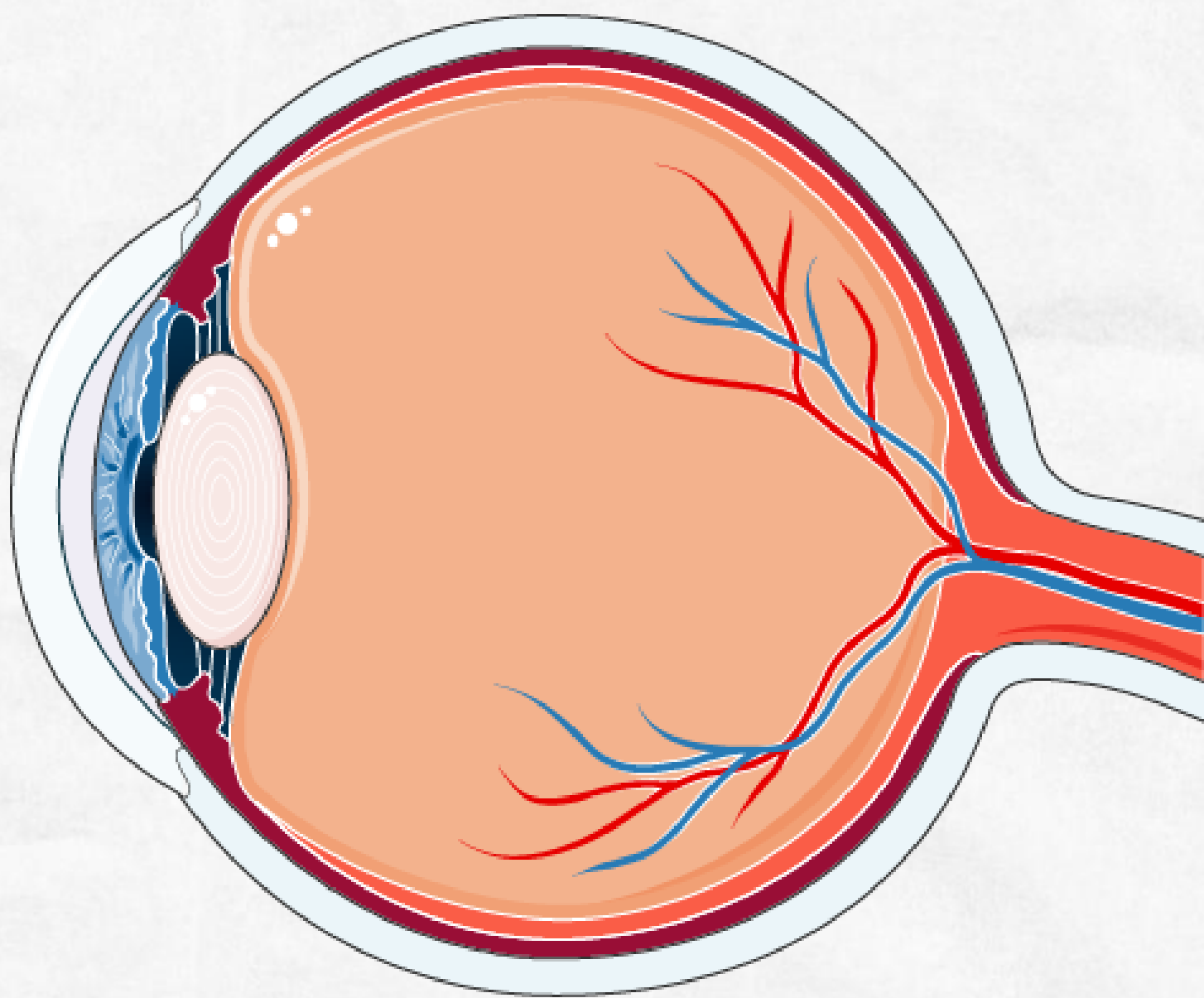


Ophthalmology



MiniOSCE - Past papers

Done by: Malek Abu Rahma

Optics and Refraction

1. Mention 2 causes for this patient to wear glasses?

ANSWER:

