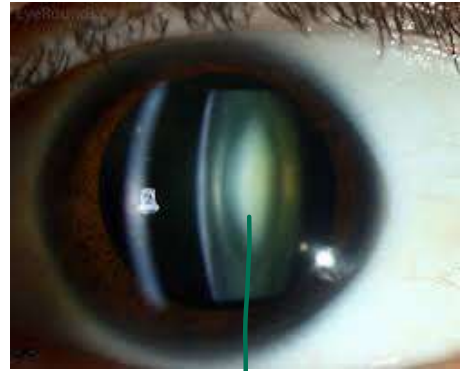
mature



2
Morgagnian
Hypermature



post subcaps
cataract



Nuclear
=
↓
2nd-second
sight phenomenon

2. The following image is an indication of toxicity due to:

A. Amiodarone

corneal

B. Digoxin

C. Chloroquine

D. Ethambutol

GN

TCANT

vortex

Indometacin

Amiodarone

Tamoxifen

-EQ
-Chlorpromazine

Netarsudil

post/subcap cataract
ant

bull's eye maculopathy

stria vascularis

↑Vd max



Van Gogh

3. A patient recently underwent LASIK surgery for her myopia. She is now complaining of headaches and eye pain. Identify the test being performed on her:

A. Pachymetry → thickness

B. Tonometry

C. Auto-refractometry

D. Slit lamp examination





4. A 23-year-old male presents with progressive proptosis of his right eye. The proptosis increases on bending forward and is compressible. No thrill or bruit was present. MRI is shown below. The most likely diagnosis is:

A. Orbital A-V fistula

↑↑ "bruit"

~~B. Orbital venolymphatic~~

malform

C. Neurofibromatosis xx

D. Orbital encephalocele xx

↑ on crying

Valve

Varix

fluid -
fluid
level



5. Which of the systemic diseases is associated with the following appearance?

A. Sarcoidosis

B. Vit A deficiency ~~xx~~

C. TB ~~xx~~

D. JIA ~~xx~~ uveitis

BSK

$\uparrow Ca^{2+}$

phlethneuar
cong
hysn

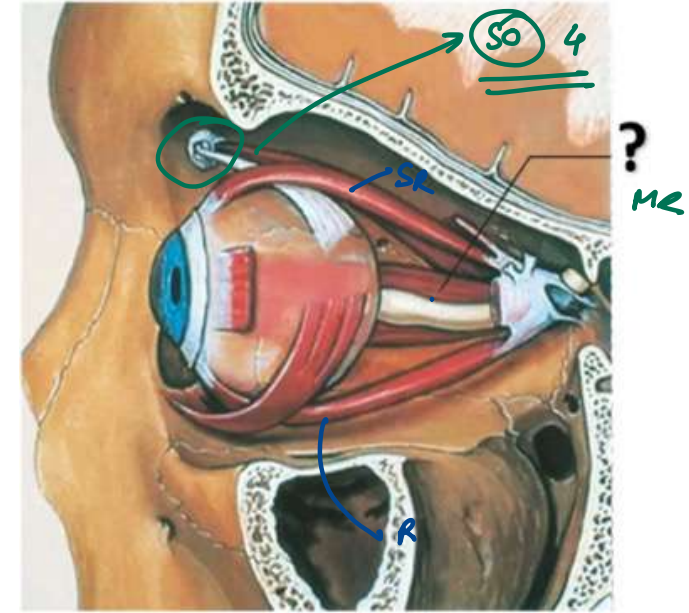
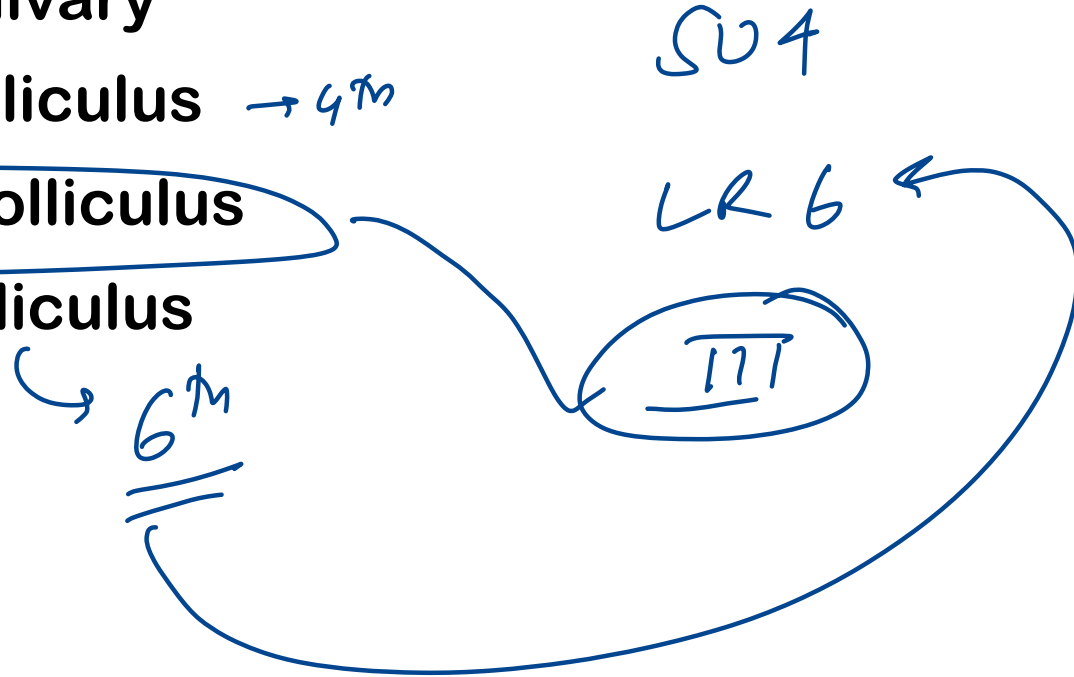
RA

KCS > scleritis
Sjogren's



6. Name the location of the nucleus supplying the muscle marked with the question mark in the image given below.

- A. Superior olivary
- B. Inferior colliculus → 4th
- C. Superior colliculus
- D. Fascial colliculus



7. The most common cause of proptosis in middle-aged individuals is:

- A. Cavernous hemangioma
- B. Orbital varix
- C. Thyroid eye disease
- D. Retinoblastoma

8. Which of the following is not a feature of complicated cataracts?

A. Krukenberg spindle

- pigm glaucoma

pyo .

B. Polychromatic lusture

C. Occurs after uveitis

D. Breadcrumb appearance

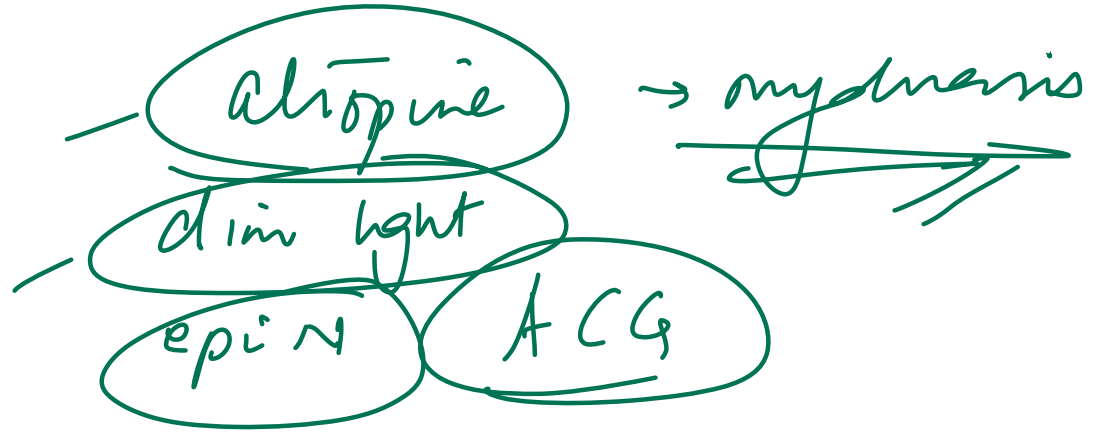
9. A 62-year-old woman is brought to the emergency department because of acute chest pain. Her blood pressure is 90/60 mm Hg and pulse is 42/min. An ECG reveals ST-segment elevation in the inferior leads. The appropriate therapy is initiated, including a medication to treat her bradycardia. After initial treatment, her blood pressure is 120/70 mm Hg and pulse is 76/min. However, she now complains of severe right-sided eye pain. Which of the following is the most likely cause for this patient's eye pain?

- A. Iridocyclitis
- B. Retinal artery thrombosis
- C. Acute conjunctivitis
- D. Glaucoma

trauma

CRAD

painless
sudden
LOV



10. A patient came to the ophthalmology OPD with corneal abrasion, corneal ulcer, corneal perforation and foreign body. Which of the following will not cause hypotonic maculopathy in this patient?

~~A. Suprachoroidal hemorrhage~~

B. Cyclodialysis of uvea

C. Corneal perforation

D. Filtration site leak

Pyo

< 5mm IOP

12. A patient presented with painless decrease in vision and metamorphopsia. Fundus examination revealed the lesion shown in the image. What is the expected finding on ultrasonography?

