Ophthalmology

5th year - jordan university

This file includes all past mini osces up to 2024

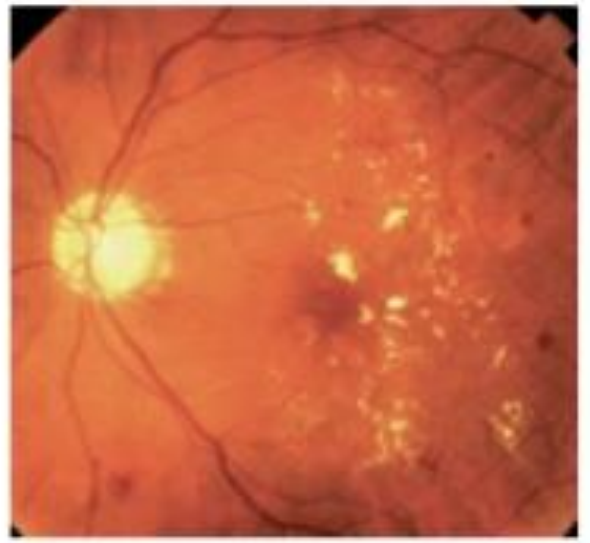
019-020 past

Q1: About corneal transplant surgery, which is wrong?

A. Success rate of the surgery is 50%
B. The graft should be extracted within 24 hours from deceased donors
C. HLA compatibility is not needed
D. The suture size that is used in surgery is 10-0
E. Astigmatism is a possible complication of the surgery

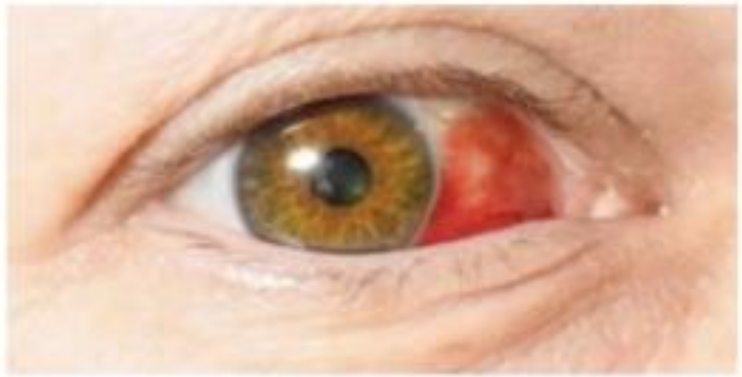
Answer: A

Q2: What is the earliest sign in this condition?



Answer: Microaneurysms

Q3: Patient presented with sudden painless lesion as in the picture, what is your management?



A. Check retina for possible retinal detachment
B. Give topical steroids
C. Check his blood pressure

Answer: C

Q4: Patient presented with a painless lesion on his eyelid, it appeared 3 months earlier and it bleeds every now and then, what's your diagnosis?

A. SCC

B. BCC

C. Calazion

Answer: B

Q5: What is the use of this procedure?

Answer:

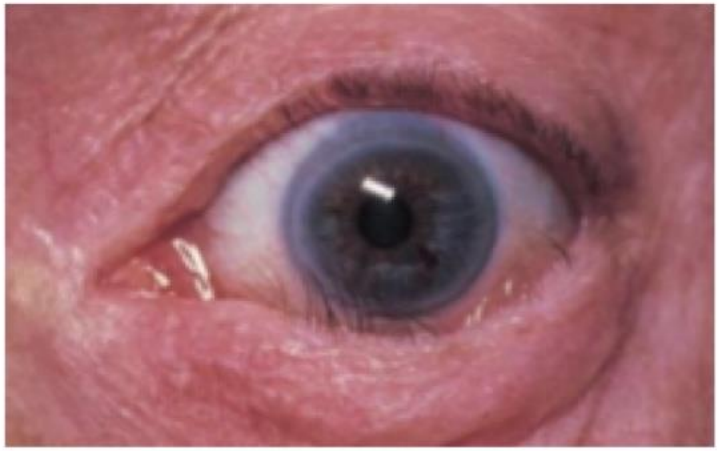
- Corneal cross linking for Keratoconus

Q6: Two contraindication of LASIK surgery

Answer:

- Keratoconus, severe dryness, pregnancy

Q7: What is the diagnosis?



Answer:

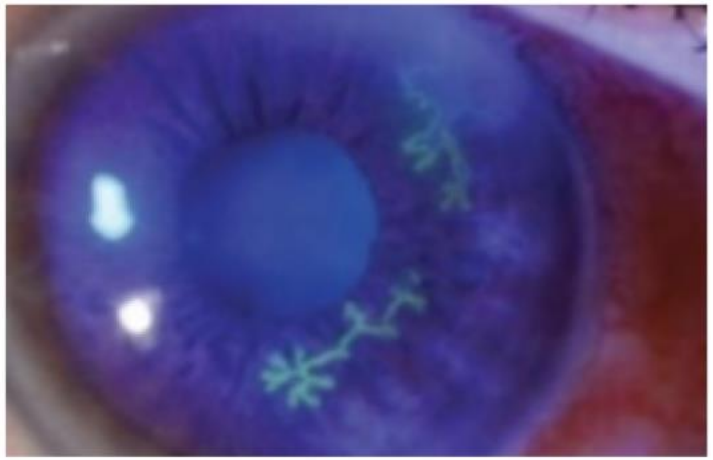
- Entropion

Q8: The most likely diagnosis?

Answer:

- Episcleritis

Q9: This disease is caused by?



Answer:

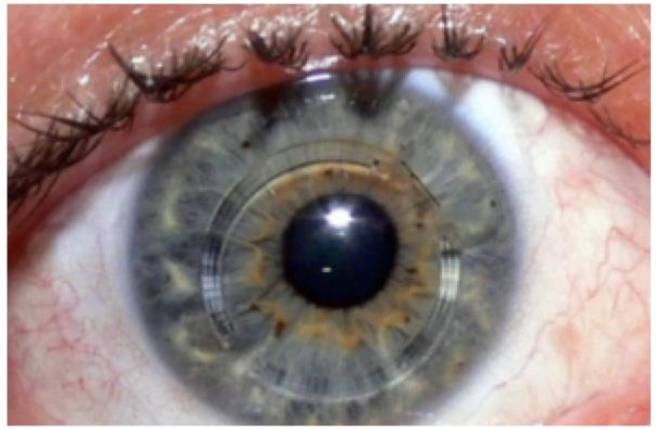
- HSV-1

Q10: The cause of vision loss in this case?

Answer:

- Progressive myopia and astigmatism

Q11: What is the diagnosis?

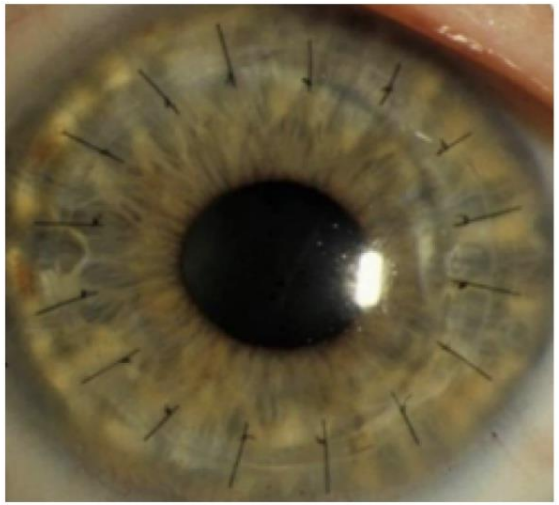


Answer:

- Intra stromal corneal ring used to treat Keratoconus

Q12: What causes of graft rejection?

A. Small corneal graft
B. Tight sutures
C. Donor- recipient junction blood vessels
D. ABO blood
E. HLA type



Answer: C

Remember, Corneal transplants are avascular, so ABO and HLA matching are not necessary.

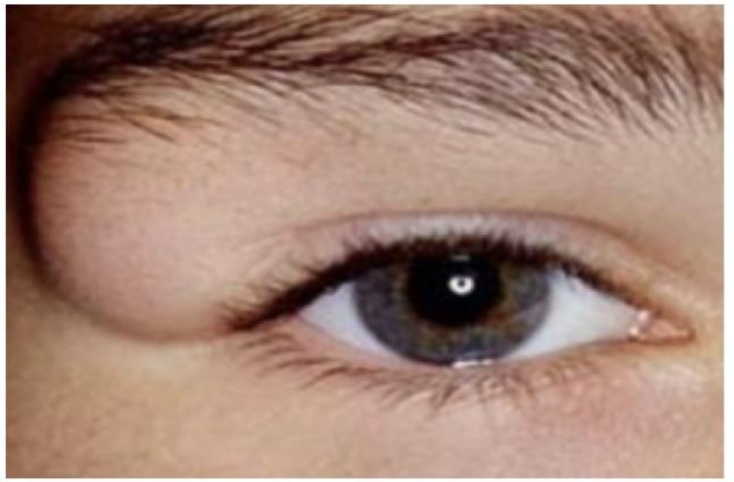
Q13: What is the diagnosis?

Answer:

- Anterior Blepharitis

The presence of **collarettes** around the eyelashes increases the suspicion of anterior blepharitis.

Q14: 1 year patient presents with this finding, what's the diagnosis?



Answer:

- Dermoid cyst

DERMOID CYSTS

- These congenital lesions are **caused by the continued growth of ectodermal tissue beneath the surface**, which may present in the medial or lateral aspect of the superior orbit .
- Excision is usually performed for **cosmetic** reasons and to **avoid traumatic rupture**, which may cause scarring.
- Some may be attached deeply by a stalk, and a CT scan may be necessary before surgery to identify this deeper connection.
-

Q15: 23-year-old female with 6 months of this complaint

A. Keratitis
B. Acquired nasolacrimal duct obstruction
C. Congenital nasolacrimal duct obstruction
D. Punctuate obstruction

Answer: B

Q16: Which one of these is the most common cause of failure of this surgery:

A. Infection
B. Astigmatism
C. Recurrence
D. Rejection

Answer: D

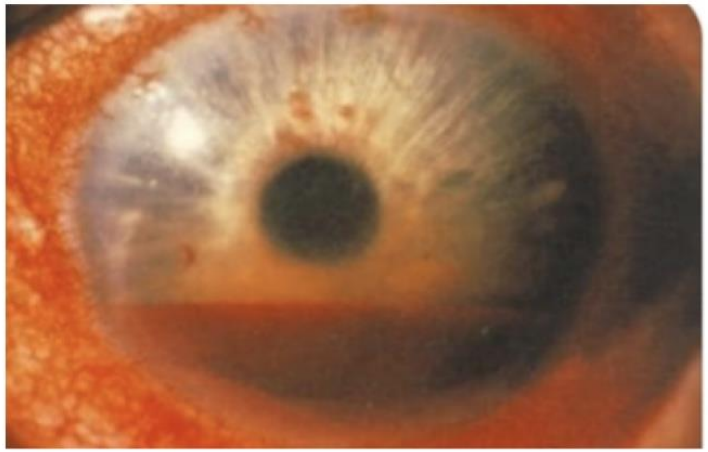
Q17. A patient presents with **ocular trauma** and has an intraocular pressure (IOP) of **35 mmHg**. Which of the following statements is **FALSE**?

A. Mydriatics should be used in the treatment.

B. Immediate post-traumatic glaucoma is considered a form of secondary angle-closure glaucoma.

C. Delayed post-traumatic glaucoma can occur

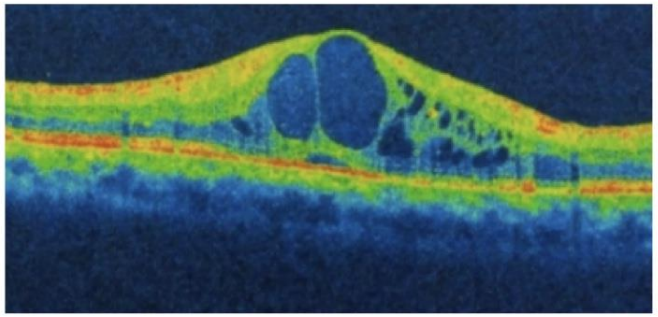
D. Ocular irrigation is indicated in the presence of corneal staining



Answer: A

- Mydriatics push the iris forward, Narrow or close the angle further,

Q18: This picture + picture of retina with hard exudates very close to macula, beast treatment?



A. YAG laser
B. Intra-vitreal VEGF
C. Panretinal laserphotocoagulation

Answer: B

Intravitreal VEGF is the 1st line treatment for diabetic retinopathy with macular edema

Q19: Which of the following is NOT a cause of esotropia?

A. Wide nasal bridge
B. Hyperemetropia
C. Amblyopia
D. Cataract

Answer: A

- Wide nasal bridge = Pseudoesotropia
- Amblyopia can be both, cause and result.

Q20: This finding happens at the evening, diagnosis?

Answer:

- Myasthenia gravis

Q21: In case of eye trauma which of the following would you NOT expect to find in relation to all complications?

A. Hypopyon
B. Hyphemia
C. Glaucoma

Answer: A

- It is a sign of severe inflammation or infection, such as endophthalmitis.

Q22: Elderly female patient came with sudden vision loss. which of the following is the most common cause?

A. Central retinal vein occlusion
B. Central retinal artery occlusion with cherry red spot
C. Wet age-related macular degeneration
D. Vitreous detachment

Answer: C

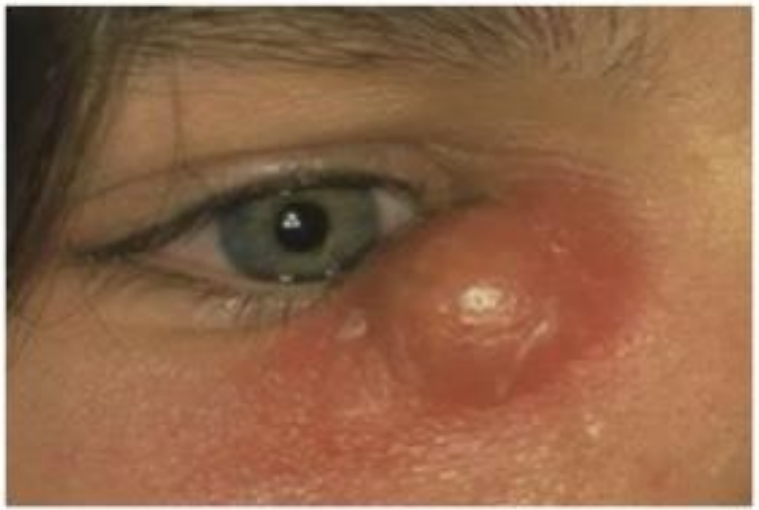
Age related macular degeneration is the most common cause of sudden vision loss in elderly.

Q23: What is corneal cross-linking surgery used for?

Answer:

- Progressive keratoconus

Q24: What is the most common cause of this finding?

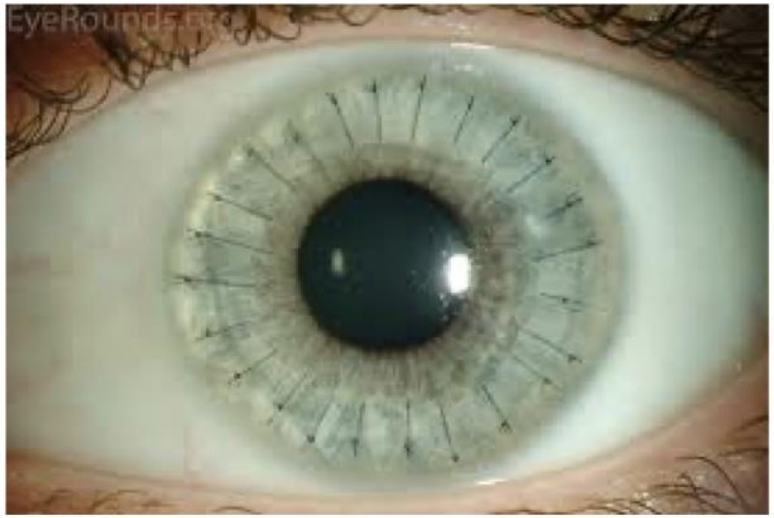


Answer:

- Staphylococcus aureus

Q25: This image .

- The name of this surgery?
- The most common complication?
- If it recognized early how you will treat?



Answer:

- Keratoplasty.
- Rejection
- Steroids

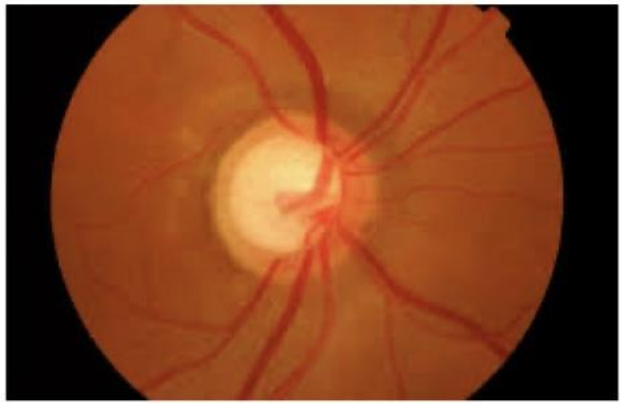
Q26: Patient with sarcoidosis and this image

- The name of this sign?
- Three systemic test to confirm the diagnosis?

Answer:

- Keratitic percipetate
- Chest x-ray, serum ACE, serum calcium level

Q27: The patient diagnosed with glaucoma.
Write 3 test to confirm it.



Answer:

- Goldmann Applanation Tonometry, gonioscopy, visual field examination, OCT (Optical Coherence Tomography)

Q28: Two cases of painful red eye other than conjunctivitis?

Answer:

- Scleritis, bacterial keratitis

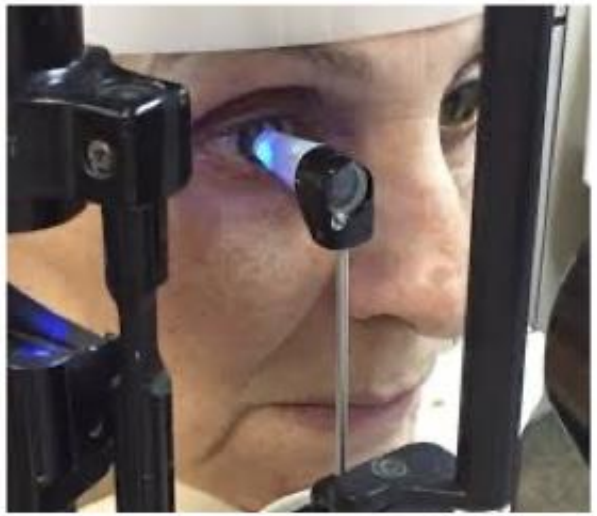
Q29: Not correct about this device.

A. least accurate

B. It uses fluorescence dye

C. It uses blue cobalt light

D. It is not necessary for dx of glaucoma



Answer: A

Q30: Earliest sign of diabetic retinopathy?

Answer:

- Microaneurysms

Q31: Not a contraindication of LASIK.

Answer:

- Makeup

Q32: Patient with graves' disease and picture of their left eye is pulled downward. Which muscle is involved?

Answer:

- Inferior rectus

Q33: Mention 2 causes for this patient to wear glasses

Answer:

- Short eyeball/ ectopia lentis (other causes of hypermetropia), astigmatism

Q34: Male patient diagnosed with DM type 2 / complaining of blurry vision in both eyes since 1 year

What is the cause?