1. Short eyeball/ ectopia lentis (other causes of hypermetropia)
2. Astigmatism



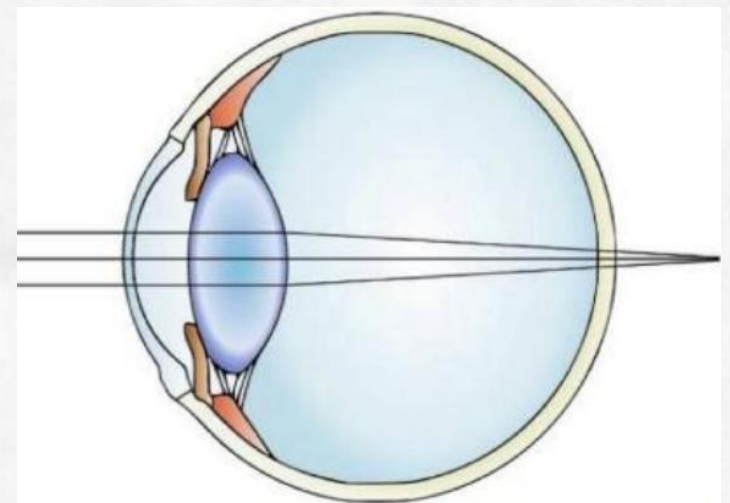
2.

A. What's the name of this condition?

Hypermetropia

B. How to treat this condition?

Convex lens to converge light or surgical



3. Two contraindication of LASIK surgery

ANSWER:

Keratoconus, severe dryness, pregnancy

4. The cause of vision loss in this case?

ANSWER:

Progressive myopia and astigmatism



Optics and Refraction

5. Not a contraindication of LASIK.

ANSWER: Makeup

6. Lasik contraindication for a female patient:

ANSWER: Pregnancy & lactation

7. What refractive errors does the patient present with?

ANSWER:

Right eye: astigmatism, myopia.

Left eye : myopia.

Eye	Sphere	CYL	Axis	Add	Pr
Right	-3	-3			
Left	-2.5	-3			

Distance Only
Readers Only
Local

8. 2 Causes of hypermetropia in a 5 year old child:

ANSWER:

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

9.

A. What's the name of this condition:

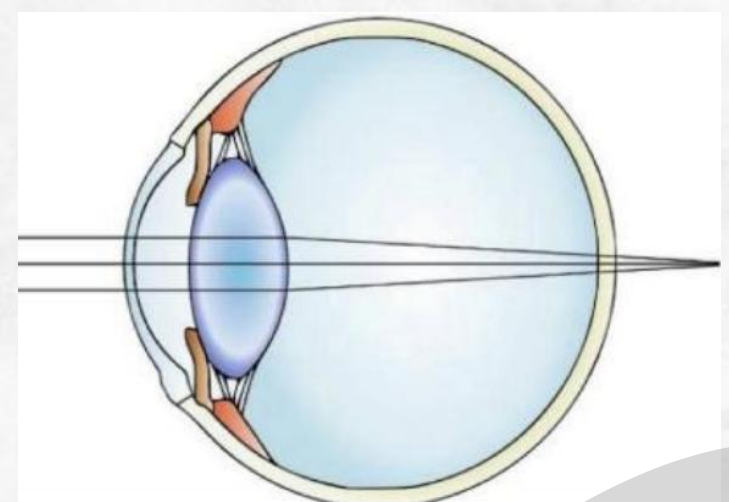
Hypermetropia.

B. What do patients complain of:

Inability to see near objects.

C. How to treat this condition:

Convex lens to converge light or surgical



Lids and Lacrimal

10.

A. What the findings in picture?

Ptosis + ectropion

B. What is the disease that causes these findings?

Facial n. palsy.



11.

A. Diagnosis?

Ectropion

B. Three symptoms other than eye dryness?

Excessive tearing, ocular irritation, redness

C. Two lines of treatment?

1. Surgery

2. Artificial tear drops, lubricants eyedrops, treatment of the underlying cause.



12.

A. 2 Findings?

Collarettes / dandruff at base of lashes

Crusting at eyelid margin

Itching or burning sensation

Mild conjunctival injection

B. This condition related to which systemic diseases (mention 2)?

1. Atopic dermatitis

2. Seborrheic dermatitis

C. Treatment?

1. Lid hygiene with bicarbonate solution or baby shampoo.

2. Topical steroids.

3. Topical antibiotics (fusidic acid eye ointment) or if necessary systemic (in case of long standing Staph infection)



Lids and Lacrimal

13.

A. Diagnosis?

Subconjunctival hemorrhage

B. 2 possible causes?

HTN, trauma

C. Management?

Reassurance and observation



14.

A. Description?

Superior eyelid ulcerative nodule with rolled margins

B. Diagnosis?

Basal cell carcinoma (BCC)

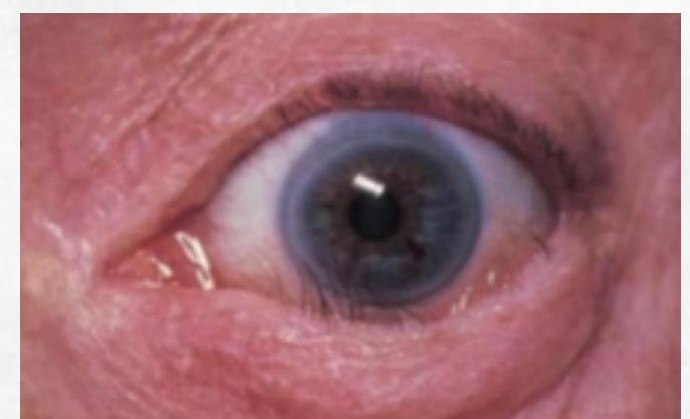
C. 3 ways for management?