A. Smoke-stack appearance

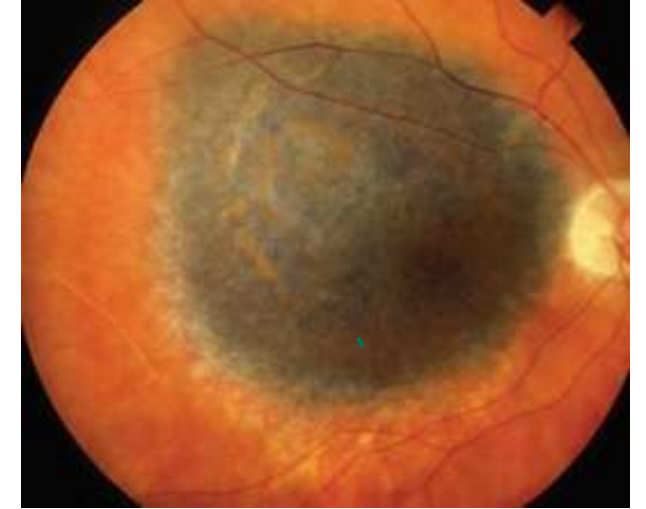
B. Inkblot appearance

C. Collar stud appearance *VSG*

D. Double circulation *FFA*

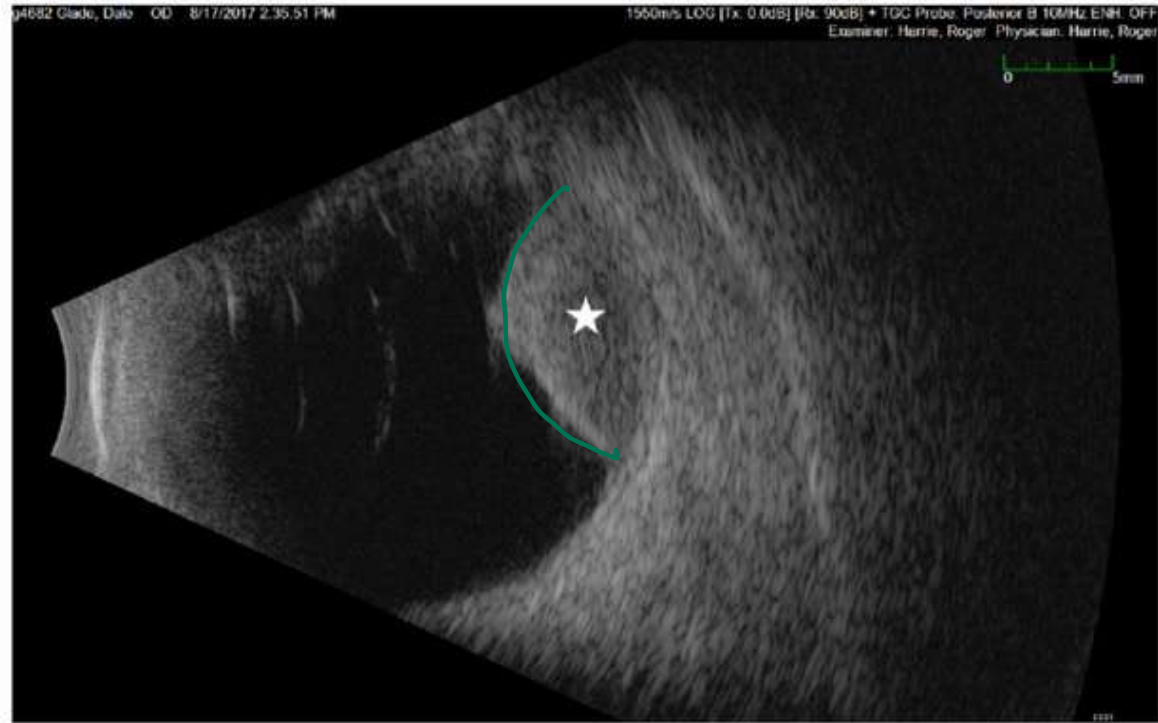
} → CSR

— CRAO
— choroid



Intraocular
adult
mete
|
overall

melanoma
choroidal
|
1°



RB :
+ Ca^{2+}

13. All of the following are features of asteroid hyalosis except?

- A. Occurs due to a degenerative process
- B. Consists of calcium pyrophosphate particles
- C. Seen as tiny round yellow-white opacities
- ~~D. Particles sediment inferiorly when the eye is immobile~~

VH
Cholesterol



Feature	Asteroid Hyalosis	Synchysis Scintillans
Definition	Benign degenerative condition with calcium-lipid (calcium phosphate) deposits suspended in the vitreous	Cholesterol crystals in liquefied vitreous, usually after ocular trauma or hemorrhage
Mobility	Particles <i>suspended in gel</i> , move little with eye movement	Crystals <i>freely mobile</i> and settle inferiorly when the eye is still
Composition	Calcium-lipid (mainly calcium phosphate or calcium soaps)	Cholesterol crystals
Associated with	Aging, diabetes mellitus	Old vitreous hemorrhage, phthisis bulbi, trauma, chronic inflammation
Fundus view	Fundus visible; media not significantly hazy	Fundus often not clearly seen due to severe liquefaction
Treatment	No treatment needed	Treat underlying cause; vitrectomy if severe

x →

↓
affect U A

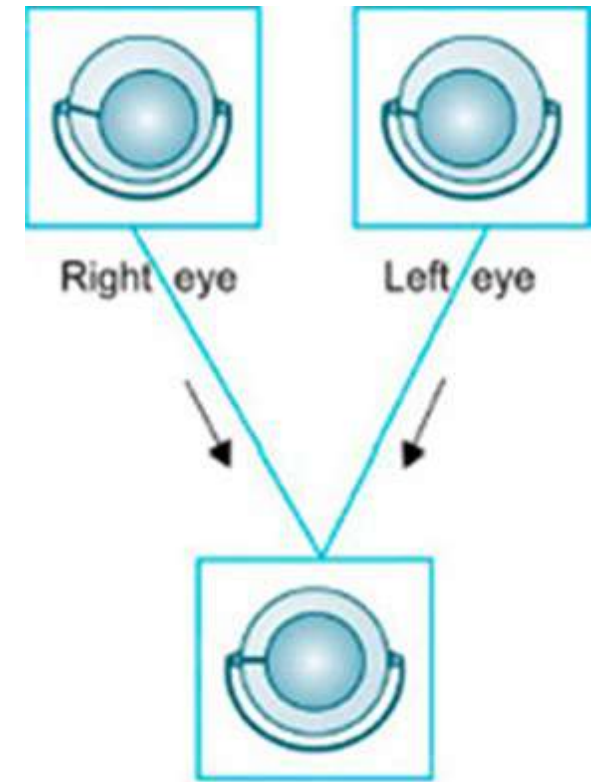
14. The binocular vision grade shown in the image corresponds to:

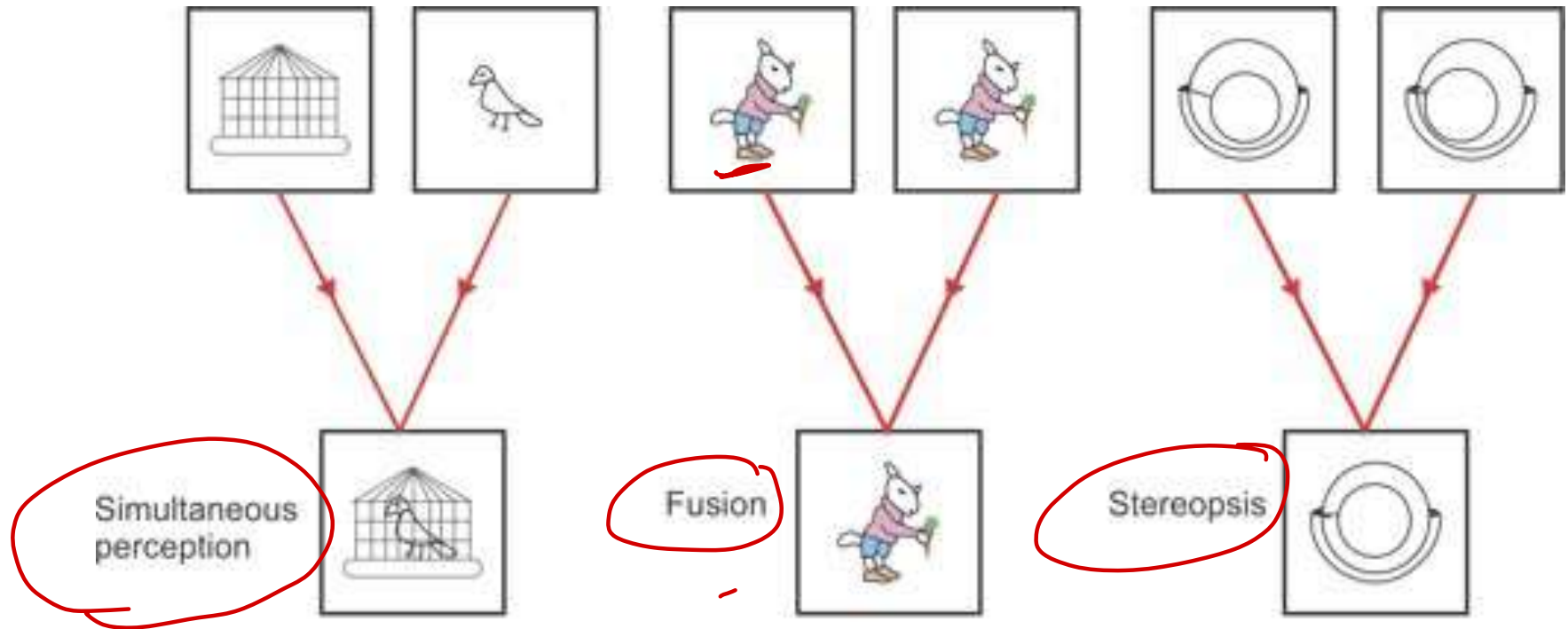
A. Grade III

B. Grade IV ~~xx~~

C. Grade II

D. Grade I





Three grades of binocular vision

15. A 65-year-old male complains of painless bilateral visual difficulty that has progressed over the last year. Fundoscopy is shown. Which of the following would you expect most on visual field examination?

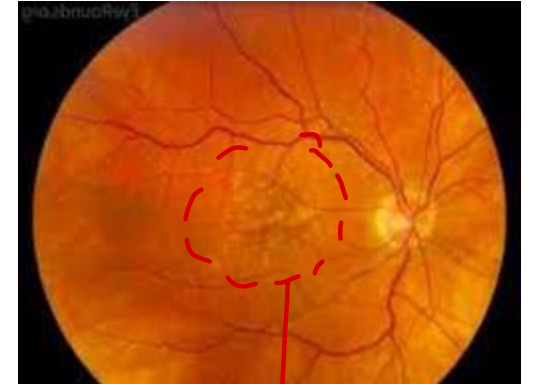
A. Bitemporal-hemianopsia OC

B. Arcuate scotomas // glaucoma

C. Central scotomas

D. Macular sparing XX

ARMD
dry
Drusen



macula

16. All of the following are procedures for involuntary ectropion except:

A. Medial conjunctivoplasty

B. Horizontal lid shortening

C. Byron-Smith modified Kuhnt-Szymanowski operation

D. Palpebral sling operation

- Lagophthalmos

- 7th CN

17. Which of the following is supplied by contralateral nerve nuclei?

- A. Superior rectus
- B. Inferior rectus
- C. Medial rectus
- D. Inferior oblique

III

py8

50

4

18. A patient came from a factory with a chemical injury to the eye a few hours back. Which is the first step in the management?

A. IOP measurement ✗

B. Visual acuity ✗

C. Copious irrigation of eyes water ,

D. Take history xx

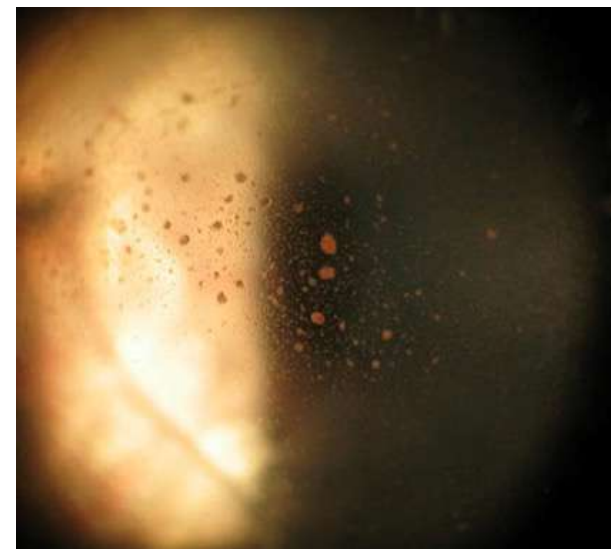
PyQ

19. A 47-year-old man presents with a 2-day history of sudden painless visual loss in his right eye. The patient describes the loss of vision as a veil covering the visual field. He is slightly myopic and had a successful cataract extraction with intraocular lens implantation 3 years ago. The examination finding is shown below. What is the most likely diagnosis?