Answer:

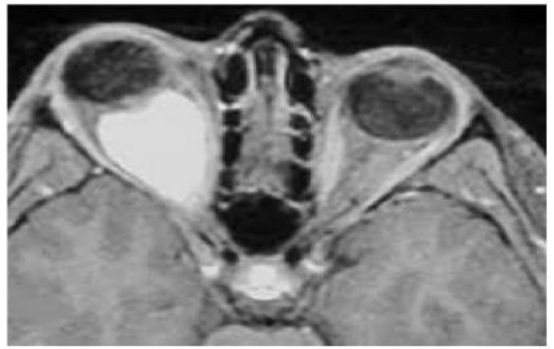
Macular edema

Most common cause for vision loss in DM is MACULAR EDEMA.

The pic is for central retinal artery occulsion^^.

Q35:Patient diagnosed with neurofibromatosis type 2 done this CT

- What is this cut?
- What do you see in the image?



Answer:

- Axial cut of a CT of the orbit
- Optic nerve glioma (Well defined hyperdense orbital mass).

Optic pathway gliomas are typically linked with **NF1** rather than **NF2**. ^^

- **Optic nerve gliomas:**

may be associated with neurofibromatosis . They are difficult to treat but are often slow - growing and thus may require no intervention.

Q36: Female Patient 32 years old complaining of ptosis in her left eye

- What is the most serious differential diagnosis to exclude?
- What is the most available test to do in the clinic?

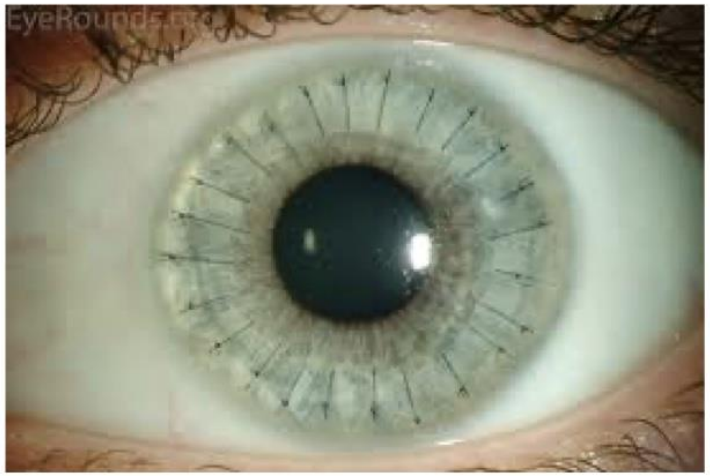
Answer:

- Myasthenia grave's
- Ice pack test

In patients with MG, ptosis can be overcome temporarily by direct cooling of the eyelid muscles.

Q37: This image ...

- The name of this surgery?
- The most common complication?
- What type of eye drop should be used for a long time?



Answer:

- Keratoplasty
- Rejection
- Topical steroids

Q38: This image...

- What is the type of this retinal detachment?
- Write two symptoms?
- 3 lines of treatment?

Answer:

- Rhegmatogenous retinal detachment
- Floaters, scotoma, vision loss.
- 1. Vitrectomy
  2. Surgical repair
  3. Laser photocoagulation & anti-VEGF

Q39: **This image...**

- What is the most common cause of this finding?
- What is the name of the surgery?

Answer:

- Staphylococcus aureus
- Dacryocystorhinostomy

016-018 past

Q1

- Symptoms :
- Diagnose:
- Treatment:

Answer:

- Dry irritable eye, tearing
- Ectropion.
- Surgical management

Ectropion

- Eversion of the lid away from the globe.
- Causes:

1. age related orbicularis laxity
2. 7th CN palsy
3. scarring of the periorbital skin

- Dry irritable eyes due to excessive exposure and tearing due to decreased tear drainage.
- Surgical management.

Q2

- Diagnosis :
- Treatment :

- Answer:

- Diagnosis : Neuclear cataract
- Treatment : Surgery:

Phacoemulsification, Extra capsular cataract extraction (ECCE), Intra capsular cataract extraction (ICCE)

Q3:

- Most dangerous DDX :
- Treatment :

Answer:

- Most dangerous DDX: Orbital cellulitis
- Treatment :

1. Admit the patient, IV antibiotic.
2. Surgical drainage of abscess.
3. Optic nerve decompression

B - ORBITAL CELLULITIS :

- It's an ocular and medical **EMERGENCY!** Defined as an inflammation of orbital contents (fat + muscles) posterior to orbital septum, common in children, elderly, and immunocompromised .

◄Etiology

-usually 2ry° to sinus (ethmoid) / tooth infections or trauma

-Most common microorganisms : Staphylococcus and streptococcus .

- **Diagnosis :**

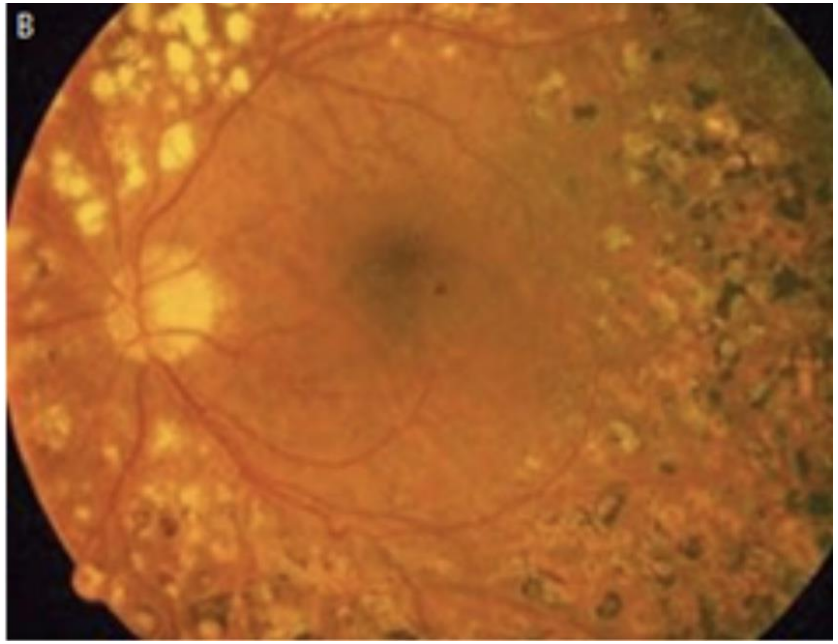
  MRI or CT

◄Treatment :

1. Admit the patient, blood cultures, orbital CT, IV antibiotics (ceftriaxone + vancomycin) for 1 week .
2. Surgical drainage of abscess with close follow-up, especially in children .
3. Optic nerve decompression if it's compromised .
   (Endoscopic optic nerve decompression is **a minimally invasive procedure used to relieve some of the pressure on the optic nerve and stabilize or improve vision by removing a portion of the bony optic canal).**

Q4:

- Findings:
- Give diagnosis:



Answer:

- Neovascularization, increase cup: disk ratio, hard exudates, Retinal photocoagulation marks (brown dots all over the retina).
- **Proliferative** diabetic retinopathy

Q5

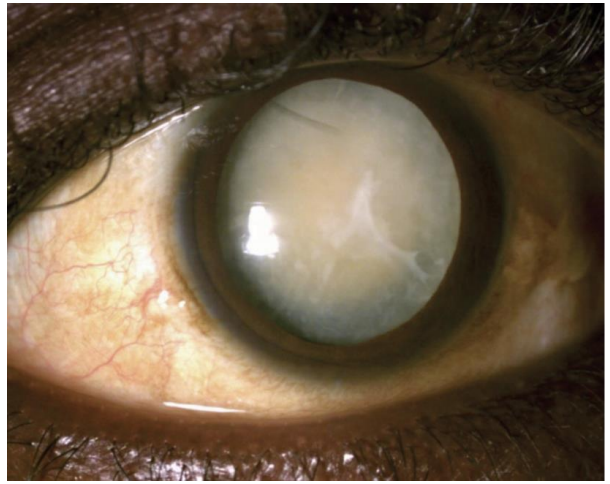
- Findings :
- Spot diagnosis :

- Answer:

- Findings : chemosis , lid retraction , proptosis
- Spot diagnosis : Graves’ disease

Q.6

- Name 2 findings related to the condition.
- Two surgical treatment.
- Most important post- operative complicaion.

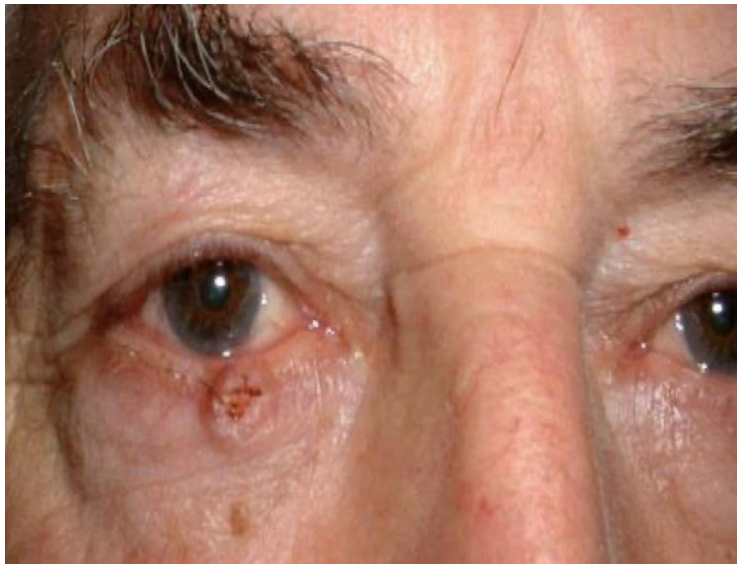


- Answer:

- Findings : Complete opaque lens (mature cataract), Leukocoria (white papillary reflex)
- Surgical treatment : Phacoemulsification, ECCE
- Post -operative complications: Endophthulmitis, Vitrous loss.

Q.7

- Describe.
- Most important diagnosis.
- Treatment.



- Answer:

- Right lower eyelid lumb with central ulceration (Rodent ulcer)
- Basal cell carcinoma (BCC)
- Eexcisional biopsy with safe margins/ Mohs Surgery.

Other treatment modalities; - Cryotherapy - Radiotherapy

Q.8

- Name 2 findings :
- 2 causes of the condition:
- Treatment:

- Answer:

- Hyphema, Ciliary flush, Conjunctival injection.
- Truma/ surgery & Robiosis iridis
- Prevent complications, monitor IOP, eye shield, ….

Management:

Preventing secondary hemorrhage and intraocular hypertension, Glaucoma and corneal blood staining by:

- Monitoring of intraocular pressure
- Eye Shield
- Limitation of activity
- Cycloplegia to manage pain
- Glucocorticoid eye drops, to lower the risk of rebleeding.

Management:

- Surgical clot evacuation:

Indications:

- Large persistent hyphemas (≥grade III for >10 days)
- Early corneal blood staining
- Uncontrolled intraocular pressure (ie, ≥50 mmHg for >5 days) despite maximal medical therapy

Q.9

- Name 3 findings:
- Most likely diagnosis :
- Work up for this patient :

- Answer:

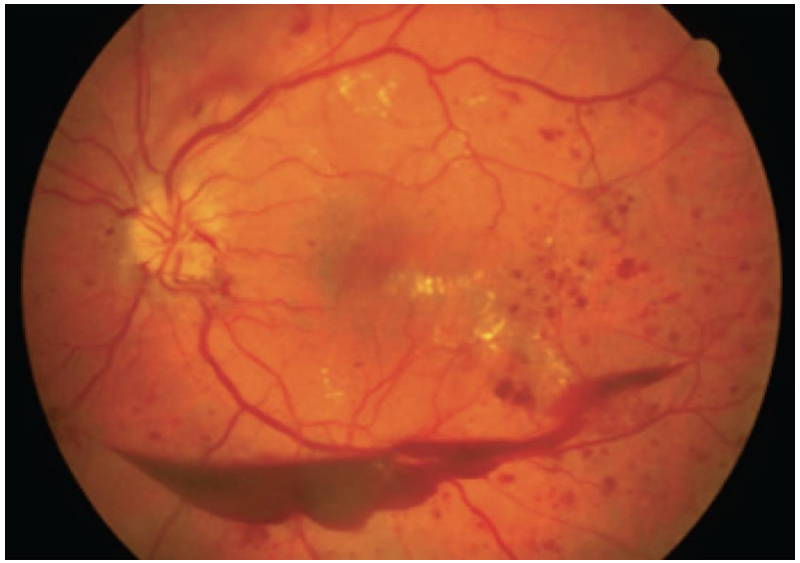
- lid retraction , ciliary flush , periorbital edema
- Grave’s disease
- Thyroid function tests (TSH, T3, T4), thyroid antibodies (TRAb, TSI), imaging (CT/MRI shows enlarged extraocular muscles)

Some Causes of Proptosis

Cause	Suggestive Findings	Diagnostic Approach
Graves disease	Eye symptoms: Eye pain, lacrimation, dry eyes, irritation, photophobia, ocular muscle weakness causing diplopia, vision loss caused by optic nerve compression Systemic symptoms: Palpitations, anxiety, increased appetite, weight loss, insomnia, goiter, pretibial myxedema (see Hyperthyroidism : Symptoms and Signs)	Thyroid function tests
Carotid-cavernous sinus or dural-cavernous sinus fistula	Pulsating proptosis with an orbital bruit	Magnetic resonance angiography
Cavernous sinus thrombosis	Ophthalmoplegia, headache, ptosis, decreased visual acuity, fever	CT or MRI
Congenital glaucoma and unilateral high myopia	Tearing, blepharospasm, redness	Intraocular pressure measurement and funduscopy by ophthalmologist
Orbital cellulitis	Redness, fever, pain, impaired visual acuity, impaired or painful extraocular movements Usually unilateral	CT or MRI
Orbital tumors (eg, lymphoma, hemangioma, vascular malformations)	Decreased visual acuity, diplopia, pain	MRI or CT
Retrobulbar hemorrhage	Decreased visual acuity, diplopia, pain, ophthalmoplegia, risk factors	Immediate CT or treatment based on clinical findings
Spheno-orbital meningioma	Pain, headache, visual field defects, ophthalmoplegia	MRI or CT

Q.10

- Name the pathological findings :
- Most likely diagnosis :
- treatment :



- Answer:

- Neovasculization, preretinal hemmorhage, dot/ blot hemorrhage, hard exudates.
- **Proliferative** diabetic retinopathy
- Retinal photocoagulation , Anti- VEGF (Avastin)

Q.11

- Describe :
- Differential diagnosis :
- Management:

- Answer:

- Left Periorbital swelling and redness with discharge
- Orbital cellulitis, preseptal cellulitis
- Admission, IV antibiotic , drainage of abscess

Q.12

- Describe the findings:
- Differential diagnosis :
- management:

- Answer:

- Chemosis, opacification of the cornea, ciliary flush.
- Chemical burn injury.
- water irrigation.

Q.13

A 71- year-old male presents with acute onset **excruciating, throbbing pain in his left eye.** This is accompanied by **marked blurring of vision in the affected eye, describing halos around lights and haziness.** He also reports **nausea and two episodes of vomiting.** Look at the picture and answer the following questions.

- Differential diagnosis:
- Managment :

- Answer :

- ACUTE closed angle glaucoma
- Timolol drops, prostaglandin drops, YAG laser iridotomy or surgical iridectomy.

Management outline

- Lower IOP:
  - Systemically : IV Acetazolamide/ Mannitol
    oral Acetazolamide
  - Topical Eye drops: B blockers, α agonists, Carbonic anhydrase inhibitors, pilocarpine
- Break the angle closure cycle:
  - YAG laser Iridotomy/ Surgical iridectomy
- Examine second eye and treat prophylactically

Q.14

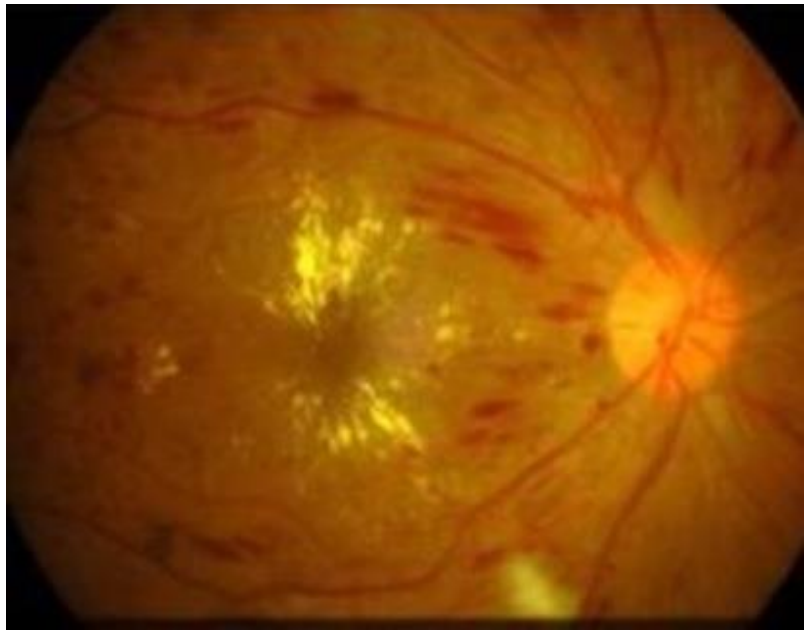
- Describe :
- Differential diagnosis:
- Treatment :

Answer:

- Cloudy cornea, intensely red conjunctiva with prominent dilated blood vessels and limbal ischemia.
- Chemical burn injury.
- Water Irregation for 30-60 min.

Q.15

- Describe :
- Give 2 differentials :
- Treatment for each :



- Answer:

- Hard exudates, retinal hemorrhage
- NPDR, hypertensive retinopathy.
- Treatment for each:

1. NPDR ⇒ if mild- moderate : no treatment. Severe : follow up
2. Hypertensive retinopathy: lower the mean arterial pressure

Treatment

❖Mild & Moderate NPDR

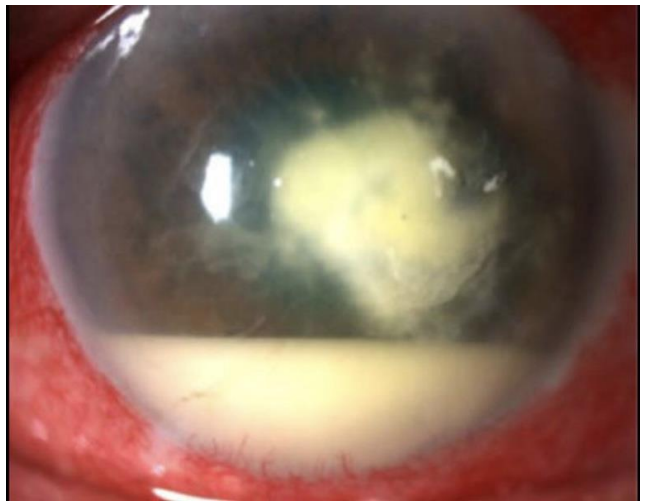
- No specific treatment for retinopathy
- Good diabetic control to delay progression
- Control of associated Hypertension, Anemia and Renal failure

❖Severe NPDR

- Close follow up by Ophthalmologist

Q.16

- Name three pathological findings :
- What is the most likely diagnosis:
- What is the treatment:

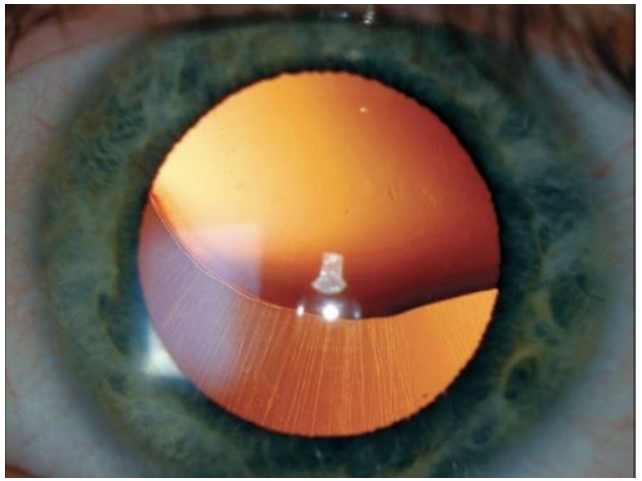


- Answer:

- Hypopyon, white corneal opacity, ciliary flush
- Bacterial keratitis .
- Topical Broad spectrum Abx .