**Surgical excision, cryotherapy, topical 5FU,
electrodissection with curettage**



15. What is the diagnosis?

ANSWER : Entropion



16. What is the diagnosis?

ANSWER: Anterior Blepharitis

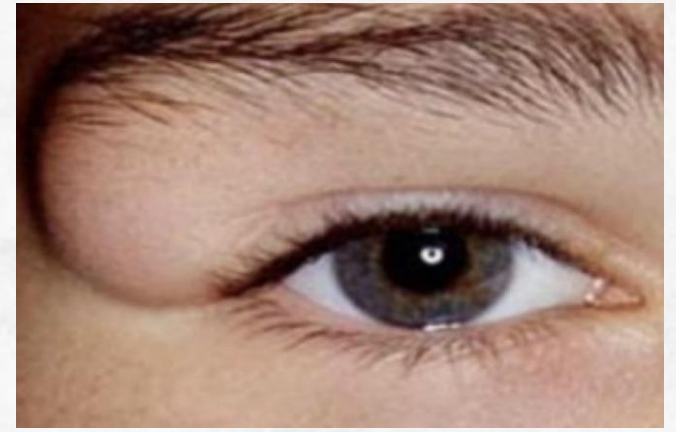
**The presence of collarettes around the eyelashes
increases the suspicion of anterior blepharitis.**



Lids and Lacrimal

17. 1 year patient presents with this finding, what's the diagnosis?

ANSWER: Dermoid cyst



18. Female Patient 32 years old complaining of ptosis in her left eye

A. What is the most serious differential diagnosis to exclude?

Myasthenia grave's

B. What is the most available test to do in the clinic?

Ice pack test

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



19. This image...

A. What is the most common cause of this finding?

Staphylococcus aureus

B. What is the name of the surgery?

Dacryocystorhinostomy



20.

A. Symptoms:

Dry irritable eye, tearing

B. Diagnose:

Ectropion.

C. Treatment:

Surgical management



Lids and Lacrimal

21.

A. Describe.

Right lower eyelid lumb with central ulceration (Rodent ulcer)

B. Most important diagnosis.

Basal cell carcinoma (BCC)

C. Treatment.

Eexcisional biopsy with safe margins/ Mohs Surgery.

Other treatment modalities; - Cryotherapy - Radiotherapy



22.

A. Diagnosis:

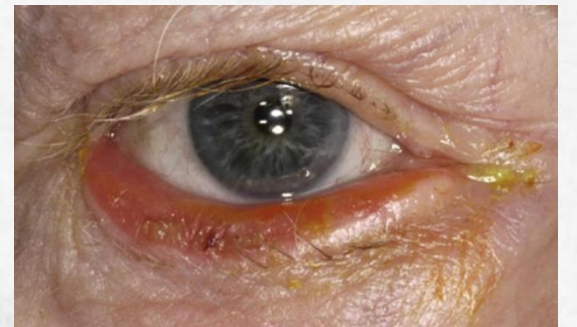
Ectropion

B. Mention three symptoms:

Outward turning of the lower eyelid, dry irritable eye, excessive tearing.

C. Mention 2 lines of treatment:

Artificial tears, surgical.



23.

A. Diagnosis

Dacrocystitis

B. Treatment

Systemic antibiotic



24.

A. Describe

Swelling at the medial lt lower part of the orbit

B. Risk factor to this condition

Obstruction of the nasolacrimal system

C. Surgical procedure

Dacryocystorhinostomy (DCR)



Lids and Lacrimal

25.

A. Describe

Congenital left eye ptosis

B. Possible cause of visual disturbance in this child

If the ptosis interfere with visual axis, this can lead to ambylopia (failure of visual maturation- lazy eye).

C. How to treat

Patching of the notmal eye, treat the underlying cause if present (ex; mysthenea grave's), surgical correction.



26.

A. Describe

Left lid ptosis

B. Most likely cause

Congenital defect in levator palpebrae muscle

C. Treatment

Surgical repair



27. 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

28. 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

The Orbit

29.

A. 3 Findings/Signs?

Bilateral proptosis, lid retraction, periorbital edema

B. M.C Diagnosis?

Graves disease

C. 3Mx?

Lubricant, systemic steroid, surgical orbital decompression



30.