- A. Breaks in Descemet membrane
- B. Exudative retinal detachment
- C. Tractional retinal detachment
- D. Rhegmatogenous retinal detachment

Haab
Vogt
Kerato
Diabeti

Bupthalmos



Shafer sign

20. A young child suffering from fever and sore throat began to complain of lacrimation. On examination, follicles were found in the lower palpebral conjunctiva with tender preauricular lymph nodes. The most probable diagnosis is:

A. Trachoma

B. Staphylococcal conjunctivitis bact

C. Adenoviral conjunctivitis

D. Phlyctenular conjunctivitis

hyon - TB

type IV

✓



Phlyctenular

TABLE 58-2

Diseases associated with various serotypes of adenoviruses

Disease	Serotypes
Acute respiratory disease	4, 7, 14, 21
Acute febrile pharyngitis	
Endemic	1, 2, 5, 6
Epidemic	3, 4, 7
Pneumonia	1-3, 7
Pharyngoconjunctival fever	3, 4, 7
Acute follicular conjunctivitis	3, 4, 11
Epidemic keratoconjunctivitis	19, 37
Gastroenteritis and diarrhea	40, 41
Intussusception	1, 2, 5
Acute hemorrhagic cystitis	11, 21
Disseminated infection	5, 34, 35, 43-47

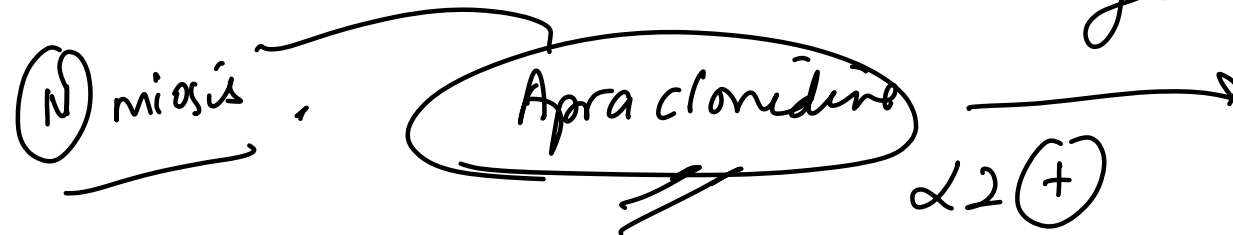
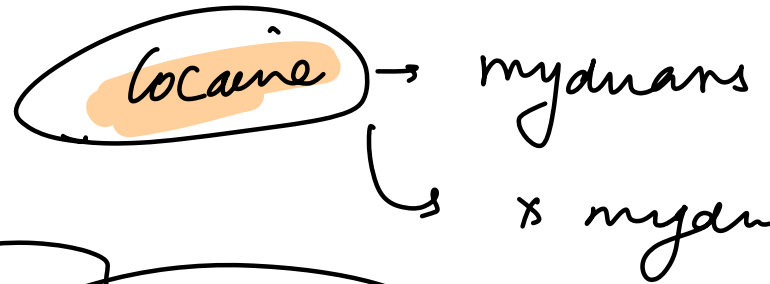
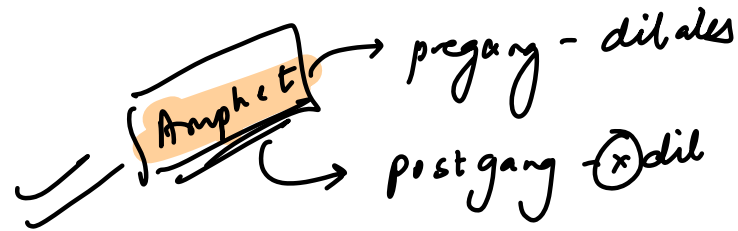
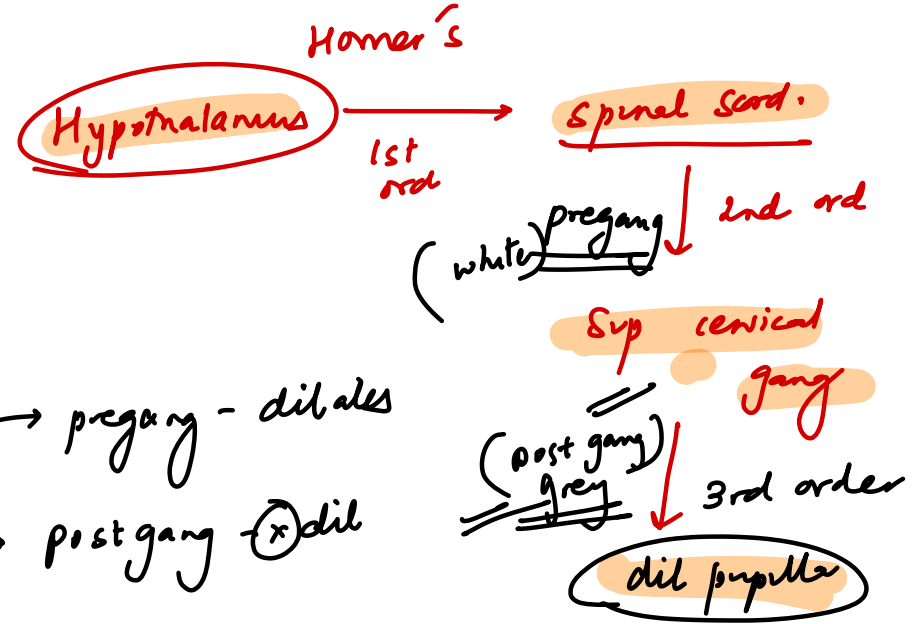
Shigard
8

3+4=7

Hemorrhagic

21. What would you expect to see on the instillation of 1% hydroxyamphetamine into both the eyes of a patient with right-sided postganglionic Horner syndrome?

- A. Both pupils dilate
- B. No change observed in both eyes
- C. Only left eye dilates
- D. Only right eye dilates



confirm Horner

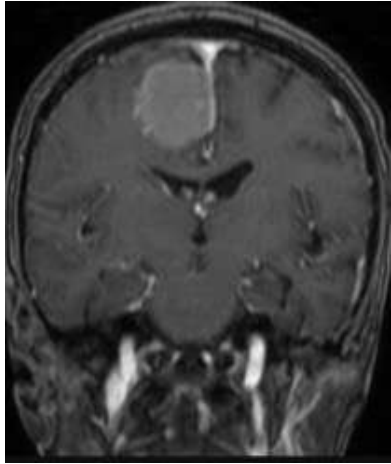
Reversal of Horner's

Lobra → post gang

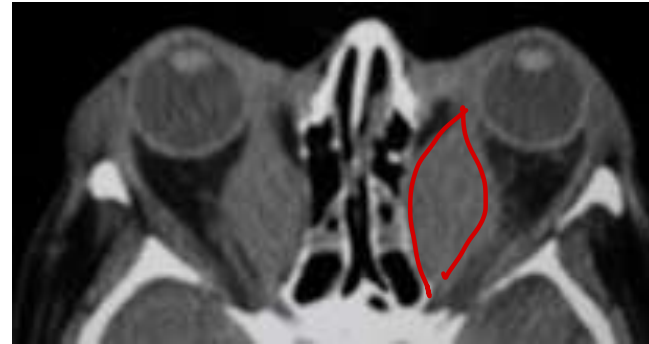
Krant → pregang

NN ACH

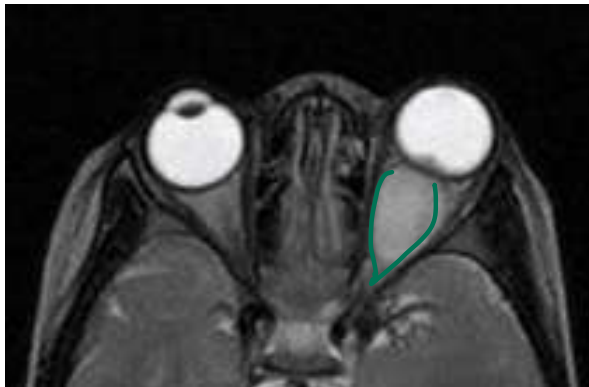
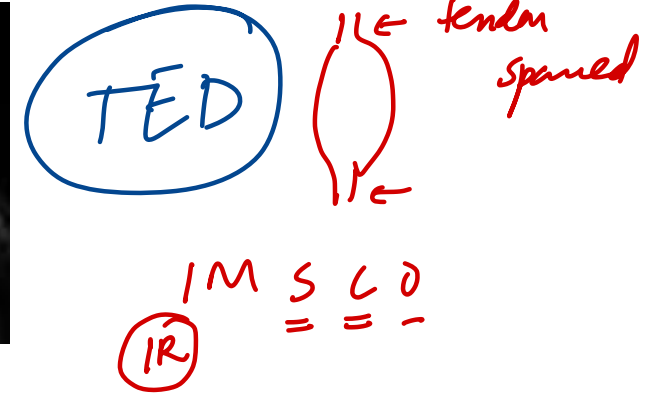
22. Identify the incorrect diagnosis pair:



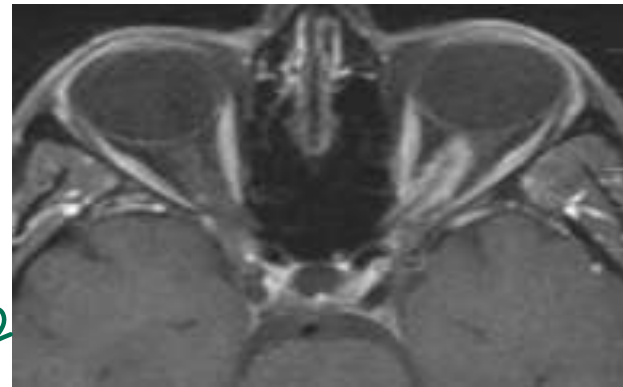
A) Meningioma



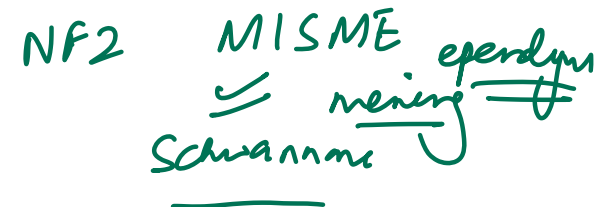
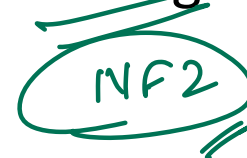
~~B) Orbital pseudotumor~~
x spanning