Q.17

- What is the diagnosis :
- Mention three possible causes:



- Answer:

- Superior ectopia lentis
- Ocular trauma, connective tissue diseases such as Marfan syndrome, metabolic diseases such as homocystinuria

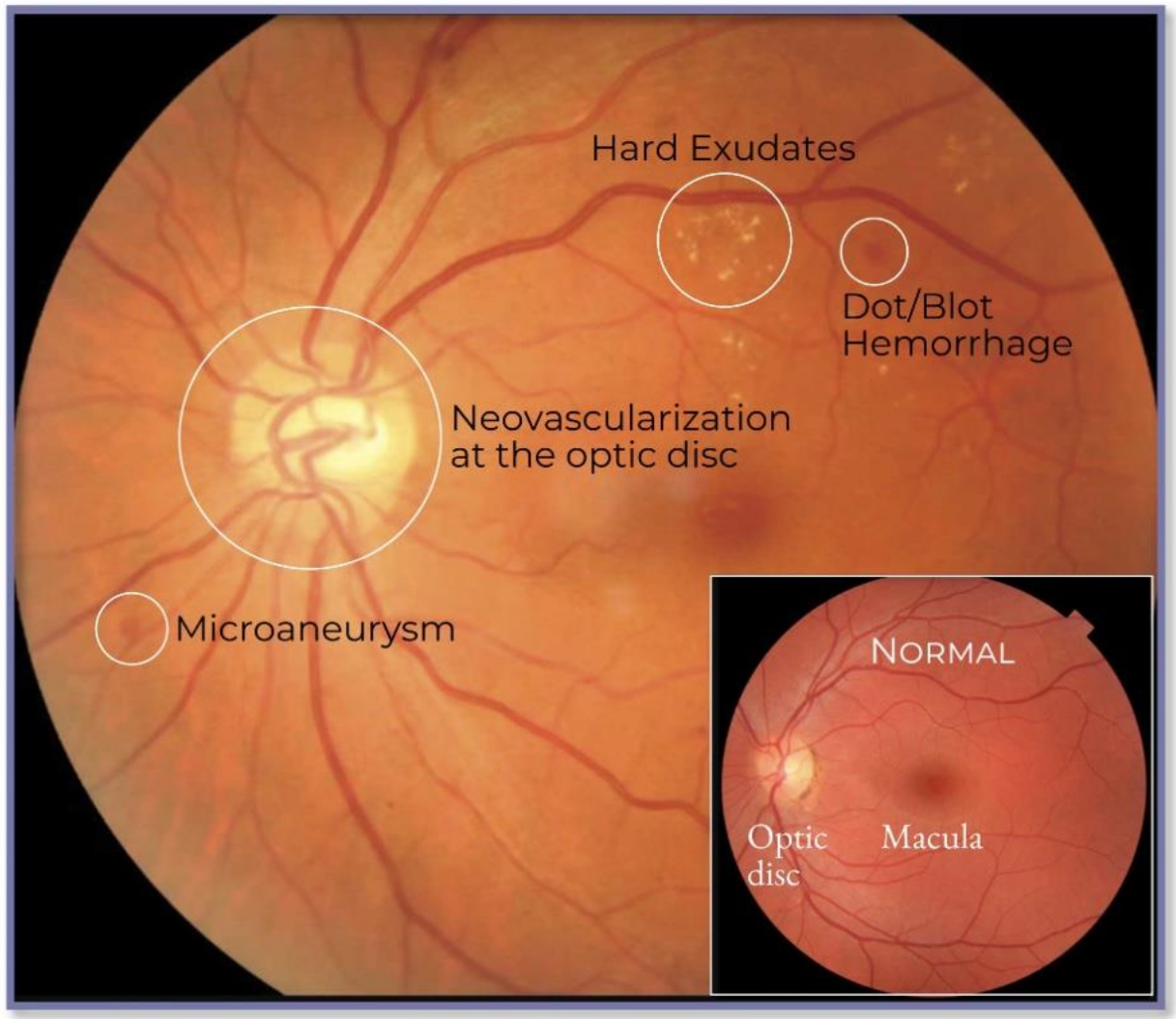
Q.18

- Name three pathological changes in the image
- What is the diagnosis

- Answer:

- Microaneurysms, dot and blot hemorrhages, neovascularization of the retina (there may have also been cotton wool spots)
- Proliferative diabetic retinopathy

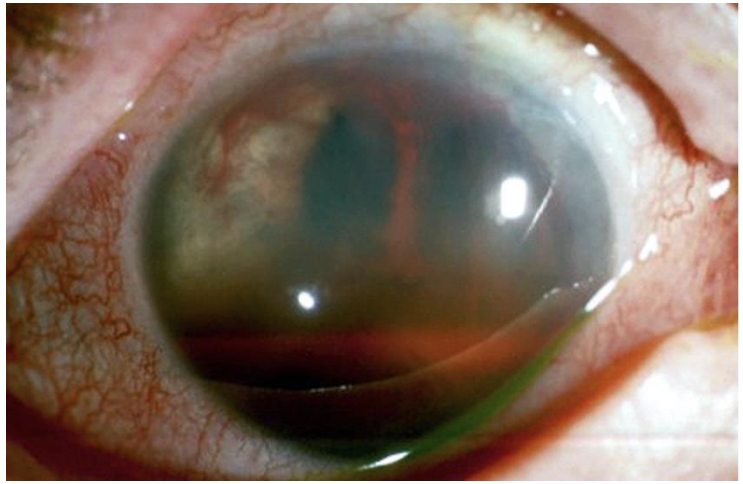
Diabetic Retinopathy (DR)



Nonproliferative DR - Exudates, Dot/Blot hemorrhages, Microaneurysms
Proliferative DR - Neovascularization

Q.19

- Name two pathological findings.
- Mention three causes.

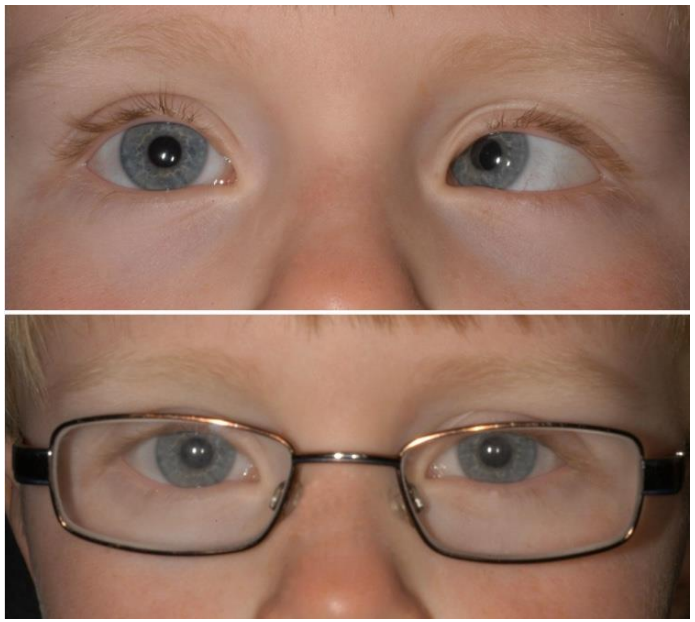


- Answer:

- Name two pathological findings : Hyphemia, ciliary flush, area of active bleeding from superior iris.
- Mention three causes : trauma , Sickle cell anemia , rubeosis iridis.

Q.20

- What is the finding in this image :
- After considering the lower image, what is the diagnosis?

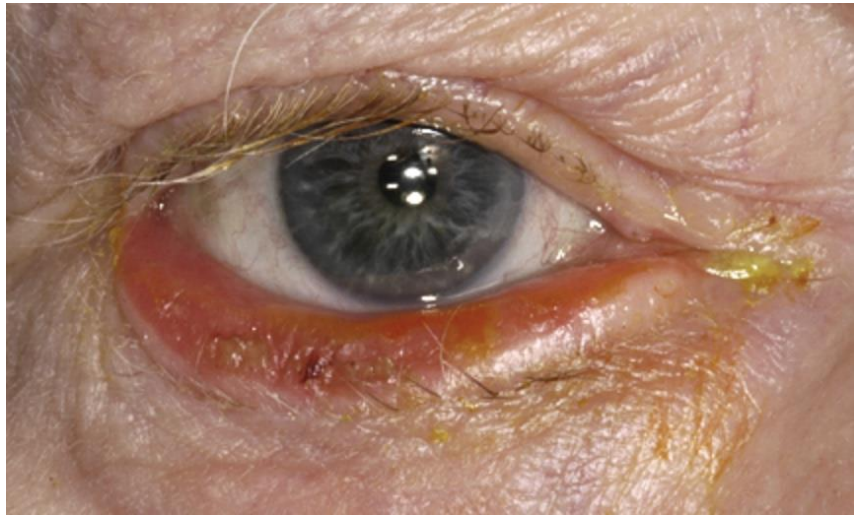


Answer:

- Esotropia in the left eye.
- Accommodative esotropia secondary to hypermetropia

Q.21

- Diagnosis:
- Mention three symptoms:
- Mention 2 lines of treatment:



- Answer:

- Ectropion
- Outward turning of the lower eyelid, dry irritable eye, excessive tearing.
- Artificial tears, surgical.

Q. 22

- What is the most serious differential diagnosis
- How would you manage this patient

- Answer:

- Orbital cellulitis
- Admit to hospital, blood culture, start IV antibiotics, surgical drainage of abscess, optic nerve decompression,

- **Diagnosis :**

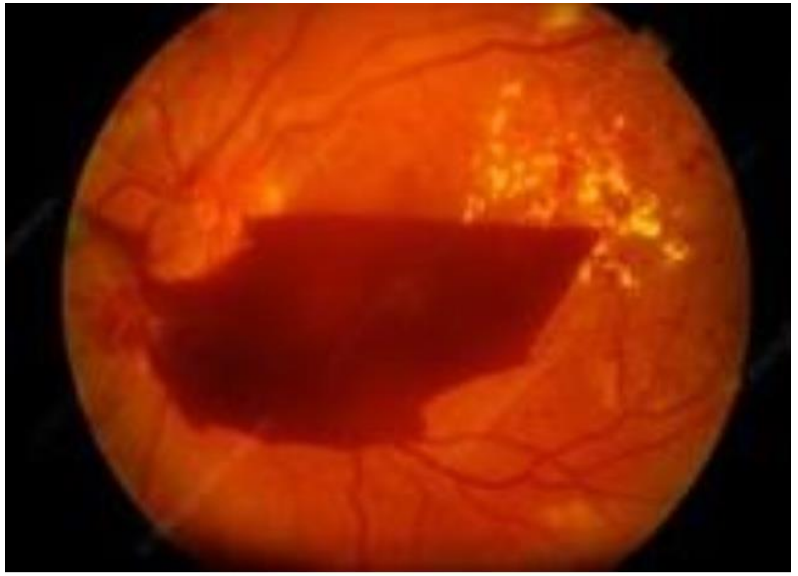
  MRI or CT

Treatment :

1. Admit the patient, blood cultures, orbital CT, IV antibiotics (ceftriaxone + vancomycin) for 1 week .
2. Surgical drainage of abscess with close follow-up, especially in children .
3. Optic nerve decompression if it's compromised .
   (Endoscopic optic nerve decompression is **a minimally invasive procedure used to relieve some of the pressure on the optic nerve and stabilize or improve vision by removing a portion of the bony optic canal).**

Q.23

- Mention three abnormalities
- Mention two lines of management



- Answer:

- Pre-retinal hemorrhage, hard exudates, neovascularization.
- Intravitreal Anti-VEGF, laser photocoagulation (proliferative DR)

Q.24

- A 65 year old lady underwent cataract surgery. Mention two complications that may occur one day after the operation other than endophthalmitis:

1. Aqueous humour leakage (seidel sign)
2. Retinal detachment
3. Macular edema

Q.25

All of the following can cause optic disc edema except:

A. Open angle glaucoma
B. Hypertensive retinopathy
C. CRVO (central retinal vein occlusion)
D. Papillitis

Q.25

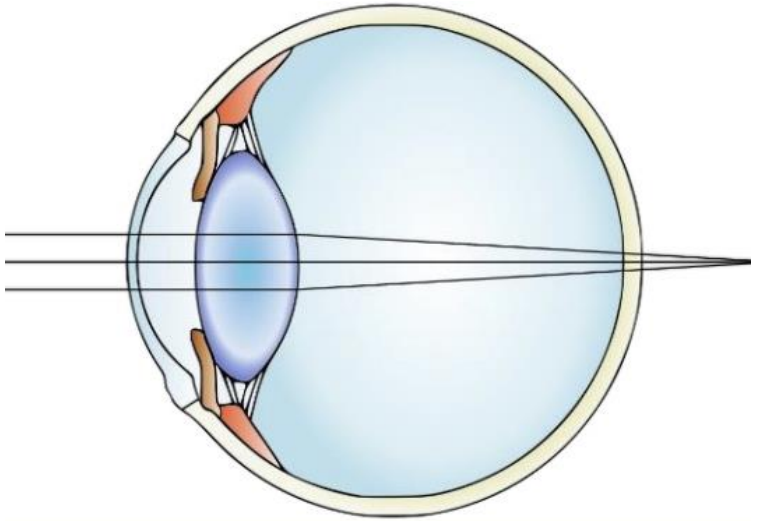
All of the following can cause optic disc edema except: (this Q was without pic)

A. Open angle glucoma
B. Hypertensive retinopathy
C. CRVO (central retinal vein occlusion)
D. Papillitis

Open-angle glaucoma is characterized by progressive optic nerve damage and visual field loss, the damage manifests as **optic disc cupping and atrophy**, not edema (swelling) of the optic disc

Q.26

- What's the name of this condition:
- What do patients complain of:
- How to treat this condition:



- Answer:

- Hypermetropia.
- Inability to see near objects.
- Convex lens to converge light or surgical.

Q.27. Matching :

i. Leucokoria	A. Upward deviation of the eye
ii. Anisocoria	B. White pupile
iii. Hypertropia	C. Asymmetric pupile size
iv. Aniseikonia	D. Lazy eye
v. Ambylopia	E. Asymmetric image size

i. Leucokoria	B. White puple
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v. Ambylopia	D. Lazy eye

Q. 28 A 30-year-old patient complaining of sudden vision loss.

- Diagnosis
- Mention 2 risk factors for this condition.

- Answer:

- Retinal detachment
- Cataract surgery, myopia

Retinal detachment occurs when the retina separates from the underlying retinal pigment epithelium and choroid, resulting in retinal ischemia and photoreceptor degeneration. Without treatment, many symptomatic retinal detachments progress to involve the entire retina and lead to loss of vision.

There are two main categories of retinal detachments:

- **Rhegmatogenous** retinal detachments (RRDs) result from a break in the retina that allows liquefied vitreous to enter the subretinal space. Most cases of RRDs are preceded by posterior vitreous detachment (PVD)
- **Nonrhegmatogenous** detachments are due to **exudative** processes or **tractional** forces.

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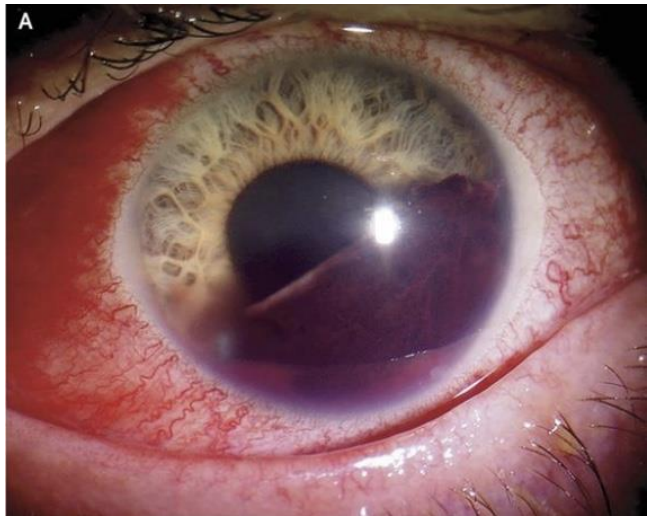
Risk factors – Risk factors for **RRDs** include PVD, older age, prior intraocular surgery, myopia, lattice degeneration, family history of retinal detachment, history of retinal detachment in the other eye, ocular trauma, and congenital connective tissue disorders. **Tractional** retinal detachments typically arise in patients with diabetes and **exudative** retinal detachments in patients with inflammatory conditions of the eye.

Q.29

This is the eye of a patient following a trauma.

- Mention 2 findings you see in the picture.
- What's the type of glaucoma in this patient.



- Answer:

- Hyphemia, conjunctival injection, limbus ischemia.
- Secondary open angle glaucoma (clogging by RBCs).

Q.30

- What's the name of the sign in the first picture?
- This is the pelvic x-ray of the same patient. What's the most likely diagnosis?
- What's the type of HLA associated with this condition?

- Answer:

- Posterior Synechia
- Ankylosing spondylitis.
- HLA-B27

Q.31

- Imaging type
- Findings
- What do you do next?

Answer :

- Axial CT of the head.
- Hyperdense foreign body in left orbital area with radiating beams indicating a metallic nature.
- Prophylactic Antibiotics, Tetanus prophylaxis, urgent ophthalmologic evaluation, NPO.

Open globe injuries:

- **Open globe rupture:** Occurs following blunt eye injury.