C) Optic nerve glioma



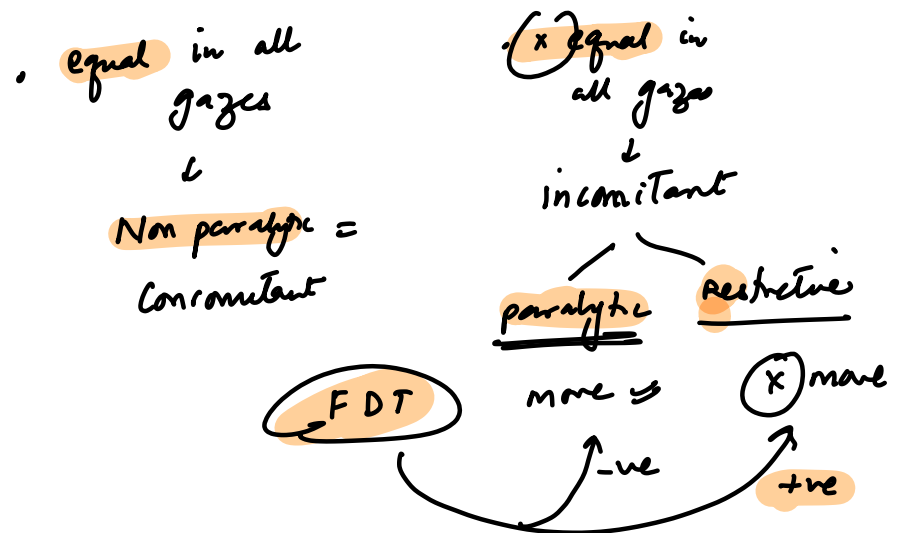
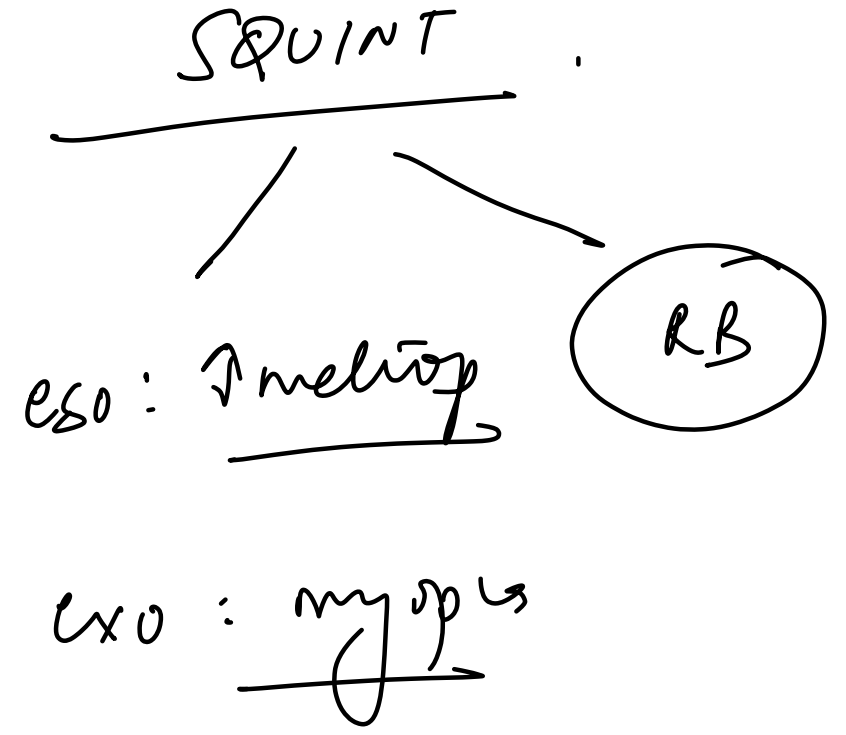
D) Optic nerve meningioma



23. What is the first step in the management of an 18-month-old child with both eyes deviated medially?

- A. Forced ductions test
- B. Examination under anesthesia
- C. Refractive error testing
- D. Examination of fundus

pyq



24. All of the following are used as indicators of a xerophthalmia problem in the community except:

- A. Night blindness prevalence $>1\%$ in 6 months–6 years ✓✓
- B. Bitot's spots prevalence $>0.5\%$ in 6 months–6 years ✓✓
- ~~C.~~ Corneal ulcer prevalence $>0.1\%$ in 6 months–6 years 0.01%
- D. Corneal scar prevalence $>0.05\%$ in 6 months–6 years ✓✓

Stage	Features
XN	Night blindness $>1\%$ in 6mon-6yrs <i>1st symptoms</i>
X1A	Conjunctival Xerosis <i>1st sign</i>
X1B	Bitot's spots $>0.5\%$ <i>most sp sign</i>
X2	Corneal xerosis
X3A	Corneal ulceration affecting $< 1/3$ of the corneal surface $>0.01\%$
X3B	Corneal ulceration affecting $> 1/3$ of the corneal surface
XS	Corneal scar $>0.05\%$
XF	Xerophthalmic fundus

$>1\%$
 $>0.5\%$
 $>0.05\%$
 $>0.01\%$

serum $< 5\mu g$
 retinol

 $>5\%$

25. All of the following organisms can penetrate an intact cornea except:

A. *Haemophilus aegyptius* ✓

B. *Corynebacterium diphtheriae* ✓

C. *Neisseria meningitidis* ✓

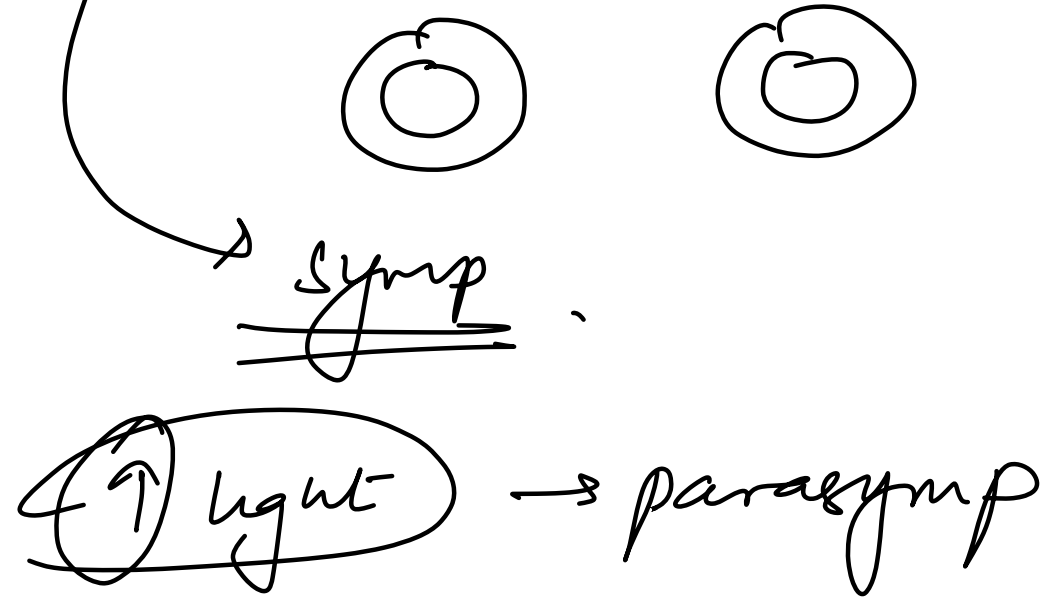
D. *Klebsiella pneumoniae*

Organisms that can penetrate intact cornea

- **Haemophilus aegyptius**
- **Listeria**
- **Corynebacterium diphtheriae**
- **Neisseria**
- **Shigella**

26. A 52-year-old man comes to the OPD after his wife noted that his eyes appeared different. Medical history is significant for hypertension and type 2 diabetes mellitus. On physical examination, the right pupil is 3 mm, and the left pupil is 5 mm. When the light in the examination room is dimmed, the anisocoria increases. Which of the following is the most likely location of the lesion?

- A. Left oculomotor nerve
- B. Left parasympathetic pathway
- C. Left Optic nerve ~~xx~~
- D. Right sympathetic pathway



27. A 2-day-old neonate born at 28 weeks of gestation had developed respiratory distress syndrome at birth. You want to screen for retinopathy of prematurity. How many weeks from now would you schedule the screening?

A. 4 weeks

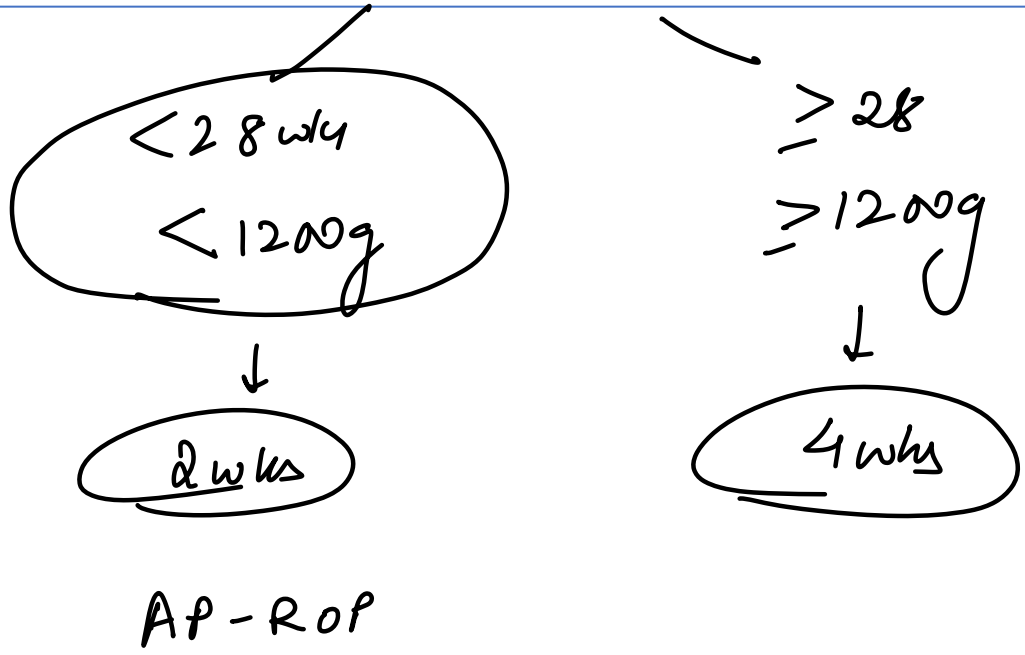
B. 2 weeks

C. 8 weeks

D. 12 weeks

Who to screen:

- Birth weight ≤ 2000 g / (1750g)
- Gestational age ≤ 34 weeks
- Sick infants (oxygen therapy, sepsis, blood transfusions, etc.)



Stage	Description
Stage 1	Demarcation line between vascular and avascular retina
Stage 2	Elevated ridge at the demarcation line
Stage 3	Ridge with extraretinal fibrovascular proliferation
Stage 4A	Partial retinal detachment not involving the macula
Stage 4B	Partial retinal detachment involving the macula
Stage 5	Total retinal detachment

Plus Disease — AP-ROP

- **Definition:** Arteriolar tortuosity and venous dilation in posterior pole
- Indicates active, progressive disease
- Can occur with any stage, requires prompt treatment

Condition	Management
No ROP or Stage 1/2 without plus disease	Observation and serial retinal exams
Stage 3 with plus disease (Threshold ROP)	Laser photocoagulation of avascular retina (gold standard)
Zone I or posterior Zone II with plus disease	Intravitreal anti-VEGF agents (e.g., bevacizumab) preferred
Stage 4 or 5	Surgical intervention (e.g., vitrectomy)
APROP	Early anti-VEGF + laser combination therapy

28. A 35-year-old male Anand Jain on slit lamp shows keratic precipitates & aqueous flare in his right eye. No synechiae but a complicated cataract is seen. The probable diagnosis would be:

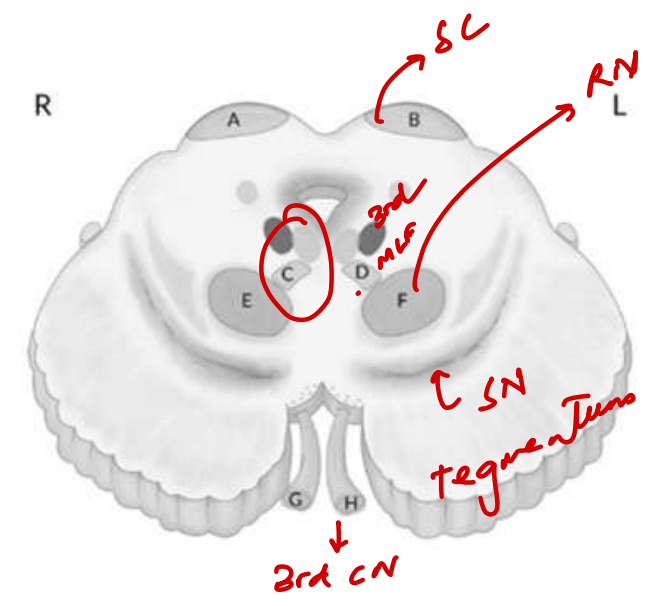
- A. Intermediate uveitis
- B. Heerfordt's syndrome
- C. Subacute iridocyclitis

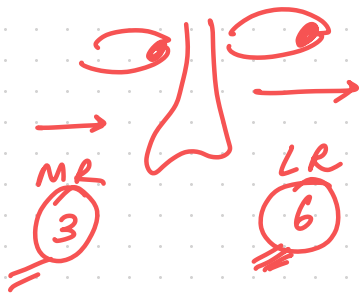
D. Heterochromic iridocyclitis of Fuch's → u/l
→ cataract
→ painless
→ stellate kps.
→ (x) synchiae

30. A 30-year-old woman comes to the physician for the evaluation of a 2-day history of intermittent dizziness and double vision. She reports double vision whenever she looks to the left. Last summer, she had an episode of weakness in her left leg that resolved spontaneously. Ophthalmologic examination shows weak adduction of the right eye on left lateral gaze. Attempted left lateral gaze results in horizontal nystagmus of the left eye. Convergence testing is normal. This patient most likely has a lesion in which of the following labeled areas of the schematic overview of a transverse section of the midbrain?