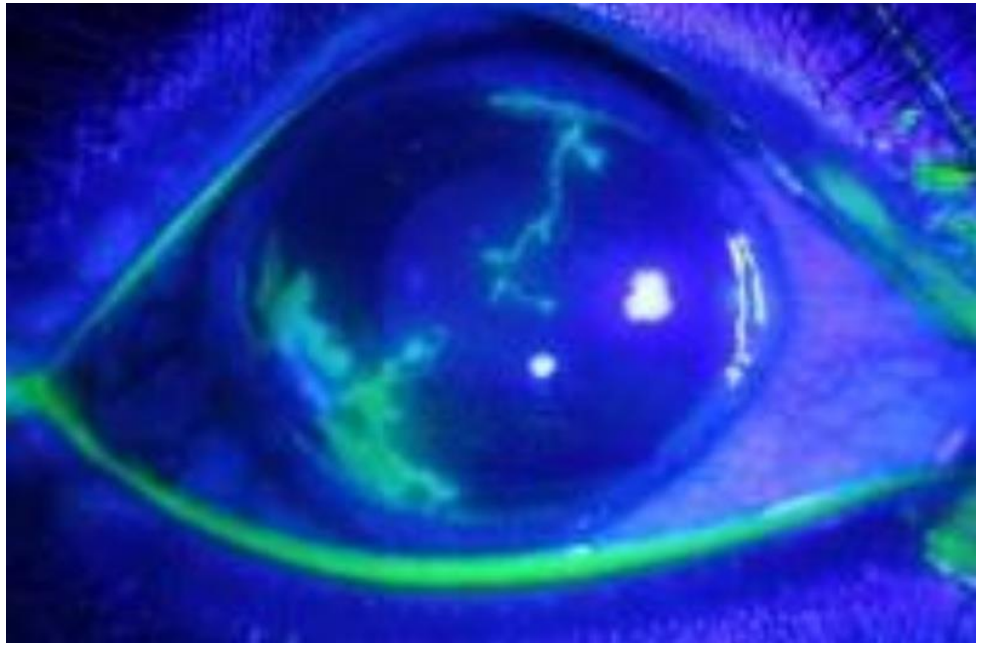
- **Open globe laceration:** Refers to a penetrating injury to the eye by a sharp object.
  - penetrating (entry wound but no exit wound)
  - perforating (entry and exit wounds)
  - Corneal laceration
  - Corneal-scleral laceration
  - Scleral laceration

Management:

- Urgent ophthalmologic evaluation
- NPO state
- Prophylactic antibiotics to avoid posttraumatic endophthalmitis
- Tetanus prophylaxis for ocular lacerations
- Rapid primary closure of an open globe injury, ideally within 24 hrs
- Rapid closure promotes the best visual outcome

Q.32

- Finding
- Investigation used
- Treatment



- Answer

- Dendritic ulcer
- Fluorescein dye with blue light in slit lamp.
- Topical antivirals (aciclovir)

- Q. 33
- Findings
- Give two differential diagnosis
- Treatment for each differential

- Answer:

- Microaneurysms, hemorrhages, hard exudates, cotton wool spots.
- NPDR ⇒ Close follow up by ophthalmologist, Anti VEGF (if clinically significant macular edema).
- Hypertensive retinopathy⇒ control blood pressure

Q.34

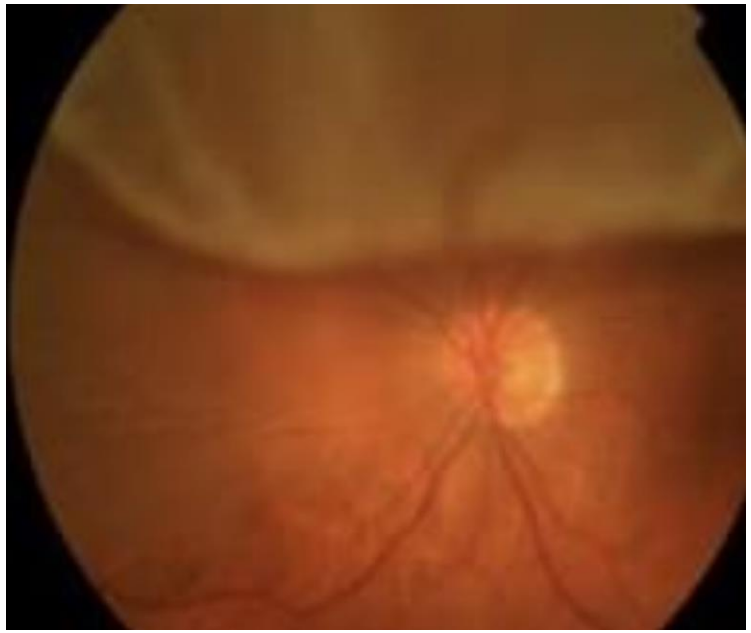
- Findings
- Possible causes
- Treatment

- Answer:

- Opacification of the cornea, white conjunctiva
- Chemical burns, alkali
- Continuous irrigation for 30-60 minutes.

Q. 35

- Finding
- Symptoms
- Treatment



- Answer:

- Retinal Detachment
- Floaters, Scotoma, Visual loss
- Surgical repair

Q.36

- Describe what you see.
- Write 2 treatments for this condition depending on the severity.
- Write 3 most common AND serious complications post surgery.

- Answer:

- Cortical cataract
- Phacoemulsification (ECCE).
- Endophthalmitis, vitreous loss, retinal detachment, macular edema

Q.37

- Describe what you see
- What's the name of this sign.
- Write 3 possible causes.

- Answer:

- white papillary reflex / loss of red reflex
- leukocoria
- congenital cataract, glaucoma, retinoblastoma.

Q. 38

- Describe what you see.
- Write 2 possible causes.
- What systemic work up would you do.

- Answer:

- Right eye proptosis, redness & swelling.
- Grave's disease, orbital pseudotumor.
- Serum TSH, Free T4, Total T3 &TSH (thyrotropin) receptor antibodies (TRAbs)

Q.39

- Describe what you see.
- Write 2 possible causes.
- What systemic workup would you do.

- Answer:

- Paralytic squint- right 6th nerve palsy
- Diabetes, high ICP, Neoplasm -meningioma
- CBC, ESR, ANCA, fundoscopy Head & neck CT, MRI.

Q.40

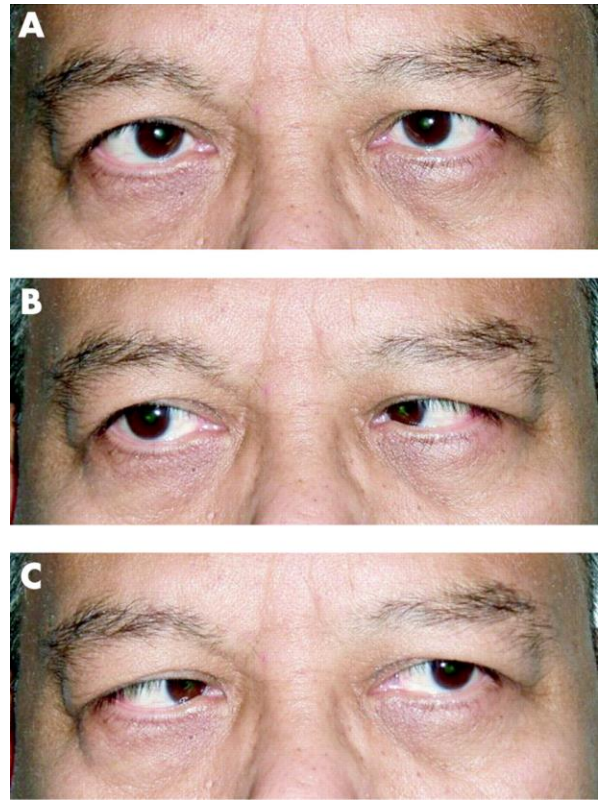
- Write 3 signs you can see.
- What is the most likely diagnosis.
- How would you treat it.

- Answer:

- Microaneurysms, dot and blot hemorrhages, neovascularization of the retina
- PDR
- Anti-VEGF, Laser photocoagulation.

Q.41

- If this is 6th nerve palsy mention two causes .



Answer:

- rised ICP, Inflammation (sarcoidosis, vasculitis), trauma, Cavernous sinous thrombosis.

Q. 42

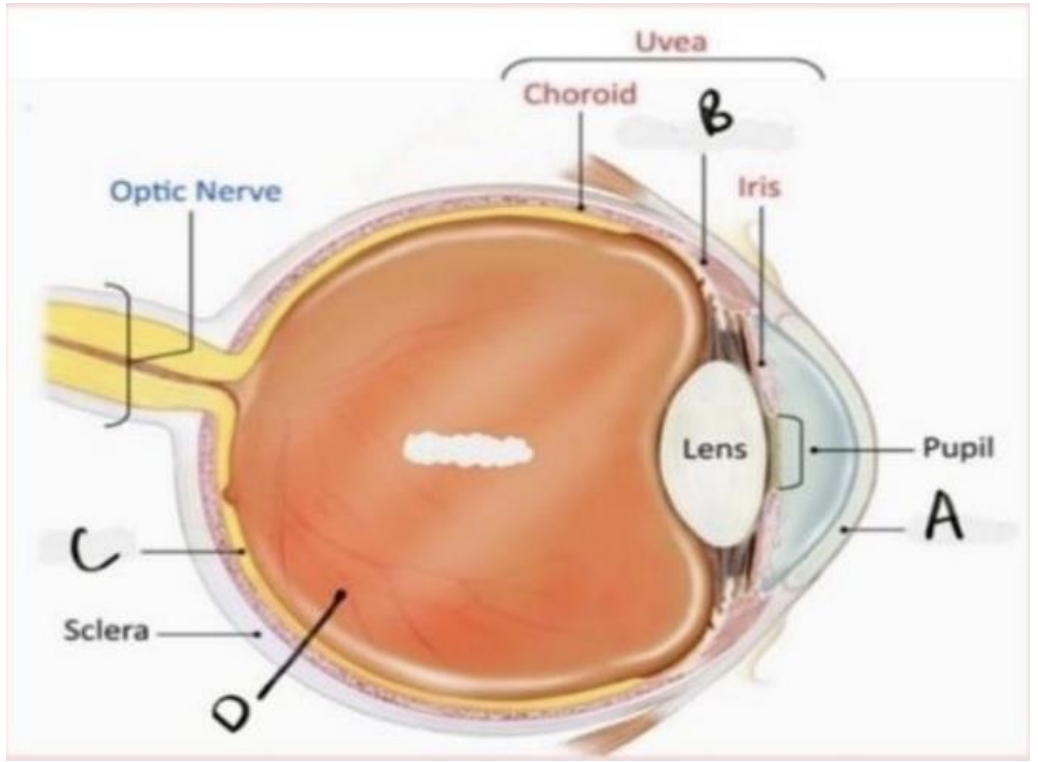
- Mention two causes other than cataract.

Answer:

- Retinoplastoma, retinal detachment.

Q. 43

- Thickness of (A) at its center
- The 2 parts of (B)
- Most anterior part of (C)
- Composition of (D)



- Answer:

- 0.5mm
- Pars plana/ pars plicata
- The inner neurosensory retina
- Vitrous humor

Q.44

- Lasik contraindication for a female patient:
- Pregnancy & lactation

- β-blocker eye drop contraindication:
- Bradycardia, heart block & asthma

- Causes of sudden painless vision loss other than retinal detachment:
- Ischemic optic neuritis, central retinal vein occlusion, vitreous hemorrhage.

Q.45

- Causes of vision loss in graves disease :
- Optic N. Compression & corneal ulceration

- Causes of anisocoria :
- Horner's syndrome & Adie's syndrome

- Causes of myopia in a 33 female patient :
- D.M , cataract & Keratoconus

Q.46

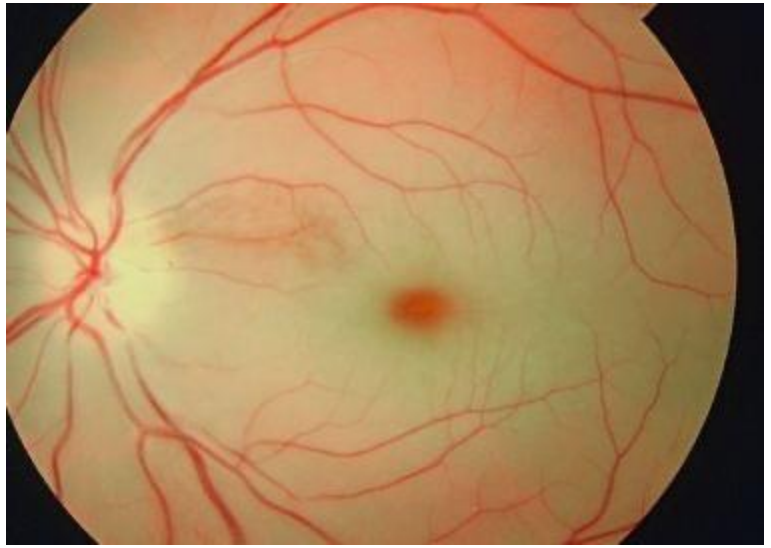
- Describe
- Treatment

- Answer:

- Eversion of the lower lid away from the globe (ectropion)
- Surgical treatment

Q. 47

- Describe
- Treatment

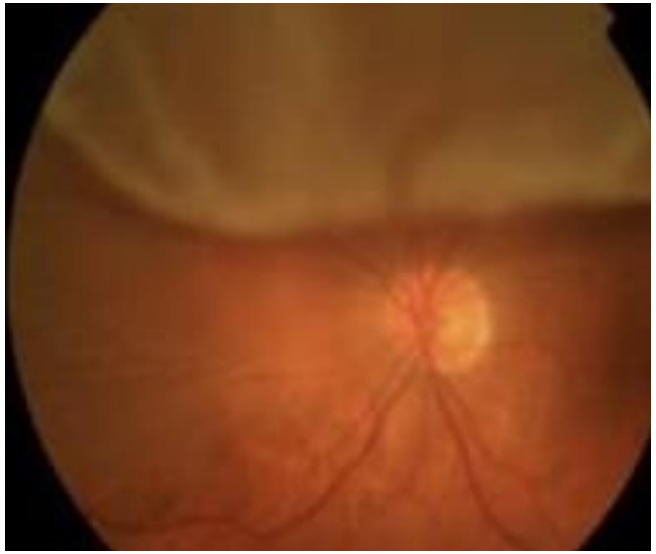


- Answer:

- Reddish area at the center of the macula/ central retinal artery occlusion (charry red spot)
- Dislodge the embolus/ revisualization

Q.48

- Describe
- Treatment

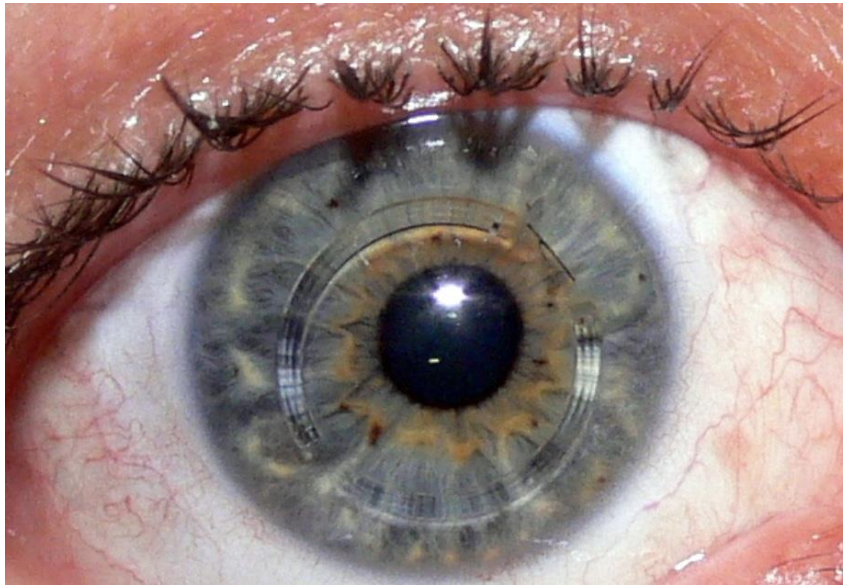


Answer:

- Retinal detachment
- Urgent surgical repair.

Q.49

- Name the device
- Indication



Answer :

- Intrastromal corneal ring segment
- Keratoconus

Q. 50

16 years old boy presented with progressive loss of vision

- What is the diagnosis:
- Investigation to confirm your diagnosis:
- 3 treatment modalities:

Answer :

- Keratoconus
- Corneal topography.
- 1. Hard contact lenses/ glasses 2.corneal cross linking 3. intrastromal corneal ring

Q. 51

65-year-old man presented with sudden painless vision loss

- Cause:
- Differential Diagnosis

- Answer:

- Vitreous hemorrhage
- Proliferative diabetic retinopathy, head truma.

Q. 52

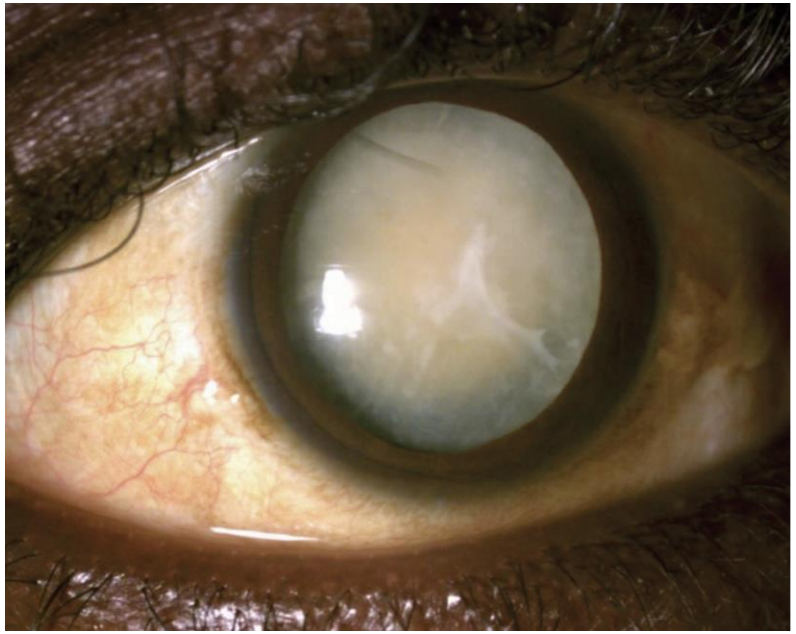
- Diagnosis
- Treatment

Answer:

- Dacrocystitis
- Systemic antibiotic

Q.53

- Diagnosis
- Surgical manegment
- Complications of surgery



- Answer:

- Mature cataract
- Phecoemulisefication, ECCE
- Endophthalmitis, posterior capsular opacification, iris prolaps, vitreous loss

Q.54

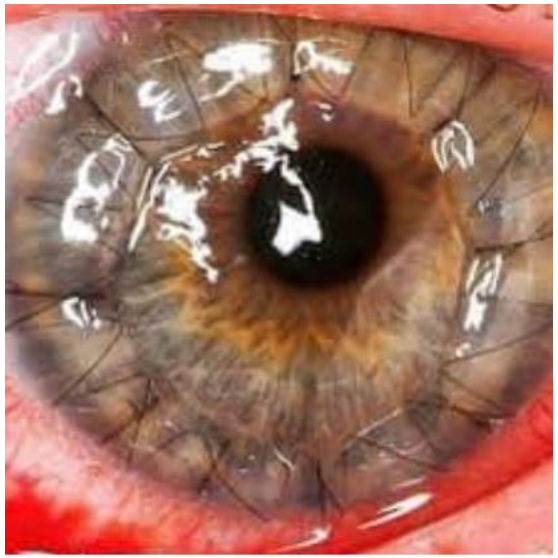
- Diagnosis
- Causes

Answer

- Hypopyon
- Anterior Uveitis, endophthalmitis, bacterial keratitis

Q. 55

- Describe what you see
- Indication
- Complications



- Answer

- Corneal sutures indicate penetrating keratoplasty (PKP), corneal graft
- Keratoconus, corneal dystrophy, persistant keratitis, corneal opacity.
- Regection, endophthalmitis, glaucoma, astagmatism

Q.56

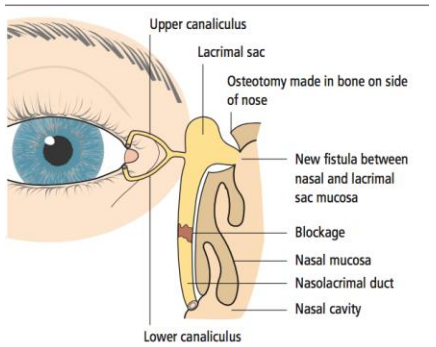
- Describe findings
- Differential diagnosis
- Systemic work up
- Clinical signs

- Answer:
- Left eye proptosis, lid retraction & chemosis
- Grave’s disease, orbital cellulitis, orbital pseudotumor.
- Serum TSH, T3/T4, brain CT, MRI.
- Ptosis, chemosis, lid retraction, opthalmoplagia & lid lag.

Q. 57

- Describe
- Risk factor to this condition
- Surgical procedure

- Answer:
- Swelling at the medial lt lower part of the orbit
- Obstruction of the nasolacrimal system
- Dacryocystorhinostomy (DCR)



Q.58

- Describe
- Posible cause of visual disterbance in this child
- How to treat

- Answer:
- Congenital left eye ptosis
- If the ptosis interfere with visual axis, this can lead to ambylopia (failure of visual maturation- lazy eye).
- Patching of the notmal eye, treat the underlying cause if present (ex; mysthenia grave’s), surgical correction.