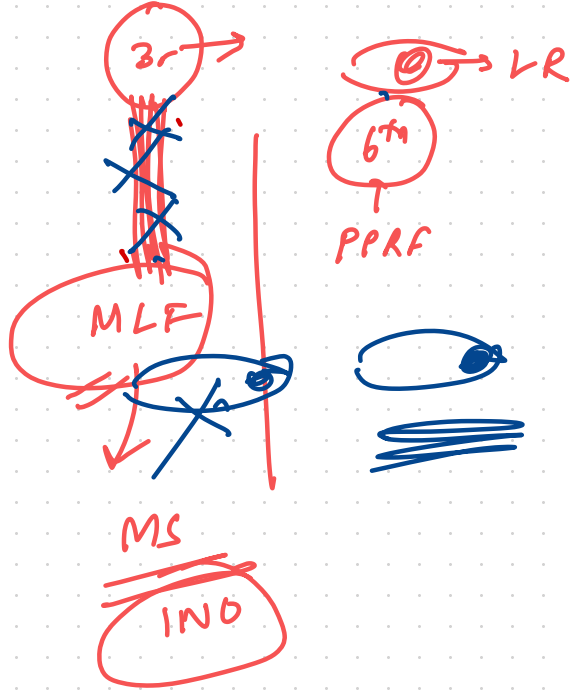
- A. A
- ~~B. C~~
- C. F
- D. D

RE MLF
 INO
 i/l NO addⁿ





INO

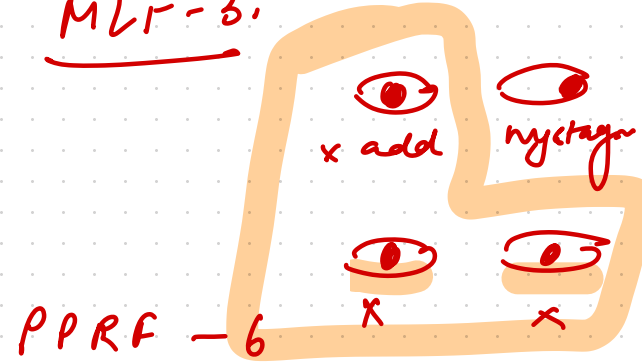
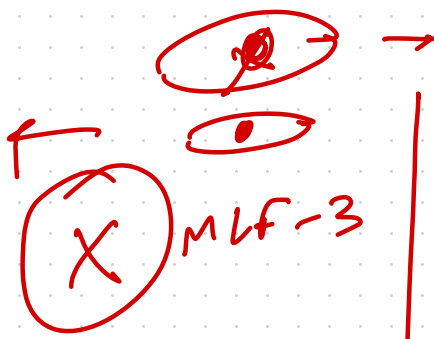


i/L addⁿ xx
 c/L myelogram ✓✓

31. A 62-year-old man presents with sudden onset diplopia and horizontal gaze palsy. On examination, he cannot move both eyes to the left, and when attempting to look right, the ~~right eye abducts with nystagmus~~ while the left eye fails to adduct. Vertical eye movements are normal. MRI shows a pontine lesion. Which of the following structures are involved?

- A. Ipsilateral paramedian pontine reticular formation (PPRF) and contralateral medial longitudinal fasciculus (MLF)
- B. Ipsilateral abducens nucleus ^{PPRF} and ipsilateral MLF
- C. Bilateral abducens nuclei
- D. Contralateral PPRF and ipsilateral MLF

MS



PPRF-6

one & a half Sx

32. Regarding herpes simplex keratitis, all of the following are true except:

A. Dendritic ulcer is a typical lesion

T

B. Steroids are contraindicated in epithelial keratitis

T

C. Geographic ulcer is a complication of untreated dendritic ulcer

T

~~D. Steroids are first-line therapy for necrotising stromal keratitis even with epithelial defect~~

DOC: acyclovir

Viral keratitis
↑ acyclovir

C Metaherpetic

infect xx → ~~T~~ steroids

stromal keratitis → steroids ✓

33. A newborn child presents with the following finding in the right eye as shown in the image below. The left eye is normal. What is the ideal age to take this patient up for elective surgery?

A. 2 years

B. 6 weeks

C. 20 weeks

D. 1 year

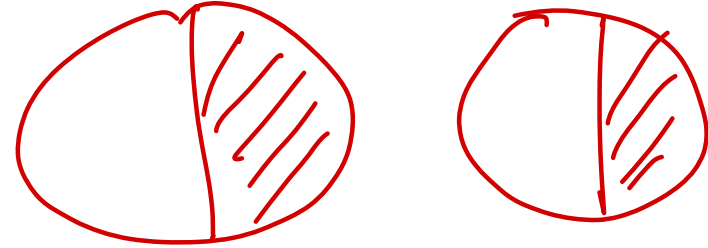


imimed

Lamblyopia

34. A female presents with loss of vision in the right halves of both eyes. Where is the lesion located in the optic pathway?

- A. Left optic tract**
- B. Right optic radiation**
- C. Optic chiasma**
- D. Right optic tract**

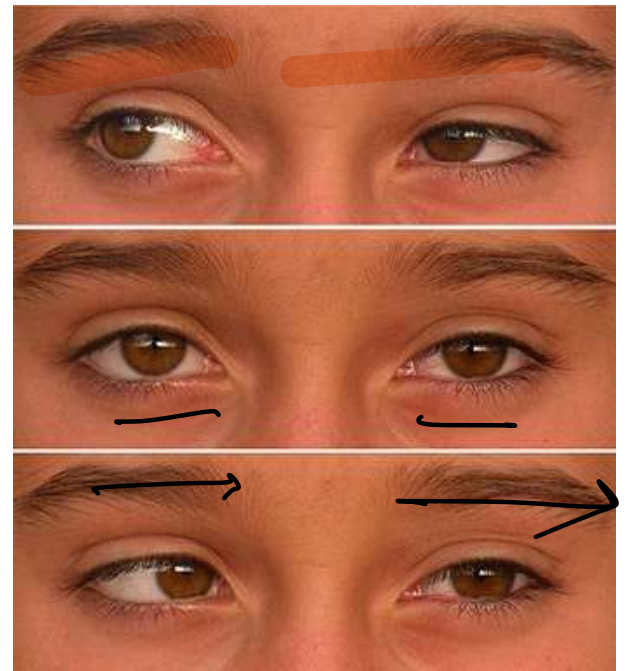


C/L

35. Identify the syndrome:

+ retracⁿ of globe

- A. ~~Duane's retraction syndrome type 1~~ → abdⁿ x
- B. Duane's retraction syndrome type 2 → add x
- C. Duane's retraction syndrome type 3 → add + x
abdⁿ
- D. Internuclear ophthalmoplegia
x addⁿ



abdⁿ

36. A 64-year-old woman is brought to the clinic by her husband due to a fall. She was walking in her living room when she tripped over an electrical cord. The patient has had several other ground-level falls in the last 6 months but has had no significant injuries. She also gave up driving a year ago following a near-miss motor vehicle accident. Ophthalmic examination reveals reduced vision in her peripheral visual fields bilaterally and an elevated intraocular pressure. After discussion of treatment options, the patient is initiated on timolol ophthalmic drops. Which of the following structures is the most likely target of this medication?

~~A. Ciliary epithelium~~

~~B. Ciliary muscle~~

C. Pupil sphincter

D. Trabecular meshwork ×/x

37. A patient presents with endophthalmitis 5 days after cataract surgery. All of the following treatments can be used, except:

A. Intravitreal antibiotic injection 

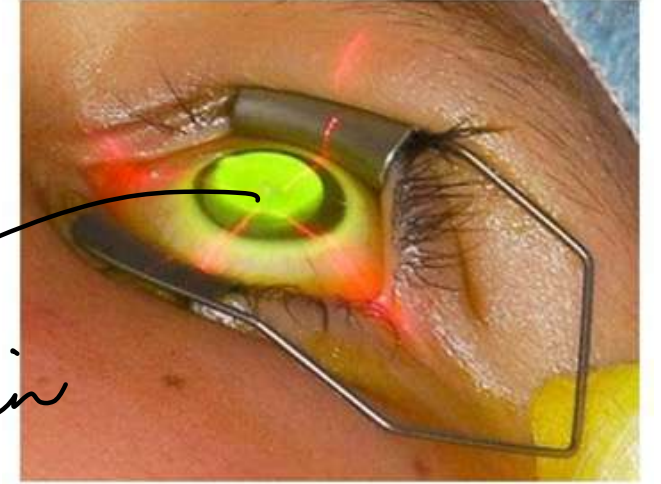
B. Intravenous steroids

C. Pars plana vitrectomy 

D. Topical antibiotics 

38. Identify the disease and procedure being performed:

- A. Cataract-Phacoemulsification
- B. Corneal Ulcer-Fluorescein staining
- C. Keratoconus- C3R
- D. Myopia-Lasik



Riboflavin
W-A

C3R

39. A patient presents with left-sided head tilt which on straightening leads to right hypotropia. This increases on dextroversion and right head tilt. Paralysis of which of the following muscles is involved?

- A. Right superior oblique
- B. Right superior rectus
- C. Right inferior oblique
- D. Left inferior oblique

Lt
hyper

IGI
c/L

ITD

sup
Rt

rectus

40. In the following enteroviruses, which cause acute hemorrhagic conjunctivitis?

- 1. Coxsackie A ✓✓
- 2. Coxsackie B X
- 3. Polio virus X
- 4. Enterovirus 70 ✓✓

- A. 1, 2, 3, 4
- B. 1, 2
- C. 1, 4
- D. 1, 3

A24

Pyo

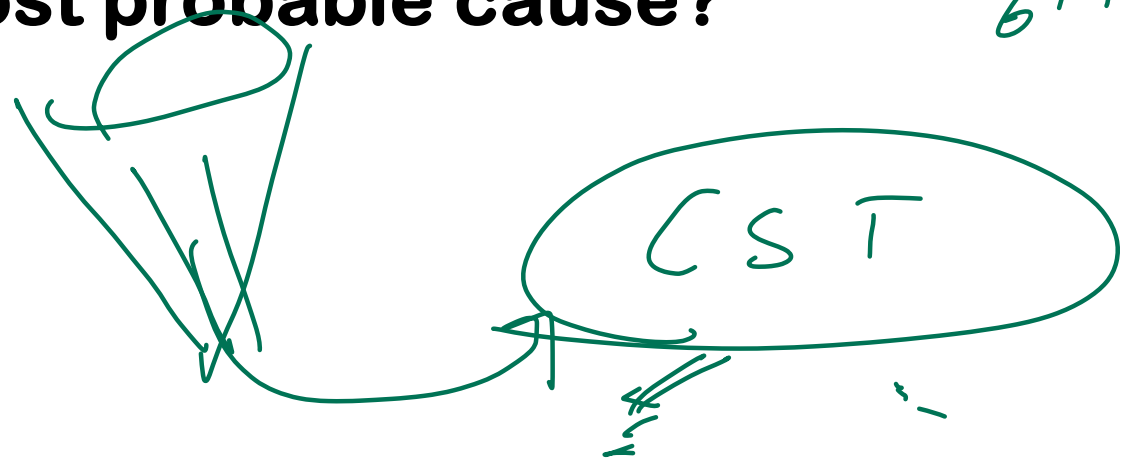
Bornholm's

(devil's grip)

Adeno 11

41. A patient presented with unilateral proptosis and bilateral abducent palsy. What is the most probable cause? 6th

- A. Retinoblastoma
- B. Orbital pseudotumor
- C. Orbital cellulitis
- D. Cavernous sinus thrombosis



42. All of the following are true regarding acquired color vision defects except:

A. Blue-yellow defects are seen in retinal diseases like CSR and macular edema

B. Red-green defects are seen in optic nerve lesions

C. Congenital dyschromatopsia is more common in males XLR

D. ~~Tritanopia~~ is the most common congenital color vision defect → Deuteranomaly

Deuter = green → mc
Protan = red

Tritan = Blue

(x) in Ishihara

anopia xx
anomaly ↓
mc

43. A patient with 1.5D myopia undergoes streak retinoscopy. The patient is seated one meter from the light source and is asked to fixate on a distant object as the retinoscopy is performed. With respect to the movement of the plane mirror in the retinoscope, the red reflex in the eye exhibits:

A. Movement with the plane $-0.5D$

B. Movement against the plane

C. No movement $-1D$

D. Oblique movement

-1D myopia : no mvt

Hypermetropia : ̄ plane

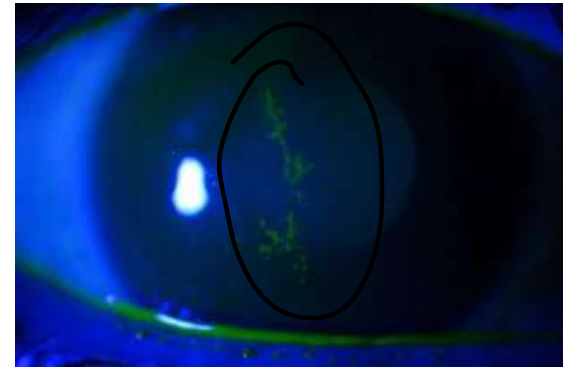
Myopia : aget pl

44. An 85-year-old woman comes to the emergency department due to worsening eye pain. Physical examination shows scattered vesicles on the left side of the forehead and nose and on the left upper and lower eyelids. Fluorescein staining is shown below. Which of the following pathogens is most likely responsible for this patient's current condition?

- A. Adenovirus
- B. Candida albicans
- C. Herpes simplex virus

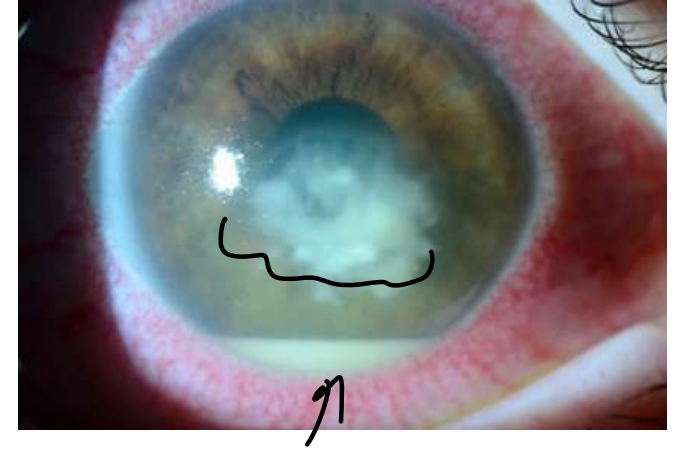
D. Varicella-zoster virus

H₂O



45. A patient presented with foreign body sensation, redness, and excessive watering from the right eye for 15 days after a twig brushed against his eye. Examination is shown below. Which among the following is the appropriate treatment?

- A. Acyclovir ointment
- B. Propamidine isethionate
- C. Hydrocortisone ointment ~~XX~~
- D. ~~Amphotericin B drops~~



Ingers

46. Regarding normal ocular axes and angles, all are correct except:

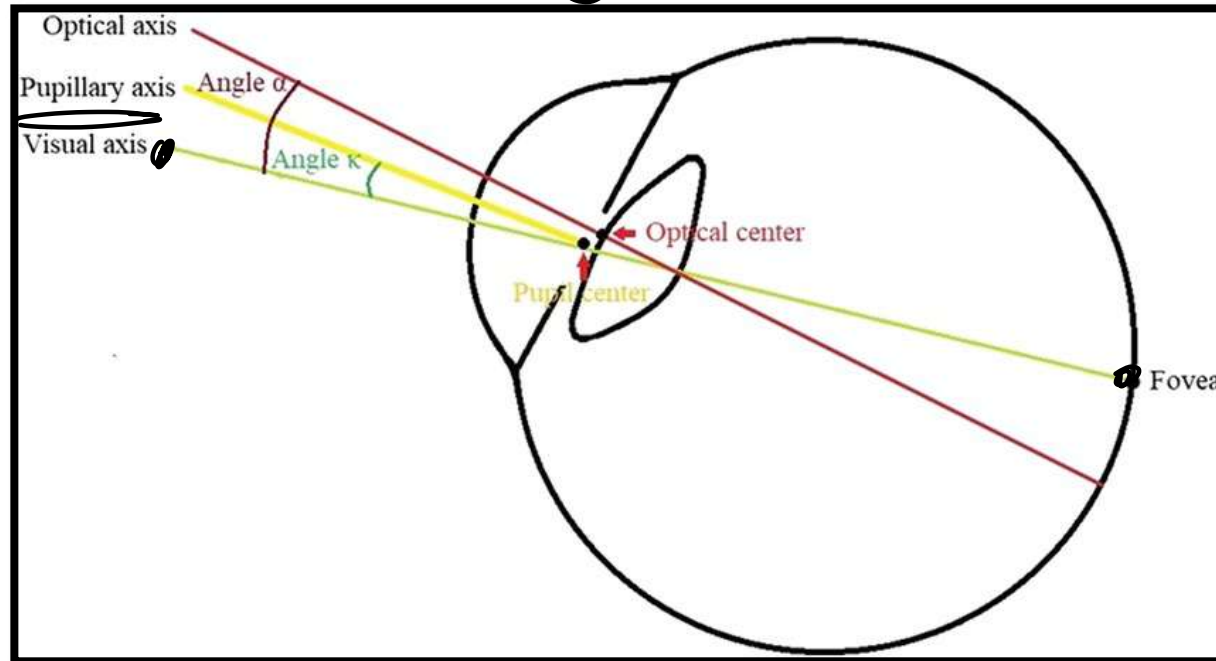
- A. Anatomical axis connects anterior and posterior poles of the eye
- B. Visual axis passes from object through nodal point to fovea
- ~~C. Angle alpha is between pupillary and visual axes~~
- D. Angle kappa is between pupillary and visual axes

T

T

A A V

- Anatomical axis: Connects the anterior and posterior poles of the eye.
- Visual axis: Passes from the object of fixation through the nodal points to the fovea.
- Pupillary axis (line perpendicular to cornea passing through the center of the pupil)
- Angle kappa: It is the angle between the pupillary axis and the visual axis
- Angle alpha: The angle between the anatomical and the visual axis



47. A 45-year-old man presented with lagophthalmos, orbicularis oculi palsy, and loss of corneal sensation. Which of the following is the most likely causative organism?

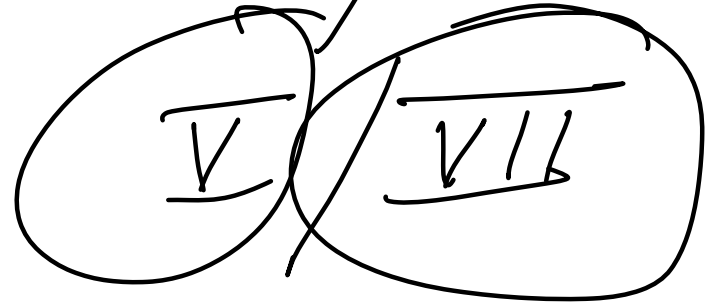
A. *Acanthamoeba castellanii*

B. *Mycobacterium leprae*

C. *Onchocerca volvulus*

D. Chlamydia A to C

/ HSV / DM

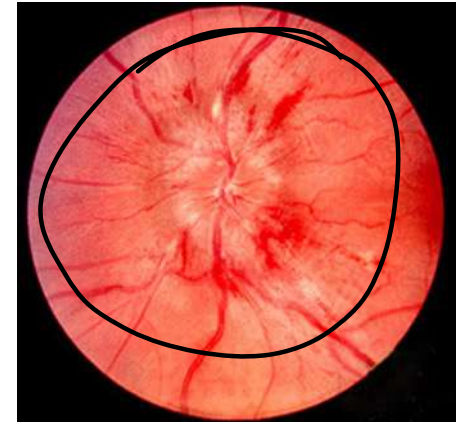


48. A 31-year-old woman comes to the office due to transient visual changes that are characterized by "loss of vision for a minute" and commonly precipitated by bending forward or lifting objects. During the last 3 months, she has had persistent headaches that she attributes to migraines. The patient takes over-the-counter analgesics as needed. Blood pressure is 140/90 mm Hg and pulse is 72/min and regular. BMI is 32.4 kg/m². Funduscopic findings of the left eye are shown in the image below, with similar findings in the right eye. Which of the following is the most likely cause of the observed funduscopic findings in this patient?