Q.59

- Name 2-findings
- Most common cause
- Two complications

- Answer:

- Bilateral ptosis, lid retraction
- Grave’s disease
- Optic nerve compression, corneal ulceration.

Q.60

- Name the sign
- causes
- Mention 3 complications
- Management

- Answer:

- Hyphema
- Truma, post-surgical, diabetes melitus retinopathy.
- Secondary open angle glaucoma, corneal blood staining, intraocular hypertension.
- Prevent complications, monitor IOP, eye shield, steroid drops, cycloplegia.

Traumatic hyphema

Management:

Preventing secondary hemorrhage and intraocular hypertension, Glaucoma and corneal blood staining by:

- Monitoring of intraocular pressure
- Eye Shield
- Limitation of activity
- Cycloplegia to manage pain
- Glucocorticoid eye drops, to lower the risk of rebleeding.

Management:

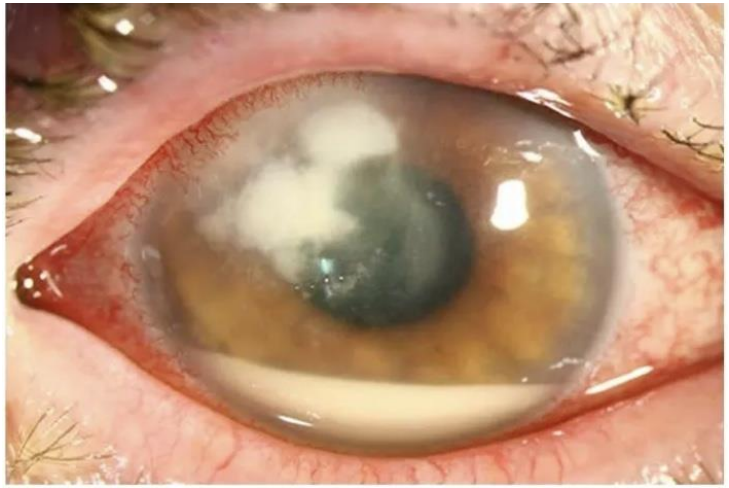
- Surgical clot evacuation:

Indications:

- Large persistent hyphemas (≥grade III for >10 days)
- Early corneal blood staining
- Uncontrolled intraocular pressure (ie, ≥50 mmHg for >5 days) despite maximal medical therapy

Q. 61

- Name 3-signs
- Name 3-risk factors

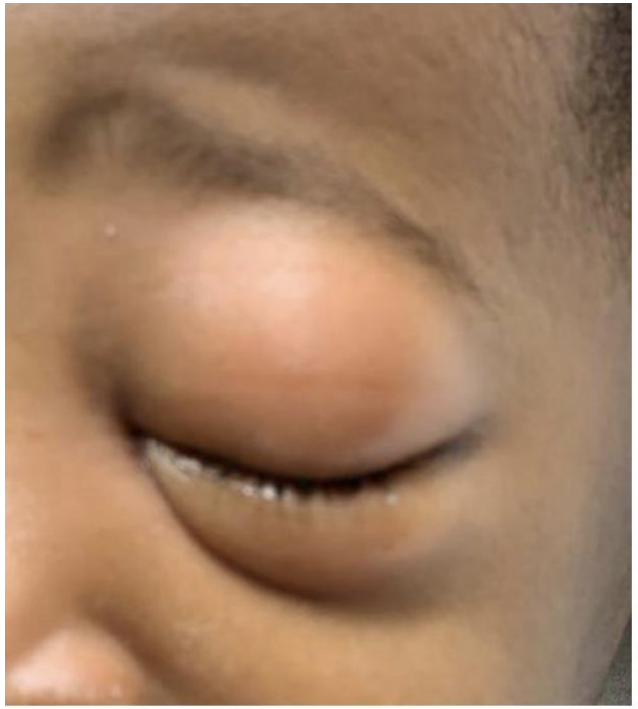


- Answer:

- Hypopyon, ciliary flush, white corneal opacification.
- Keratoconjungtivitis sicca, contact lens wearing, prolonged use of topical steroids.

Q. 62

- What signs to differentiate between this and other less severe form?



Eyelid swelling due to orbital cellulitis in a young child.

Answer:

Clinical feature	Preseptal cellulitis	Orbital cellulitis
Eyelid swelling with or without erythema	Yes	Yes
Eye pain/tenderness	May be present	Yes; may cause deep eye pain
Pain with eye movements	No	Yes
Proptosis	No	Usually, but may be subtle
Ophthalmoplegia +/- diplopia	No	May be present
Vision impairment	No	May be present*
Chemosis	Rarely present	May be present
Fever	May be present	Usually present
Leukocytosis	May be present	May be present

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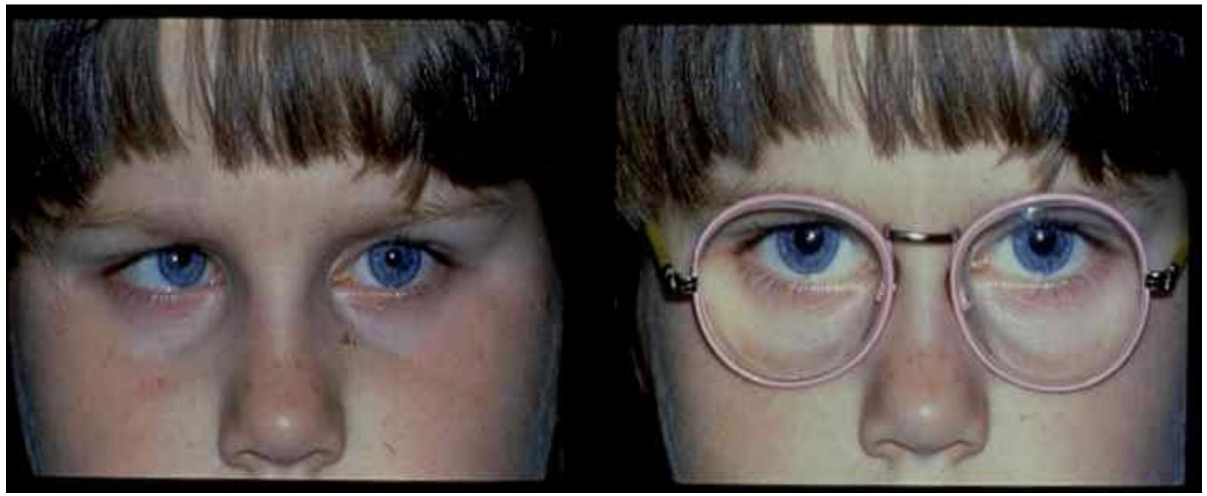
Q. 63

- Name the condition
- Type of glasses



- Answer

- Strabismus (accommodative esotropia caused by hyperopia)
- Positive glasses (convex lenses, eyes looks bigger).

Q.64

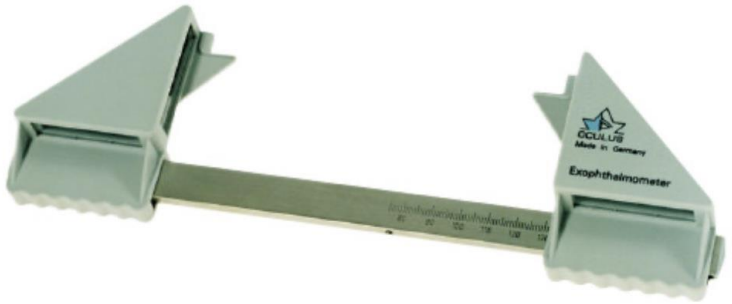
- Describe what you see
- Name 3- treatment modalities
- Complications of surgical procedure

- Answer

- Bulging of the cornea
- Hard contact lenses/ glasses, corneal cross linking, intrastromal corneal ring, corneal graft
- Endophthalmitis, astigmatism, peripheral anterior synechiae, graft rejection

Q.65 name each of the following :

A.



Hertel exophthalmometer

B.

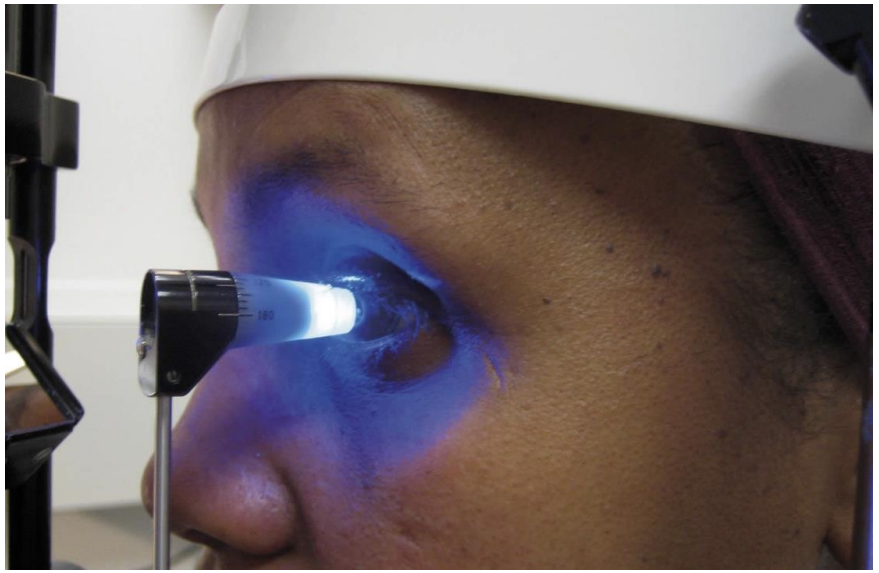
Prism bar

Used to measure the angle of deviation in strabismus

C.

Trial lens frame

D.



Goldmann applanation tonometer

Used to meausre IOP

E.

Corneal cross linking device

F.

Fundoscope/ ophthalmoscope

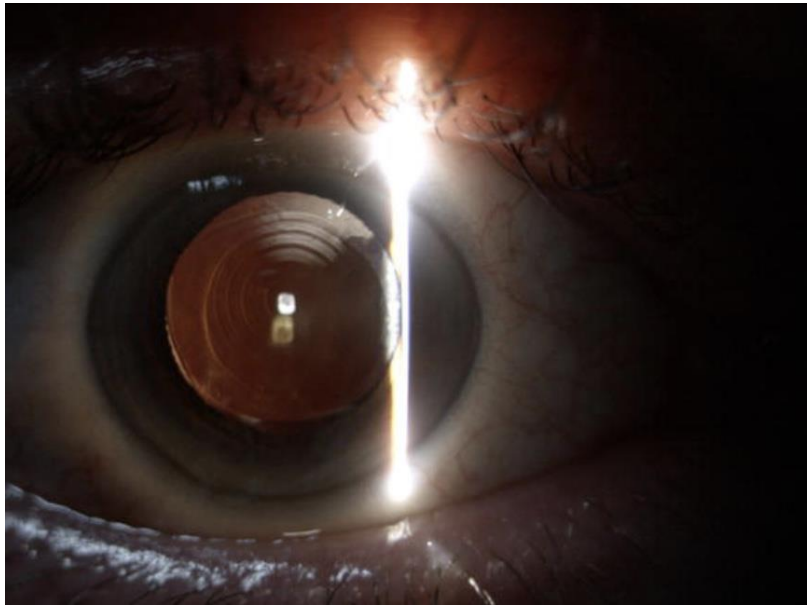
G.

Tonometer

H.

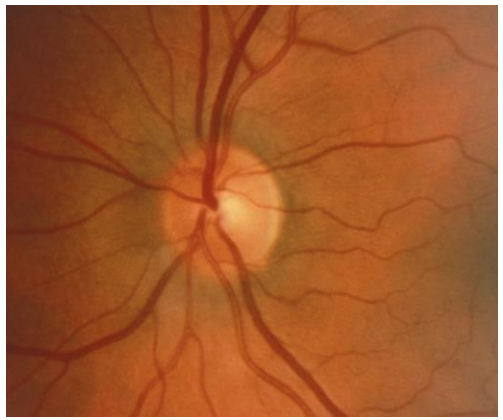
Fluorescent dye strep

I.



Pseudophakic lens/ artificial lens

• Q.66 mention the abnormalities seen :

A. 

B. 

C. 

Answer :

A. Optic disc pallor B. Optic disc edema C. Optic disc cupping

Q.67

- Diagnosis
- Give 1 Cause
- Give 1 complication

- Answer:

- Hyphemea
- Truma
- Secondary open angle glucoma

Q.68

- Name 2 presenting symptoms
- Name 4 ocular symptoms/signs
- Name 2 neurological symptoms
- Treatment

- Answer:

- Vesicular rash on forehead, eyelid and tip of nose (Hutchinson's sign- nasociliary nerve) fever.
- Keratitis, iritis, lid swelling and erythema, dendretic ulcers (herpes zoster opthalmicus) conjunctivitis, scleritis.
- V1 pain, headache and hypersthesia.
- Systemic antiviral (acyclovir), derma consult.

Q.69

- What does the patient have
- Name two instruments to view this pathology
- Two differentials

Answer:

- Leukocoria
- Slit lamp/ fundoscope
- Retinoplastoma, conginital cataract

Q. 70

- What's the sign
- Name 1 cause
- Name 2 risk factors not related to ↑IOP
- The medication that is contraindicated if the patient has sulfa-allergy

Answer:

- Optic disc cupping
- Glaucoma
- Female, older age, high myopia
- Acetazolamide

Q.71 Name the pathology:

A. 

B. 

C. 

A. Subconjunctival hemorrhage.

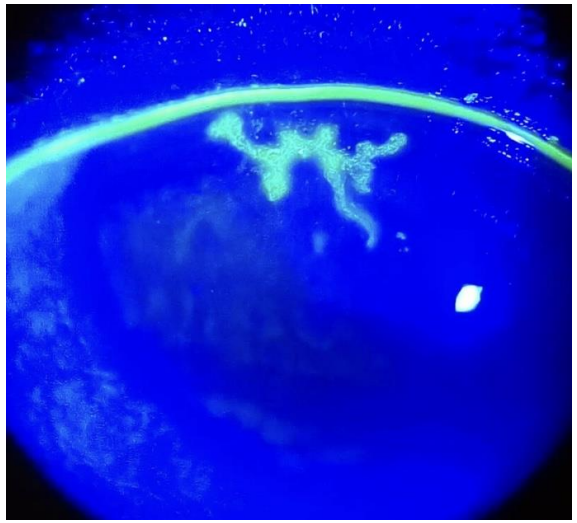
B. vitreous hemorrhage

C. hyphemea

Q.72

- Diagnosis
- Most common cause
- If you use topical steroids, the lesion becomes:

(worse, better, no change)

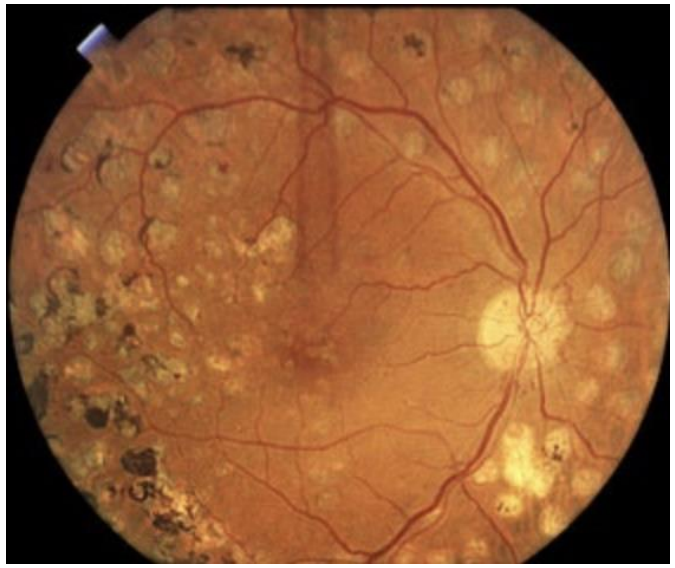


Answer

- Dendritic corneal ulcer
- Herpetic keratitis (HSV &HZV)
- Worse

Q.73

- Describe what you see
- Mention 2 complication of such procedure
- If you know that the patient has diabetic retinopathy, what stage is most likely to be



Answer:

- Retinal laser photocoagulation marks
- Reduce night vision, exudative retinal detachment, macular edema
- Proliferative DR.

Q. 74

- Menstion 2 side effects of the following eyedrop

Other than cataract

Answer

- Increase risk of bacterial keratitis, corneal thinning & perforation

Q. 75

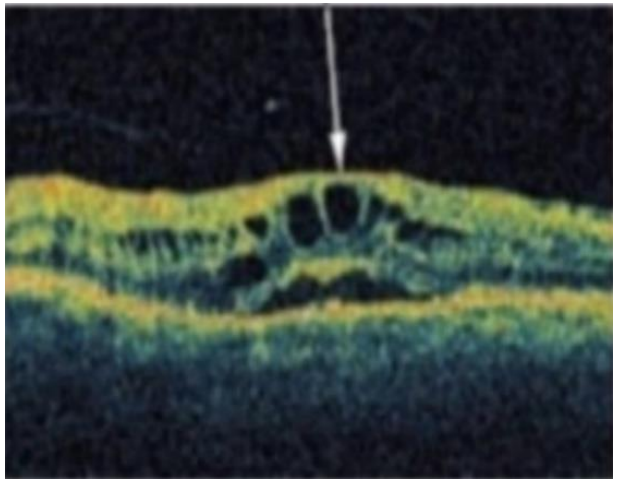
- Mention 2 causes of such condition

Answer

- Thyroid eye disease, retrobulber hematoma

Q.76

- Name of the image
- Diagnosis
- 2-possible causes
- Treatment



Answer:

- Optical coherence tomography – OCT (OCT alone wasn’t accepted)
- Macular edema
- Diabetic retinopathy, post intraocular surgery (cataract), retinitis pigmentosa
- Intravitreal Anti-VEGF injections, laser photocoagulation, topical steroids .

Q.77

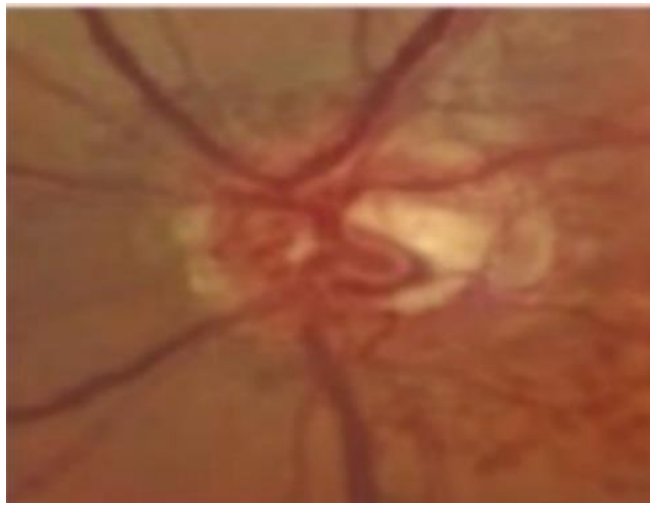
- Describe
- 3- differentials
- Investigations to do

Answer:

- Unilater left eye proptosis, swelling and erythema
- Thyroid eye disease, orbital cellulitis, lymphoma, meningioma.
- CBC, thyroid function (TSH, t3/4), ESR, orbital / brain CT & MRI.