- A. Choroidal inflammation
- ~~B. Elevated intracranial pressure~~
- C. Elevated intraocular pressure
- D. Optic nerve inflammation

papilledema

blurring



49. A 2-year-old child presents with leukocoria in the left eye. The CT is shown below. The most likely mutated gene is on the same chromosome as which of the following genes:

A. BRCA1

~~B. BRCA2~~

C. NF1

D. APC

5
APC

+ 12 = 17

KRAS

p53

RB

13

BRCA 2

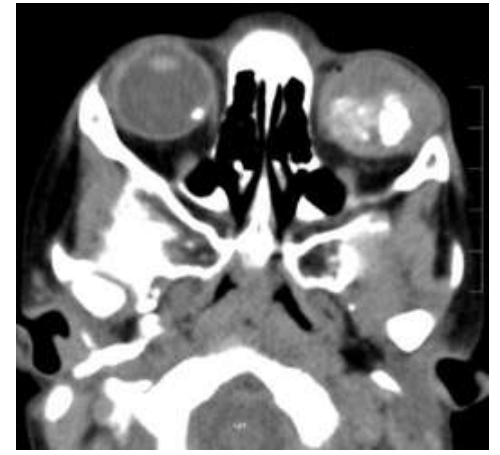
ATP7B

17

BRCA 1

NF1

p53



NF2 - 22

50. Which of the following is false:

A. External hordeolum is an acute inflammation of the Zeis gland

B. Meibomian gland is a modified apocrine gland *sebaceous*

C. Internal hordeolum is an acute suppurative inflammation of meibomian gland

D. Chalazion is a chronic granulomatous inflammation of the meibornian gland

modified

Moll

apocrine
mammary
ceruminous

51. Which of these is a true statement?

1. Ferry's Line-corneal epithelial iron line at the edge of filtering blebs
2. Stockers Line-Corneal epithelial iron line at the edge of pterygium
3. Hudson-Stahli line-visible all around the base of cone in Keratoconus
4. Fleischer's ring: Horizontal corneal epithelial iron line' at the inferior one third of cornea due to aging
5. Coat's white ring- A form of iron deposit at the level of Bowman's layer of cornea

A. 1, 2, 3, 4, 5

B. 2, 3, 4, 5

C. 1, 2, 4, 5

~~D. 1, 2, 5~~

aging

Siderosis / FB

Fleischer ring

Coat's D

idropatmi
- vasculitis

Young's

VH
recurrent

52. A 21-year-old woman with a history of Bell's palsy presents with dryness in her left eye. Ocular examination shows mild punctate epithelial defects and corneal dryness. What is the most likely diagnosis?

A. Exposure keratopathy

B. Neurotrophic keratopathy xx *painful*

C. Mooren ulcer

D. Herpes simplex keratitis xx

53. A 21-year-old student presents with ocular redness, foreign body sensation, and excessive tearing, following the use of a contact lens. An interface contrast microscopy from his corneal scraping is shown below. Which of the following is false regarding the treatment of this condition?

A. Topical Steroids

X/X

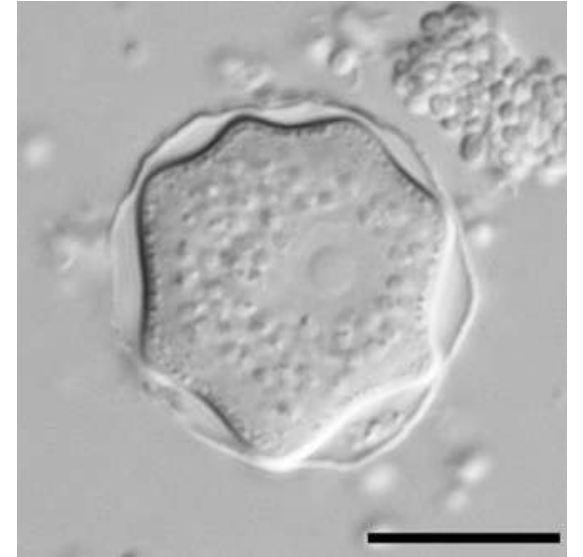
B. Oral NSAIDs

C. Topical polyhexamethylene biguanide (PHMB)

D. Debridement of epithelium

✓

✓



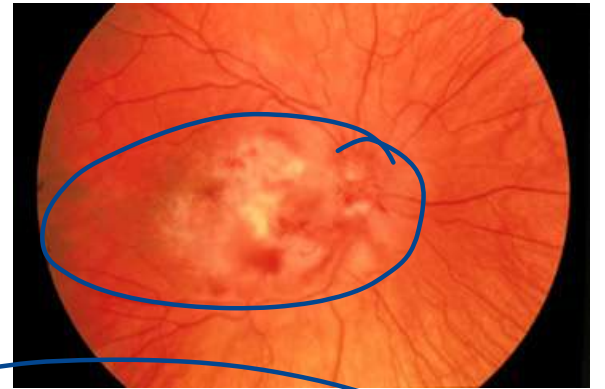
acanthameba

54. A 43-year-old man comes to the emergency department due to painless, progressive visual impairment. The patient was diagnosed with sexually acquired HIV infection 4 years ago. He was previously started on antiretroviral therapy but has been noncompliant with his prescribed medications. Funduscopy reveals the findings seen in the image below. Which of the following medications is the best initial therapy for this patient?

- A. Acyclovir
- B. Amphotericin B
- C. Clarithromycin

D. Ganciclovir

CMV



Pizza pie

55. A neonate with leukocoria and strabismus is found to have following USG finding. With which congenital disorder is this condition most commonly associated? _____

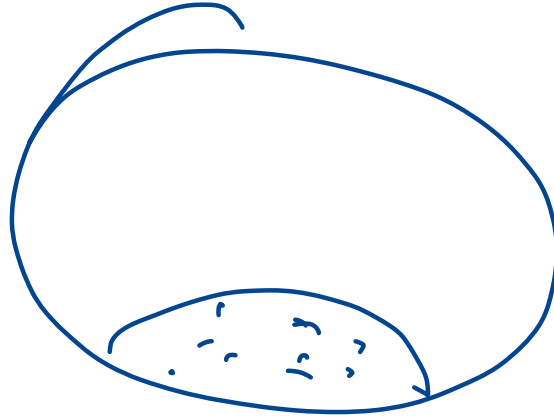
A. Down syndrome ~~X~~

B. Tuberous sclerosis

C. Patau syndrome

D. Osteosarcoma

LRB



~~PHPV~~
↓
Hyaloid artery
persistent



" retrolental
triangular "

56. A 75-year-old woman attends the emergency department with nausea and vomiting. She says that her right eye is painful and red. Vision is reduced. She is longsighted and wears glasses for near and distance vision. She is generally fit. There is no family history of medical problems. On examination the emergency doctor finds the vision to be reduced to counting fingers in the right eye. The eye is red, the cornea appears cloudy and edematous, and the pupil is oval and dilated on the affected side. No view of the fundus is obtained. What are the immediate and definitive treatment?

- A. Topical pilocarpine and Nd:YAG 532nm laser capsulotomy
- B. Intravenous Acetazolamide, and Femtosecond laser Iridotomy
- C. Intravenous Acetazolamide, and Nd:YAG 1064nm laser Iridotomy
- D. Topical Beta-Blockers, and Trabeculectomy

ACG

AMP

532nm
PRP LT

1064
PI PIO

57. A 60-year-old man with a previous history of cataract surgery two weeks back presented with diminution of vision, visual acuity 5/60, anterior chamber cells, vitreous haze with no fundus details visible. What is the diagnosis and the organism causing it?

A. Toxic anterior segment syndrome; No organism

B. Endophthalmitis; Propionibacterium cutis

C. Endophthalmitis; Staphylococcus

D. Sympathetic ophthalmia; Mucormycosis

< 48h PYS

> 6 wks - chr

< 6 wks - acute
- 2 wks

Coat's - cong teleangiectases
Eale's - inflamⁿ

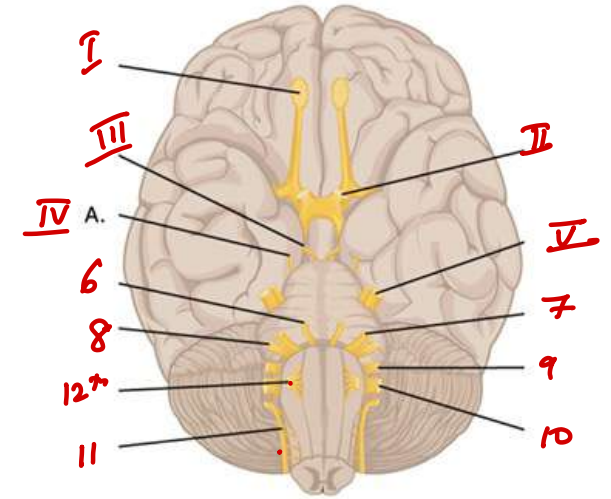
58. What is the action of the muscle supplied by the structure marked A. in the image?

~~A. Extorsion, abduction, depression~~

B. Intorsion, adduction, elevation

C. Intorsion, abduction, depression

~~D. Extorsion, adduction, elevation~~



SO 4

SIN RAD

59. A 34-year-old woman comes to the office due to double vision. The patient first experienced difficulty focusing her eyes while at work yesterday. On awakening this morning, her symptoms had progressed to frank diplopia. A complete physical examination is performed, including a full neurologic assessment. Shining light into the patient's right eye causes constriction of her right pupil, but not the left pupil. Shining light into her left eye causes constriction of only her right pupil. Which of the following additional physical examination findings is likely to be found in this patient?

A. Absence of the left corneal reflex

5 / 7

B. Drooping of the left eyelid

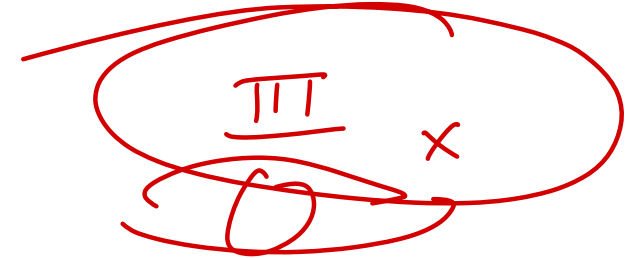
LPS XX

C. Inability to close the left eye

7

D. Inward deviation of the left eye

|| III
→



LE

→

60. Identify the correct pair:

- A. Vogt triad-Open angle glaucoma ~~x~~ ACG
 - B. Vogt striae-~~Congenital buphthalmos~~ kerato
 - C. Shield ulcer-Atopic dermatitis
 - D. Foster Fuch spots-Myopia → Cataract
- VKC

Dalen Fuch → SD

61. Which of the following can occur in a patient with prolactinoma?

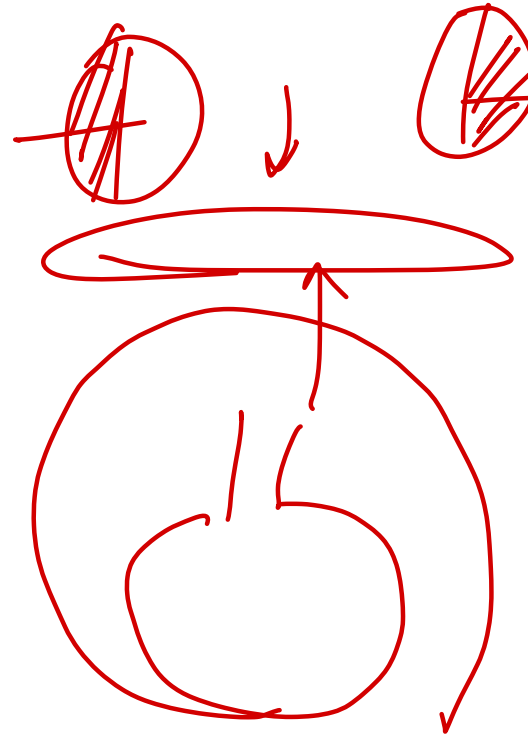
A. Superior quadrantanopia

B. Inferior quadrantanopia

C. Priapism

D. Failure of lactation

Cramogh



62. Identify the correct statements:

1. Microaneurysms appear as hyperfluorescent branching pattern on FFA
2. Hard exudates are found in outer plexiform layer
3. Normal A:V ratio is 3:2 at the fundus
4. IOC for best disease is EOG