Q.78

- Differential diagnosis
- Investigations
- Treatment

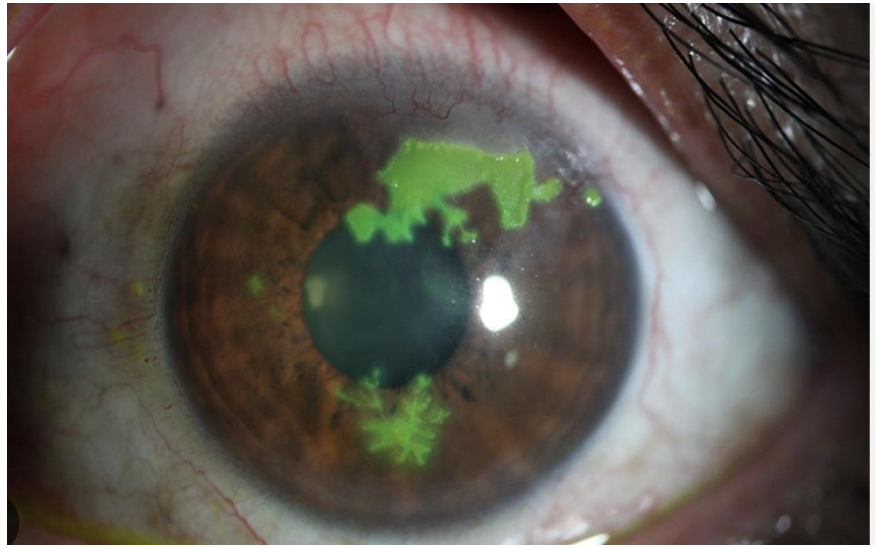


Answer:

- Diabetic retinopathy, retinal vein occlusion
- Blood glucose, HA1C, optical coherance tomography, fluorescein angiography
- Anti-VEGF, photocoagulation

Q. 79

- Type of staine used
- What is the cause
- Which layer of the cornea is involved

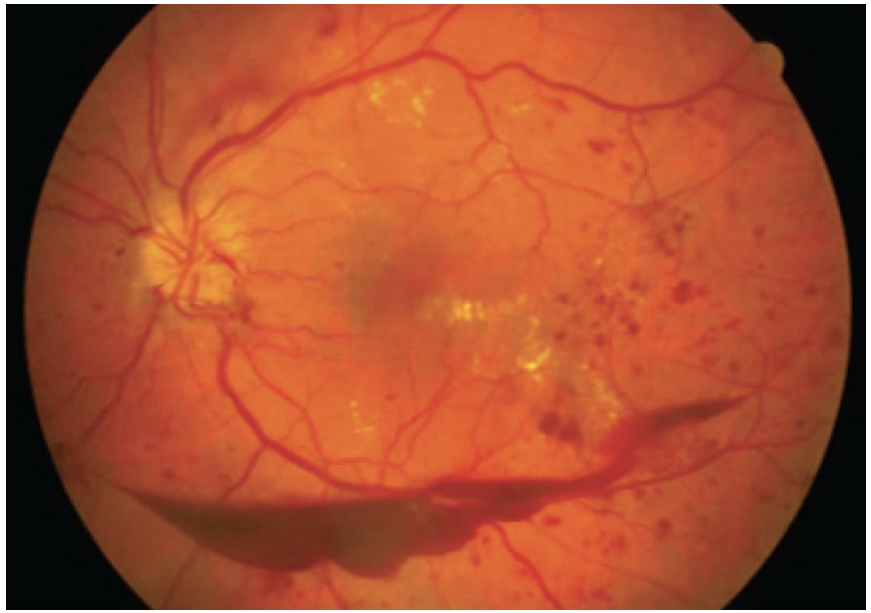


Answer:

- Fluorecine
- HSV type 1
- Epithelial

Q. 80

- Findings
- Most likely diagnosis

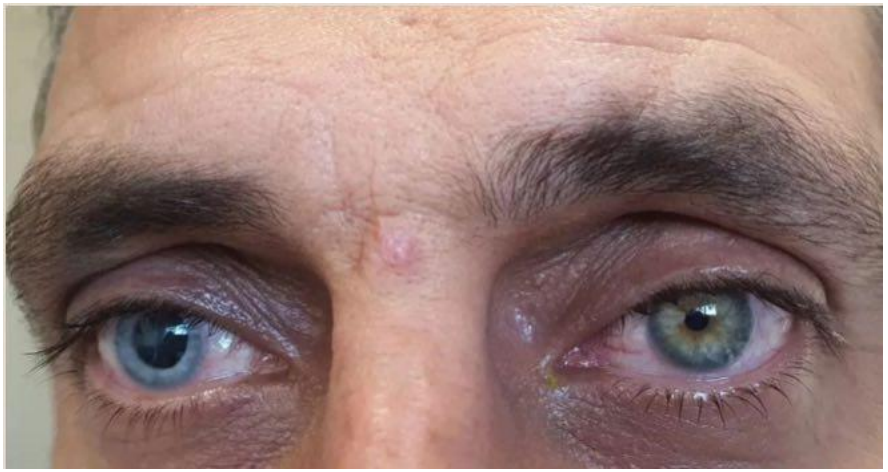


Answer:

- Preretinal hemorrhage, neovascularization, microanyrisms, cotton wool spots.
- Proliferative diabetic retinopathy.

Q. 81

- Mention 2 abnormalities
- Diagnosis



Answer:

- Heterochromia, fixed dilated puple of the right eye.
- Fuchs' heterochromic iridocyclitis.

Q.82

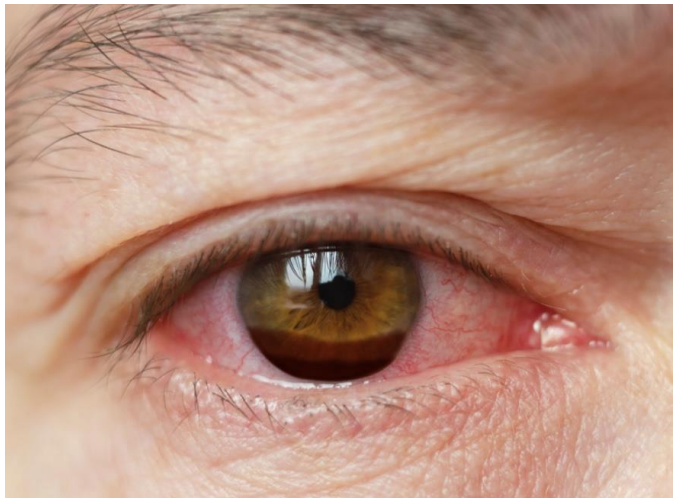
- Describe
- Mention 2-causes

Answer

- Neovascularization of the iris - **rubiosis iridis**
- Diabetic retinopathy (proliferative), chronic uvitis

Q. 83

- Mention 3 –complications
- Treatment



- Answer:

- Secondary hemorrhage,↑IOP, secondary open angle glucoma, corneal blood staining.
- Topical steroids, cyclopentolate

Q.84

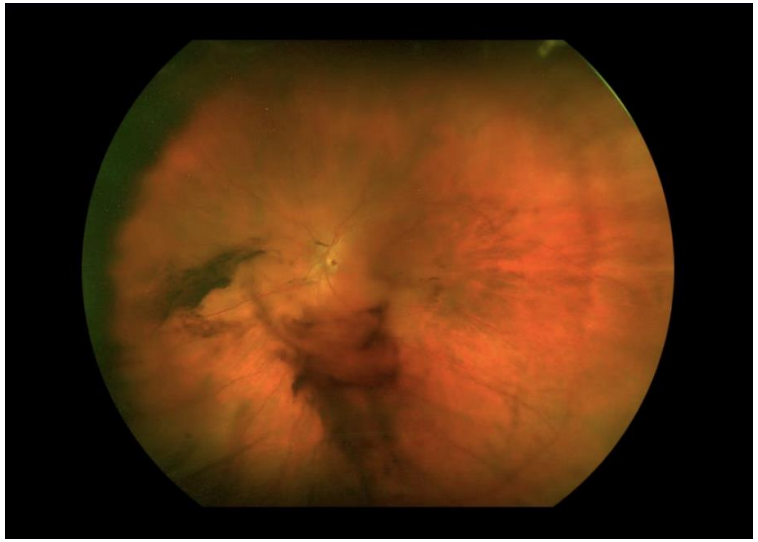
- Describe
- Patint presentation
- Treatment

Answer:

- Rhegmatogenous retinal detachment/ subretinal fluid from 10:00 clockwise to 3:00, extending posteriorly to just involve the center of the fovea.
- Sudden painless monocular vision loss/ flashing lights and blurred vision/ curtain-like vision loss.
- surgical repair (vitrectomy)

Q.85

- Differential diagnosis
- 3- investigations
- Treatment

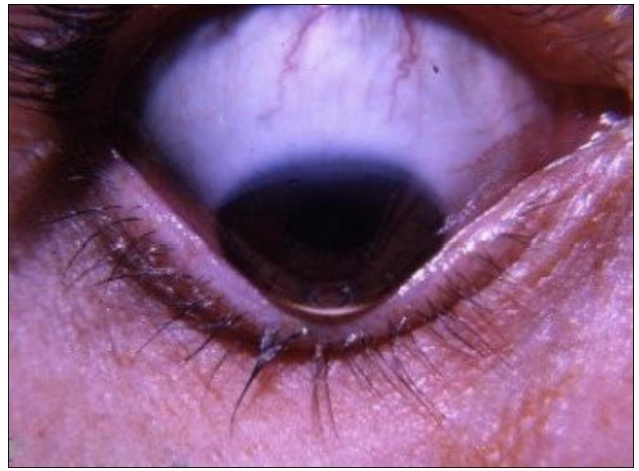


Answer:

- Diabetic retinopathy, truma, retinal tear.
- HbA1C, blood glucose, blood pressure, fluoresine angiography,

Q.86

- Describe
- 2-investigations aid in the diagnosis
- Approach to treat.

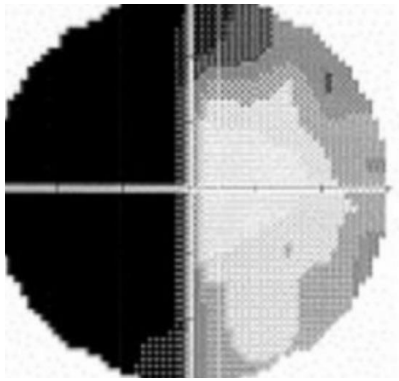


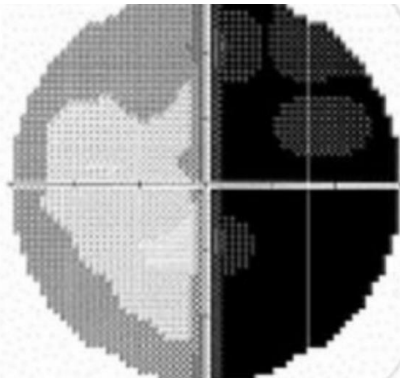
Answer:

- Keratoconus, bulging of the mid and inferior part of the cornea withbending of the lower lid (munson‘s sign)
- Corneal topography,corneal tomography, slit lamp, ophthalmoscope
- Spectecles, contact lens, corneal corss linking, intrastromal corneal ring, corneal graft.

Q. 87

- Name the test
- Other test helps in diagnosis
- Give one differential





Answer:

- Visual field test
- Optic nerve heaad imaging (OCT)
- Piuitary adenoma compressing optic chiasm

Q.88

- Name 2-differentials
- If the patient was adult, name 2-differentials

Answer

- Congenital cataract, retinoblastoma
- Cataract, retinal detachment.

Q. 89

- What is the light type used in this procedure
- Which corneal layer the procedure target
- Give one indication for such procedure

Answer

- Riboflavine (vitamin B_2) drops with UV light.
- Stromal layer
- Keratoconus.

Q.90

- Mention 2- abnormalities
- Differential Diagnosis

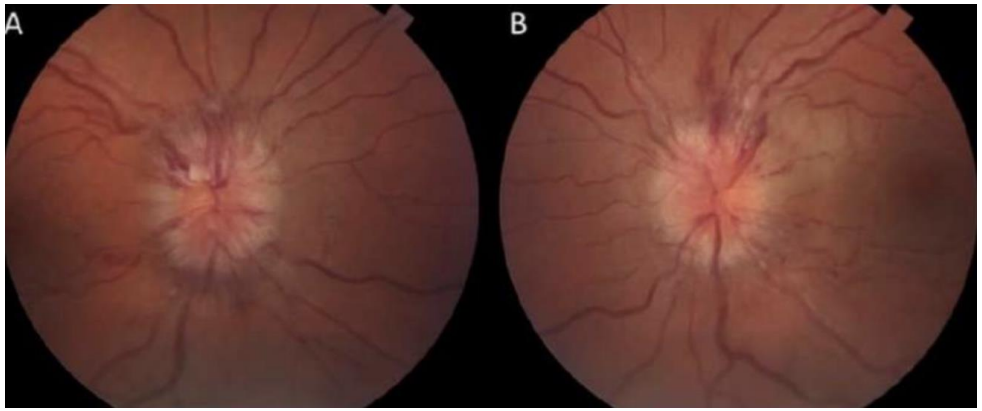
Answer:

- Right eye esotropia and ptosis.
- Cranial nerve 3 pulsy, intracranial artery anurysm, tumor, HTN, high IOP.

Q. 91

31 year old female present to ED with Sudden onset headache and vomiting.

- Describe
- Differential
- 2-causes

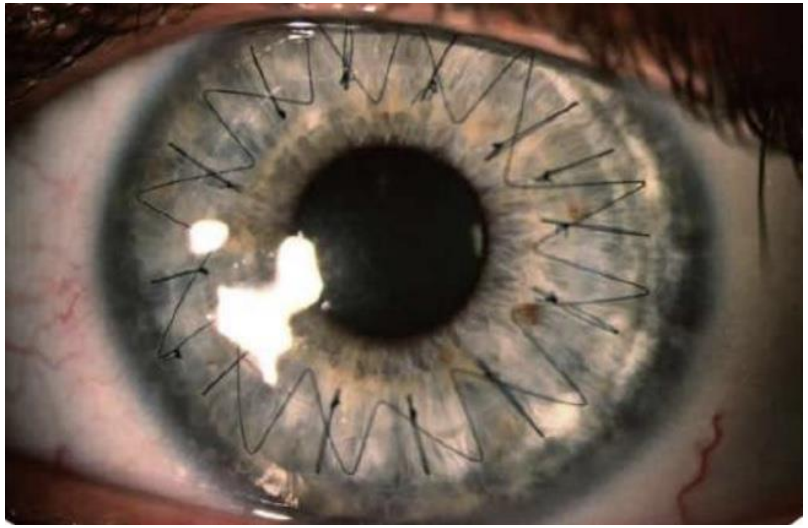


Answer

- Papilledema (bilateral optic disc swelling with high icp)
- Pseudotumor cerebri, malignant hypertension, brain tumors.
- ↑ ICP, uncontrolled HTN.

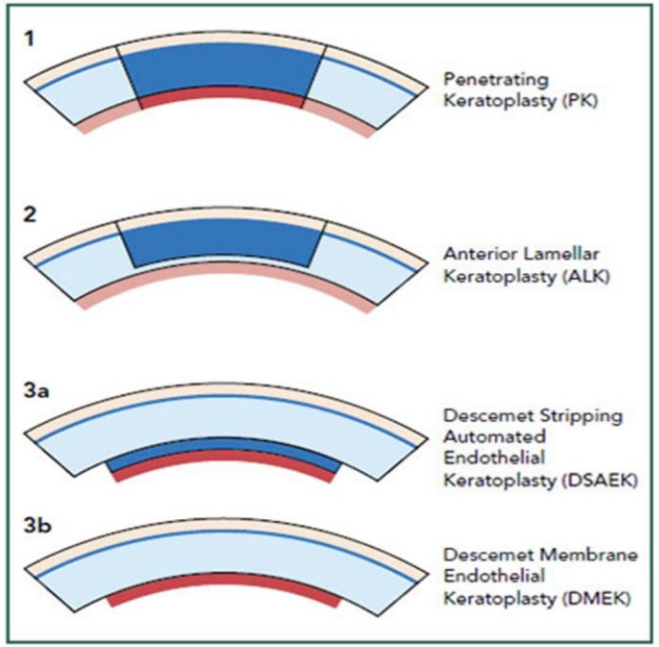
Q. 92

- Describe what you see.
- Name the surgery.
- Two indications.
- Two surgical approaches.
- How can this surgery interfere with vision.



Answer:

- Corneal sutures.
- Keratoplasty/ corneal grafting.
- Keratoconus, corneal dystrophy, corneal scars.
- Pentrating keratoplasty, anterior lamellar keratoplasty,..
- Tight non symmetrical suturing my result in astagmatism.



Different types of corneal transplantation

.

Q. 93

- Describe
- 2-differentials
- 3- tests to confirm your diagnosis.

Answer:

- Left eye proptosis, lower lid retraction and swelling.
- Thyroid eye disease (grave's), orbital lymphoma, conginital glucoma with high myopia.
- Thyroid function tests (TSH, T_3/T_4), CT/ MRI of the orbit, IOP measurement.

Q.94

- Give 2- differentials
- What systemic diseases associated with your differentials
- How to confirm the systemic diseases you mentioned
- Treatment of each.

Answer :

- Scleritis, episcleritis
- Rheumatoid arthritis, SLE.
- RF, ACPA, anti-dsDNA, anti-Smith antibodies
- Scleritis: mild cases- topical steroids and oral NSAIDs, severe- systemic steroids or cytotoxics
  Episcleritis:self-limiting if symptoms persist, topical anti-inflammatory

Q.95

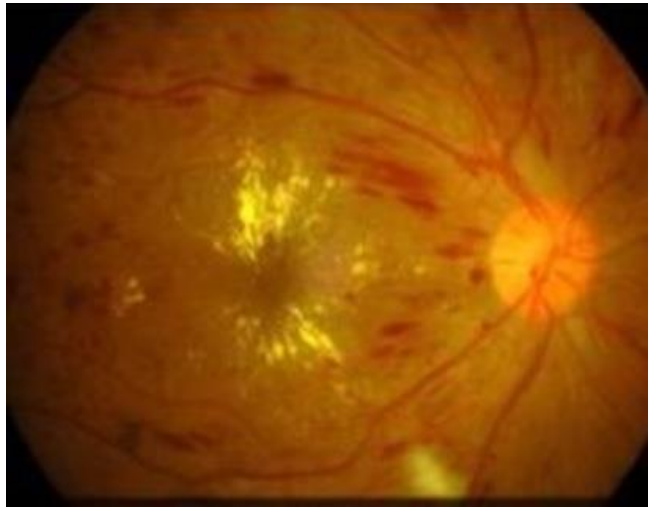
- Differential diagnosis
- Risk factors
- Treatment

Answer:

- Acanthamoba keratitis (Ring-shaped stromal infiltrates are characteristic late-stage lesions)
- Contact lens, prolonged steroid use, eye injury by a plant, exposure to contaminated water.
- Chlorhexidine and propamidine for months and may end by corneal graft

Q. 96

- Desscribe
- Give two differentials
- Treatment for each

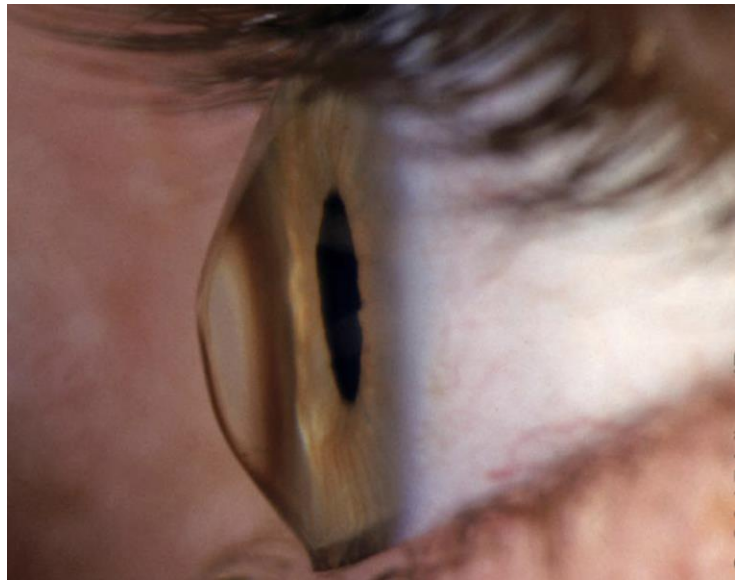


- Answer

- Splinter hemorrhag, hard exudates involving the retina,
- Non-proliferative diabetic retinopathy, hypertensive retinopathy, central/ breanch retinal vein occlusion.
- **NPDR**⇒ Blood glucouse control, if severe NPDR then intravitrus anti-VEGF.
  Hypertensive retinopathy ⇒ Contol systemic blood pressure.
  Retinal vein occlusion ⇒ supportive & aimed at complicaions.