A. 1, 2, 3, 4

B. 2, 4

C. 2, 3, 4

D. 1, 4

A : V → 2 : 3

N

HOPZ ✓✓

~~dots~~
↓

prolif DR

63. A neonate was found to have the following finding on routine examination of the eye. All of the following may be differentials except:

- A. Congenital cataract ✓✓
- B. PHPV ✓✓
- C. Retinopathy of prematurity ✓✓
- ~~D. Congenital glaucoma~~



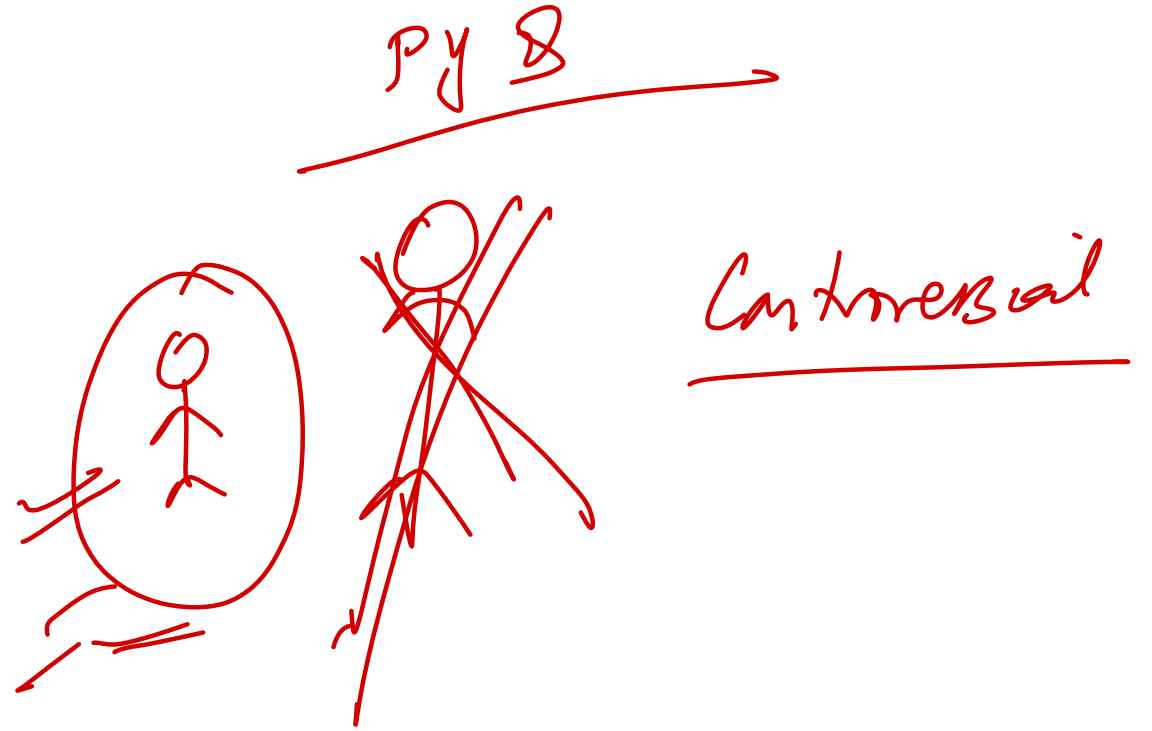
loss of red
reflex

Leukocoria

64. Amblyopia management includes all except:

- A. Patching *1st*
- B. Video games
- C. Refractive error correction *1st*
- ~~D. Strabismus surgery~~

*after amblyopia
Correcⁿ*



D > B

65. A patient's fundus photograph taken 48 hours after acute episode of pain abdomen is shown below. What is the most likely diagnosis?

- A. Hypertensive retinopathy
- B. Diabetic retinopathy
- C. Purtscher's retinopathy
- D. Central retinal vein occlusion

pancreatitis
trauma



GPM

66. In optic neuritis, which of the following statements is true?

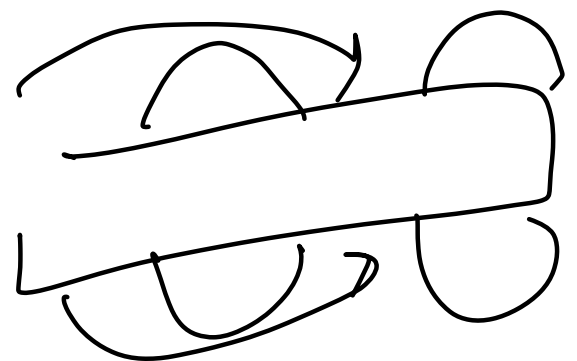
- 1. 70% patients of multiple sclerosis present with optic neuritis, X
- 2. Oral steroids are an appropriate treatment X
- 3. It can have a normal fundus with no disc edema
- 4. Colour vision and contrast are proportionally affected to vision impairment

- A. 1, 4
- B. 2, 4
- C. 1, 3, 4
- D. 3 only

→ Pulfich ^{+3D} sign

→ Ihermittle

→ Uthoff _{hot bath}



iv steroids

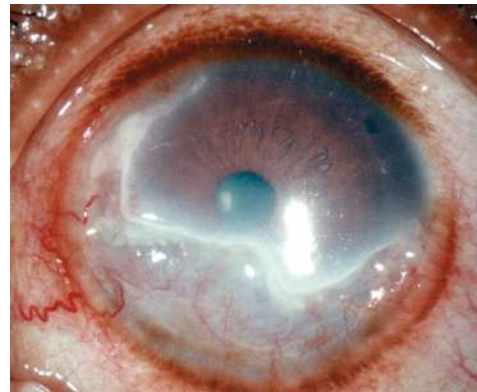
MAY INI
25

50% MS - lifetime

25% at present

67. Which of the following statements correctly describes Mooren's ulcer?

- A. ~~Painless~~ superficial ulcer that may perforate
- B. Associated with ~~autoimmune~~ diseases
- C. Physical findings out of proportion to pain ~~XX~~
- D. Serpiginous spread



→ idiopathic
→ painful
→ serpiginous

68. Pseudopapillitis is typically seen in which of the following conditions?

A. Myopia

B. Hypermetropia

silk shot .

C. Aphakia

D. Presbyopia

69. A construction worker has unilateral facial anhidrosis after a back injury. Examination finding is shown below. Which location is the most likely site of lesion?

A. Grey ramus of T1

B. Grey ramus of C8

C. White ramus of T1

D. White ramus of C8



Horner's

70. All are true about the oculocardiac reflex except:

- A. Mediated via V1 trigeminal afferent (T) V1 → X → ↓HR
- B. Triggered during strabismus surgery (T)
- ~~C. Most commonly due to inferior rectus stimulation~~ MR
- D. Managed by stopping surgical stimulation (T)

71. All are true about Foster–Kennedy syndrome except:

- A. Ipsilateral optic atrophy
- B. Often caused by olfactory meningioma
- C. Can be seen in ~~occipital lobe~~ neoplasms
- D. Contralateral papilledema

frontal lobe

72. A student with myopia wishes to undergo surgery. Which option is not suitable for correcting her refractive error?

- A. SMILE ✓
- B. Radial keratotomy ✓
- C. Intracorneal ring implantation ✓
- D. Conductive keratoplasty

hypermetropia

Cornea based procedures	Lens-based procedure
Thermal laser keratoplasty (TLK)	Refractive lens exchange
Hyperopic photorefractive keratotomy	Phakic intraocular lens
Conductive keratoplasty	

myopia

Cornea-based procedures	Lens-based procedures
Laser-based:	
• Photorefractive keratectomy (PRK)	Refractive lens exchange
• Laser in-situ keratomileusis (LASIK) (Most common)	Phakic intraocular lens
• Refractive lenticule extraction (ReLEx) or Small incision lenticule extraction (SMILE)	Clear lens extraction
• Intracorneal ring segment (ICRS) implantation	
• Orthokeratology	
• Radial keratotomy (obsolete) → CI in boxes	



73. The spectacles shown in the image are not used for the management of which of the following?

A. Presbyopia ✓

B. Aphakia ✓

C. Pediatric pseudophakia ✓

~~D. Hypermetropia~~



Bifocals

74. A 69-year-old man with hypertension shows silver wiring, papilledema, and arteriovenous nicking on fundoscopy, but no other findings. How should his hypertensive retinopathy be graded?

A. Grade I retinopathy

B. Grade IV retinopathy

C. Grade III retinopathy

D. Grade II retinopathy

A : V → 1:3 -
2:3

Grade 1 Mild arteriolar attenuation, broadening of arteriolar light reflex

Grade 2 Severe arteriolar constriction associated with deflection of veins at arteriovenous crossings

Salu (2)

Grade 3 Copper wiring of arterioles, banking and tapering of veins, right-angled deflection of veins, haemorrhages, cotton-wool spots, hard exudates

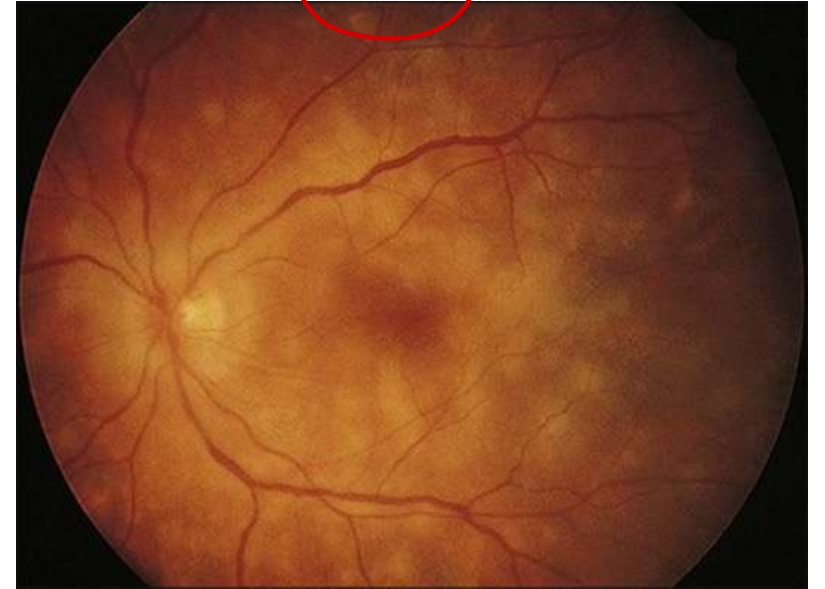
. Bonnet 3
. Gunn

Grade 4 Changes of grade 3, silver wiring of arterioles, disc swelling

75. A carpenter develops bilateral eye irritation and vision loss after trauma to the right eye. Fundus exam reveals **Dalen-Fuchs nodules**. Which type of hypersensitivity is involved?

- A. Type 1
- B. Type 2
- C. Type 3
- D. Type 4**

granuloma panuveitis



SD

Mon 9am — Tue 9pm
wed 10am

Thank You