Q.97

- Mention 2-signs
- What causes vision loss in such patient



- Answer

- Corneal thinning, Cone-shaped protrusion of the cornea.
- Secondary to progressive irregular myopic -astigmatism

Q.98

- Describe
- DDx
- 2-causes of vision loss in such patient

Answer

- Neovascularization, microanyrisms, cotton wool spots.
- Proliferative diabetic retinopathy
- Macular edema (mcc of vision loss in DM patients), vitreous hemorrhage.

Q.99

- Describe the findings
- Lines of treatment
- 3-most common and severe complications

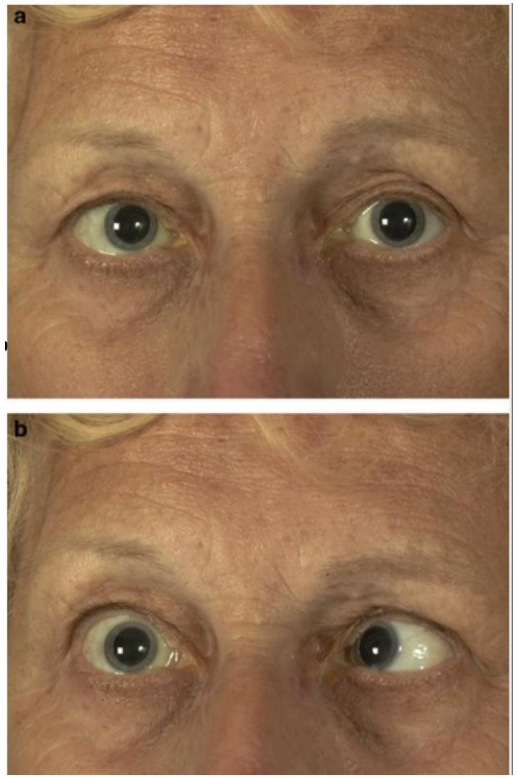
That could occur after the surgery

Answer:

- Corneal thining, Cone-shaped protrusion of the cornea
- Spectacles, contact lenses, corneal cross linking, intrastromal corneal ring, corneal graft.
- Graft regection, endophthalmitis, astagmatism.

Q.100

- What is the chief complaint of the patient
- 2-causes of the condition
- 3-risk factors



Answer:

- Diplopia
- 6th nerve pulsy, acustic neuroma, manangioma, vasculitis, high icp.
- Diabetes, hypertension, history of head trauma, history of neurological disease.

Q. 101

- Describe
- Differential diagnosis

Answer:

- Left eye esotropia (strabismus)
- Accommodative esotropia (untreated hyperopia), infantile esotropia, non-accommodative esotropia (cataract, stress, retinoblastoma).

Q.102 Match :

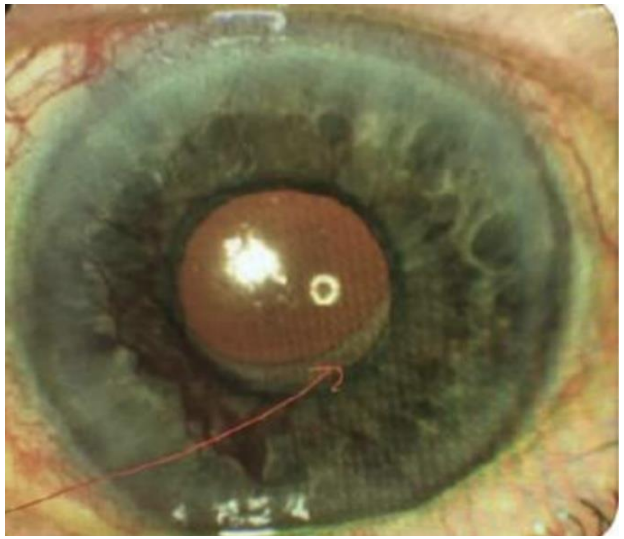
• Sarcoidosis	A. Corneal deposits
• Wilson's disease	B. CMV retinitis
• AIDS	C. Lid retraction
• Hashimoto thyroiditis	D. Lens dislocation
• Marfan Syndrome.	E. Scleritis

Q.102 Match :

• Sarcoidosis	E. Scleritis
• Wilson's disease	A. Corneal deposits
• AIDS	B. CMV retinitis
• Hashimoto thyroiditis	C. Lid retraction
• Marfan Syndrome.	D. Lens dislocation

Q. 103

- Name the surgery the patient underwent
- 2-early complications

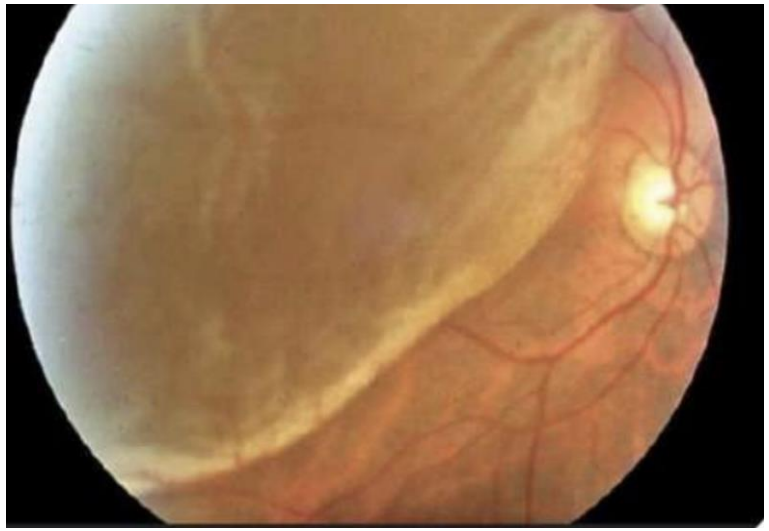


Answer:

- Phecoamulisification (cataract surgery)
- Iris prolaps, vitreous loss.

Q.104

- Describe
- Causes

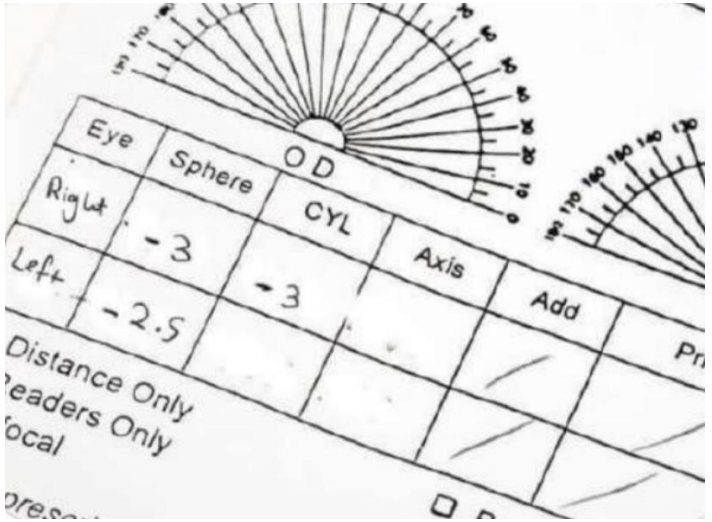


Answer:

- Retinal detachment
- Trauma, high myope, diabetic retinopathy, intraorbital surgery.

Q.105

- What refractive errors does the patient present with?



Answer:

- Right eye: astigmatism, myopia.
  Left eye : myopia.

Q.106

- Describe
- Most likely cause
- Treatment

Answer:

- Left lid ptosis
- Congenital defect in levator palpebrae muscle
- Surgical repair

Q. 107 Match

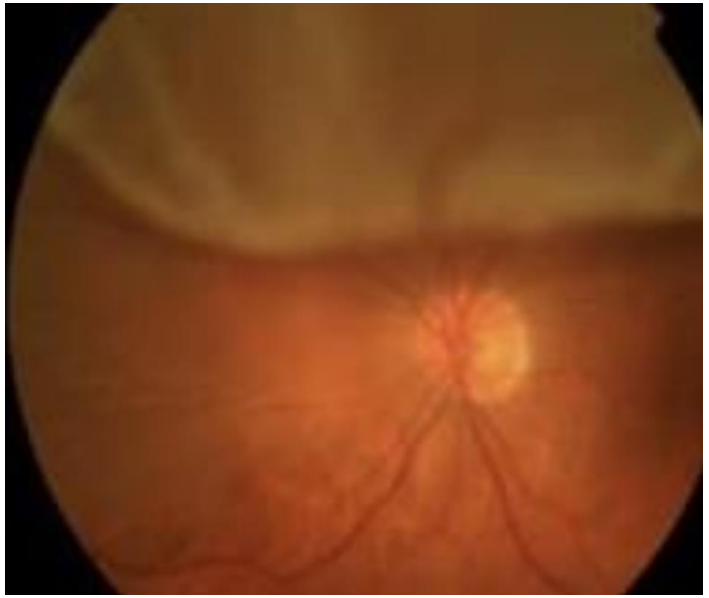
• Sudden painful visual loss	A-Cataract
• Sudden painless visual loss	B-central retinal vein occlusion
• Gradual painful visual loss	C-Acute angle glaucoma
• Gradual painless visual loss	D-Migraine
• Transient visual loss	E-Herpes zoster ophthalmicus

Q. 107 Match

• Sudden painful visual loss	C- Acute angle glaucoma
• Sudden painless visual loss	B- Central retinal vein occlusion
• Gradual painful visual loss	E- Herpes zoster ophthalmicus
• Gradual painless visual loss	A- Cataract
• Transient visual loss	D- Migraine

Q.108

- Describe
- Right or left eye
- Causes
- Treatment

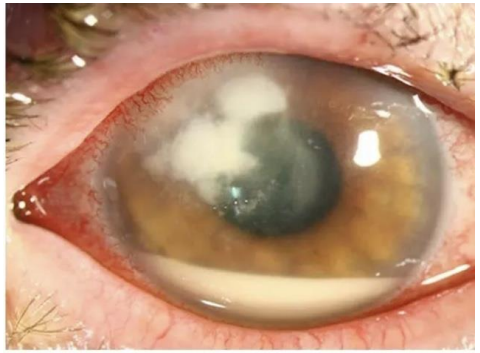


Answer:

- Retinal detachment
- Right eye
- Trauma, post ocular surgery, diabetic retinopathy
- Surgical repair.

Q.109 patient present as the following pictures

- Write one abnormality in each picture
- 2-Differential diagnosis



- Answer:

- Oral ulcers, hypopyon
- Bahçet diseasr, bacterial keratitis.

Q.110 Mention :

1. 2 Causes of leukocoria other than retinoblastoma:

- congenital cataract, glaucoma.

2. 2 Causes of hypermetropia in a 5 year old child:

- abnormal corneal shape, abnormal lens shape, short axial length of eyeball (grows too short from front to back).

3. 2 Side effects of cyclopentolate other than itching and blurry vision:

- acute angle closure glaucoma, photophobia.

4. 2 Causes of anisocoria

- Horner’s syndrome, Adie’s disease.

5. 2 Causes of retinal detachment

- Eye truma, High myopia.

6. 2 Risk factors for acute angle closure glaucoma

- Drugs (antihistamine, cycloplegics), female gender.

7. 2 Contraindications to LASIK other than keratoconus.

- Active corneal disease, dryness, pregnancy, lactation.

8. 2 Causes of 6th cranial nerve palsy

- Raised ICP, neoplasia (meningioma)

9. 2 Complications of phacoemulsification on the first day post op other than endophthalmitis:

- Vitreous loss, iris prolapse

10. 2 Management options for keratoconus other than lenses and glasses

- Corneal cross linking, intrastromal corneal ring

11. 2 causes of leukocoria in a 5 years old patient other than cataract :

- Retinoblastoma, Retinal detachment

12. 2 contraindications of LASIK surgery :

- Keratoconus, active corneal disease, dryness

13. 2 side effect of Acetazolamide

- Paresthesia, metabolic acidosis & kidney stones

14. 2 causes of Abducent nerve palsy :

- Increased ICP, Vasculitis.

15. 2 causes of anisocoria :

- 3rd nerve pulse, Adie's tonic pupil

16. 2 side effects of topical prednisolone:

- Corneal thinning & perforation, increase IOP, posterior subcapsular cataract.

17. 2 causes of hypermetropia in a 6 years old boy:

- Short axial eyeball length, cornea or lens abnormal shape

18. 2 risk factors of sudden painless vision loss

- DM, glaucoma, hypertension, A.fib.

19. 2 management of keratoconus other than 2 hard contact lenses:

- Corneal cross linking, intrastromal corneal rings, corneal graft

20. 2 Post-op cataract surgery complications of one day other than infection (endophthalmitis):

- Iris prolapse ,vitreous loss.

21. Complications of panretinal photocoagulation:

- Pain during treatment, transient increase in IOP, reduced visual field, impaired dark adaptation, and development of macular edema.

22. How is phacoemulsification better than ECCE:

- Small incision, no need for suturing, fewer complications.

23. The anterior limit of the sensory retina

- Ora serrata.

24. Zonular fibers (ciliary muscle) contraction effect on the lens

- Accomodation (make the lens more globular and able to see close things).

Q. 111

What’s the most common cause of blindness in diabetic retinopathy?

A. Macular ischemia

B. Macular edema

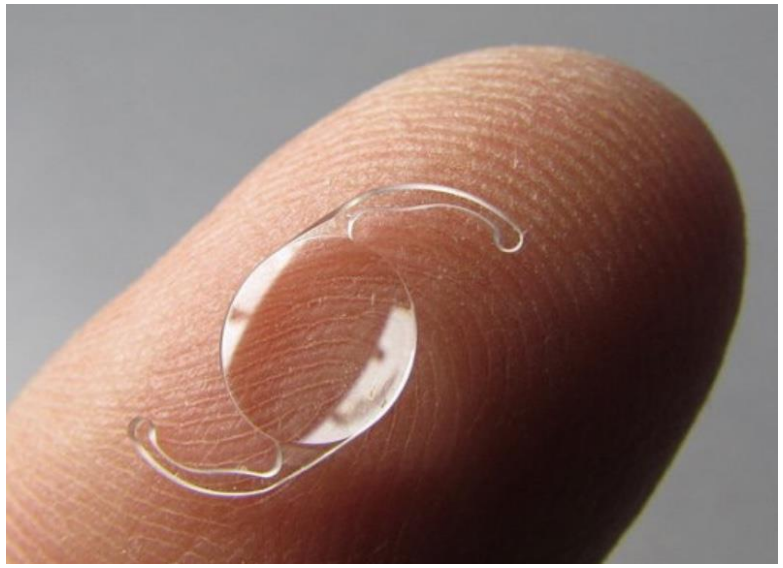
C. Vitreous hemorrhage

D. Tractional Retinal detachment

Answer: B

Q.112

- Describe
- 3- Complications



Answer

- Pseudophekic lens
- Endophthalmitis, vitreous loss, retinal detachment.

Notes by Dr. Moayed Shafei:

Munson’s sign

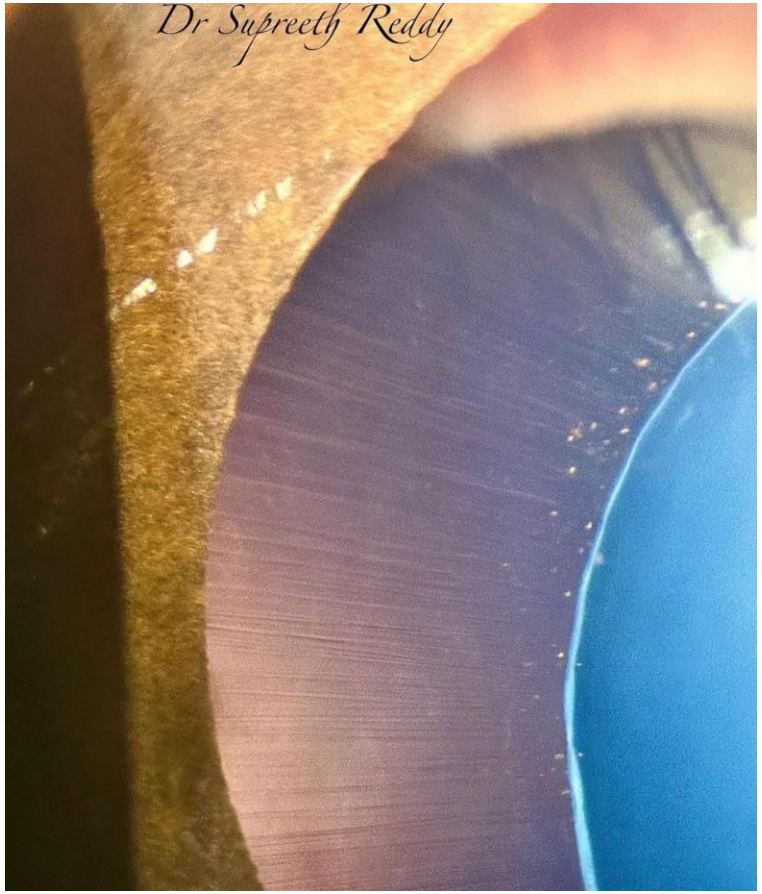
This sign is characteristic of advanced keratoconus

To look for this sign we ask the patient to look downwards (downward gaze) and we observe the lower eyelid margin for a V-shaped indentation. This indentation is a result of the protruding cone-shaped cornea found in keratoconus.

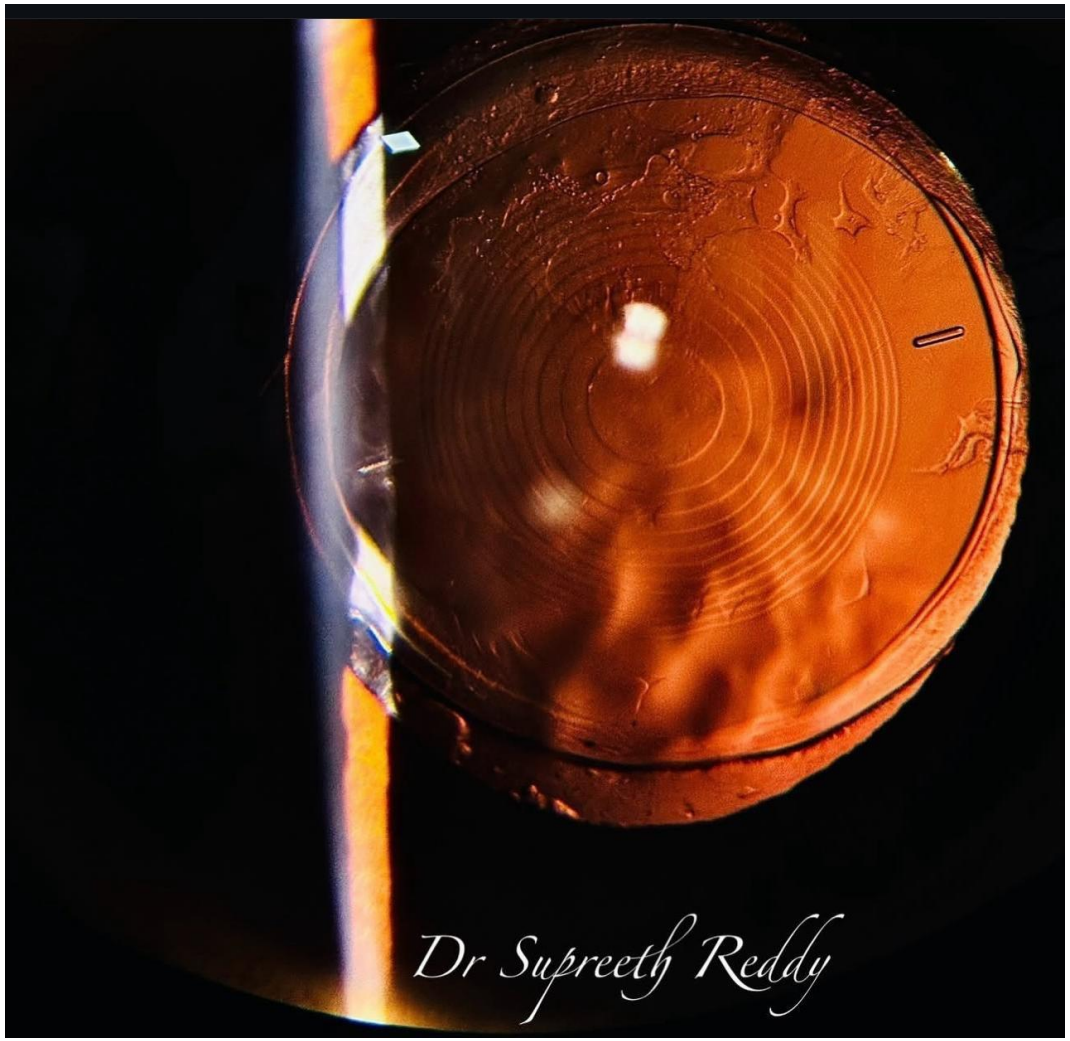
This is a subluxated lens seen in marafan and homocysteinuria.

Those lines are zonular fibers

The pigmented dots near the lens are the dandruff like material of the PXF(pseudoexfoliation syndrome)



This pseudophakic patient has a multi-focal (see the rings) and toric (see the marks at 2 and 8 clocks, that mark the astigmatism axis of power)



This is a case of **Keratitis**

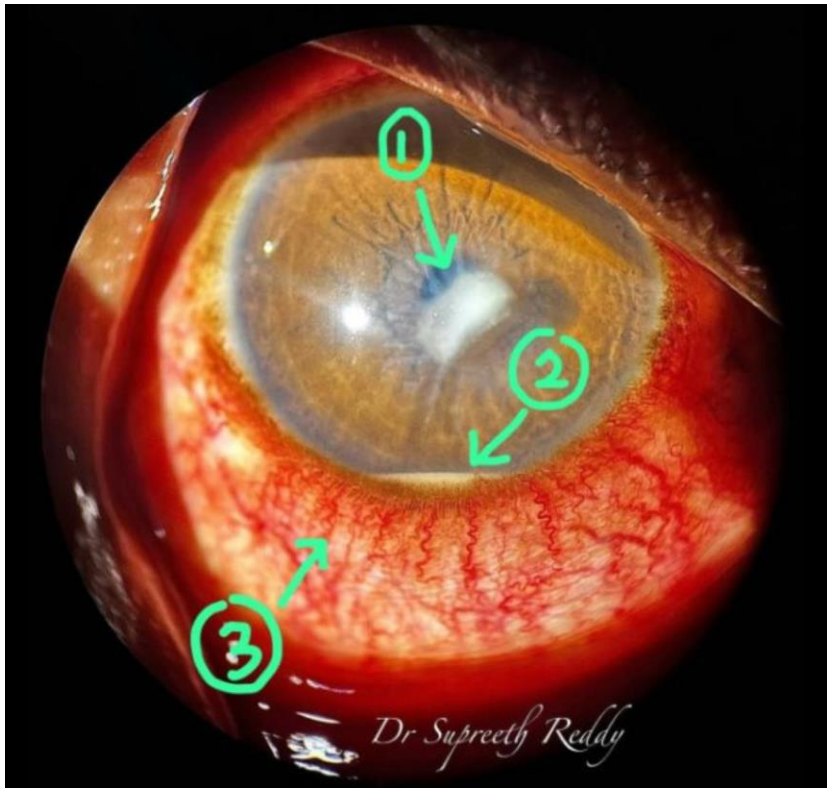
The main presenting sign:

1) focal white opacity (infiltrate) in the corneal stroma.

Other signs:

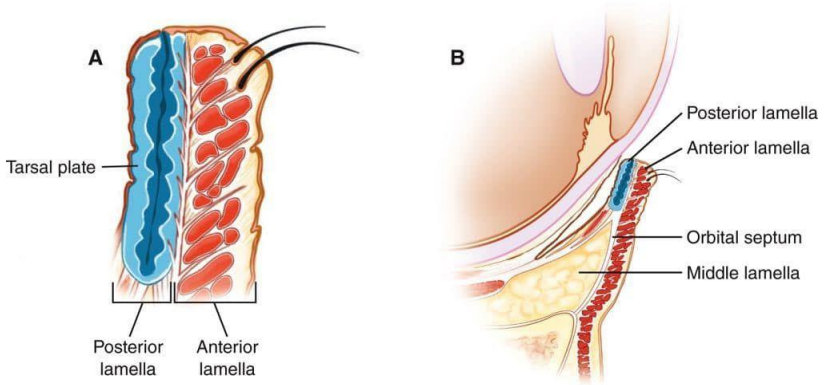
2) Hypopyon: collection of WBCs in the anterior chamber.

3) Ciliary flush: dilated, fine, deep blood vessels radiating out from the limbus.



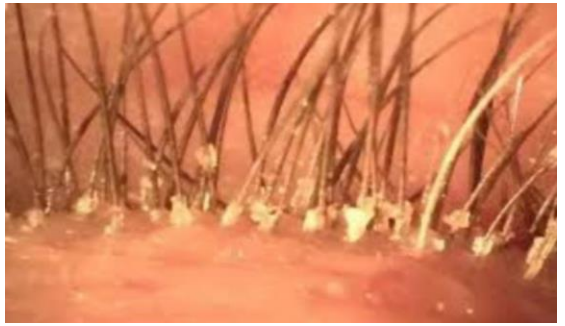
This image shows the anatomical structure of the eyelid in cross-section:

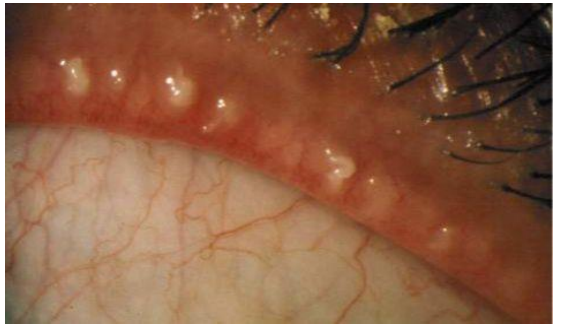
- Anterior lamella: Contains skin and orbicularis oculi muscle — involved in eyelid movement.
- Posterior lamella: Includes the tarsal plate (provides structural support) and conjunctiva.



Clinical relevance:

- Anterior blepharitis affects the skin/lash area.
- Posterior blepharitis (meibomian gland dysfunction) involves the tarsal plate area.
- posterior chalazion arises from blocke meibomian glands in the posterior lamella.
- Anterior chalazion arises from eyelashes' sebaceous cyst and other anterior sebaceous glands.





1. What clinical features in this image suggest preseptal cellulitis?

lid swelling, no proptosis to differentiate it from orbital cellulitis, discharge

2. What are the main differential diagnoses for eyelid swelling in children?

Preseptal cellulitis, orbital cellulitis, stye, trauma

3. What additional clinical signs would raise suspicion for orbital cellulitis rather than preseptal cellulitis?

Proptosis, Ophthalmoplegia, Decreased visual acuity, Relative afferent pupillary defect (RAPD), conjunctival edema.

4. When should imaging be ordered in a child with suspected preseptal cellulitis? What is the imaging modality of choice?

When there are signs of orbital involvement \ct, mri

5. What is the initial management for preseptal cellulitis? When should hospitalization be considered?

Preseptal cellutitis: emiric oral antibiotic, hospitalization: when sepsis is suspected, ill appearing child.

Orbital cellulitis: iv antibiotic that covers both gram positive and negative organisms (that causes sinusitis which is the most common risk factor).

Goldmann applanation tonometry measures IOP

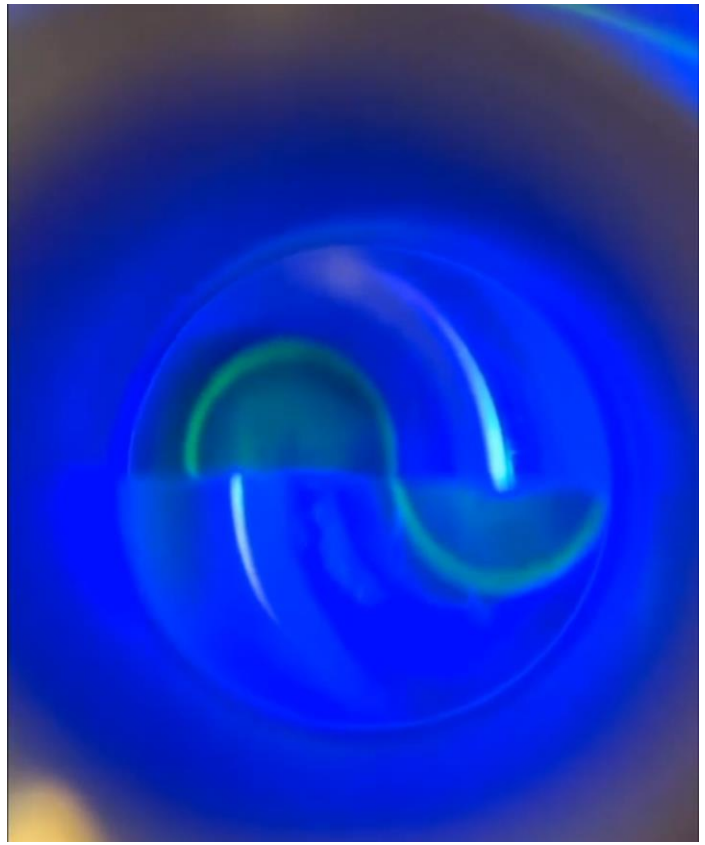
normal values: 10-21 mmhg

A high IOP (>21) can be a result of open or closed angle glaucoma, Uveitis, increase episcleral veinous pressure, drugs like steroids, TCA, sulfonamide, post Phacoemulsification.

We consider the eye in hypotony if the IOP is <6

This can be seen in:

- post surgical if you have a leaking wound
- in cases of globe rupture
- Retinal detachment
- even uveitis can cause either high or low IOP

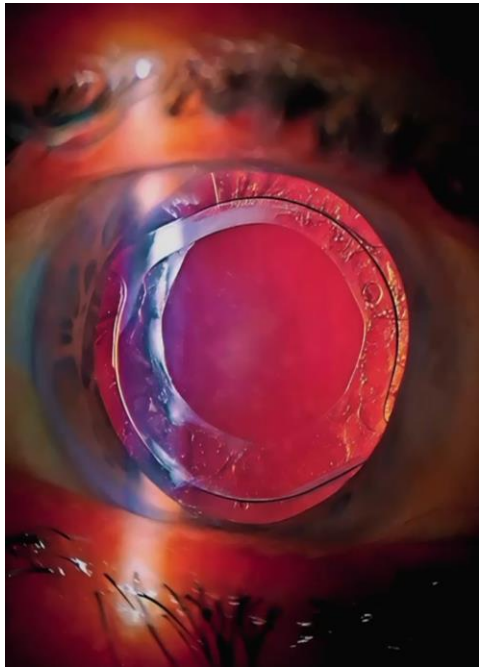


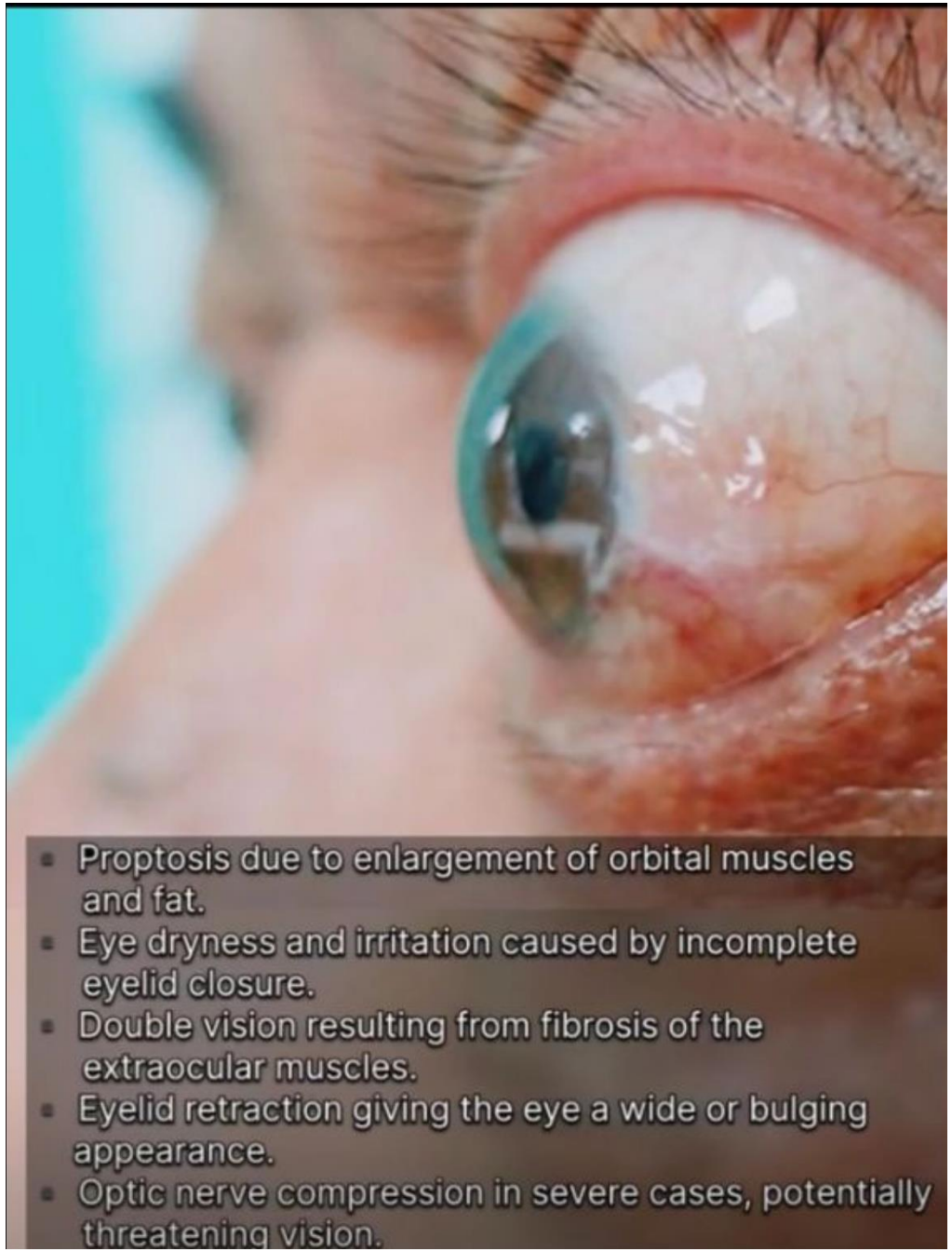
1) What are the findings?
First pic: Posterior capsule opacification
Second pic: intraocular lens with yag laser

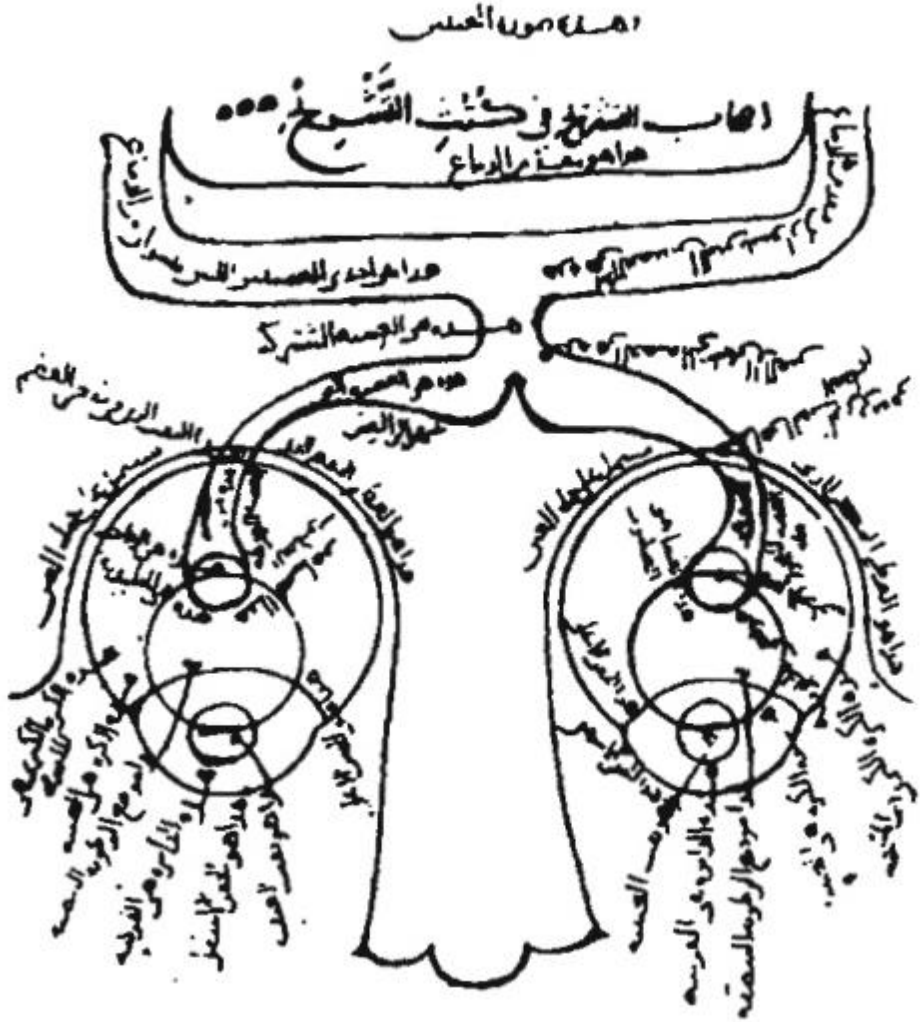
2) When do we expect to see the first pic?
Post phacoemulsification with residual epithelium

3) What's the treatment modality?
Yag laser

There are 3 types of laser:
1) photo-coagulation (for proliferative diapetic retinopaghy)
2) photo-ablation (for refractive surgeries)
3) photo-disruptive (for posterior capsulr opacifications)




Proptosis due to enlargement of orbital muscles and fat.
Eye dryness and irritation caused by incomplete eyelid closure.
Double vision resulting from fibrosis of the extraocular muscles.
Eyelid retraction giving the eye a wide or bulging appearance.
Optic nerve compression in severe cases, potentially threatening vision.



Ibn Alhytham‘s diagram of the eyes from his book of optics 1011-1021 CE, at a time when much of the Western world was still debating whether women even possessed a soul!

- Resources

- 2025 slides
- Doctors’ notes
- UpToDate

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