A. 2 Findings/Signs?

Bilateral proptosis, lid retraction, periorbital edema

B. 2 Ddx?

Graves disease, Cavernous sinus thrombosis

C. 2 Work ups for this patient?

Thyroid function tests (TSH, T3, T4), thyroid antibodies (TRAb, TSI), imaging (CT/MRI shows enlarged extraocular muscles)



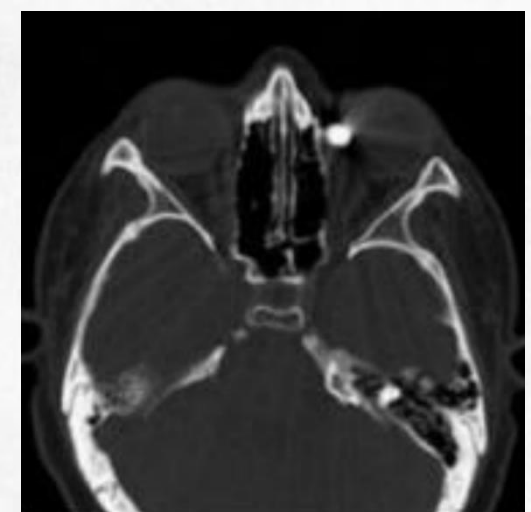
31.

A. Describe what you see?

CT scan showing Hyperdense foreign body in left orbital area with radiating beams indicating a metallic nature.

B. Two exams to be done:

Slit lamp & Tonometry



32.

A. Most dangerous DDX:

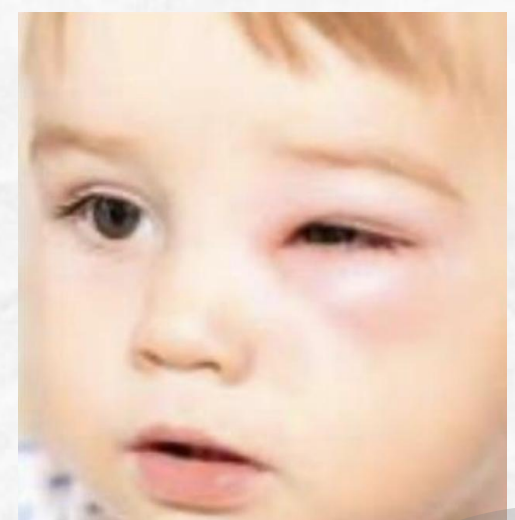
Orbital cellulitis

B. Treatment:

1. Admit the patient, IV antibiotic.

2. Surgical drainage of abscess.

3. Optic nerve decompression



The Orbit

33.

A. Findings :

chemosis , lid retraction , proptosis

B. Spot diagnosis :

Graves' disease



34.

A. Describe :

Left Periorbital swelling and redness with discharge

B. Differential diagnosis :

Orbital cellulitis, preseptal cellulitis

C. Management:

Admission, IV antibiotic , drainage of abscess



35.

A. Describe what you see.

Right eye proptosis, redness & swelling.

B. Write 2 possible causes.

Grave's disease, orbital pseudotumor.

C. What systemic work up would you do.

Serum TSH, Free T4, Total T3 & TSH (thyrotropin) receptor antibodies (TRAbs)



36.

A. Describe findings

Left eye proptosis, lid retraction & chemosis

B. Differential diagnosis

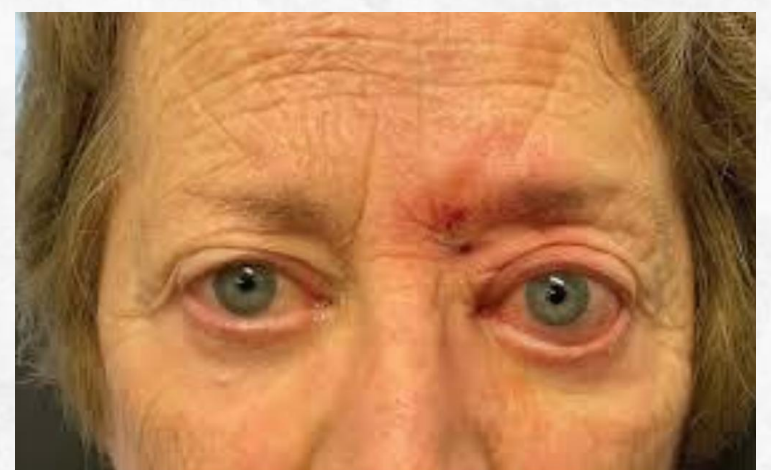
Grave's disease, orbital cellulitis, orbital pseudotumor.

C. Systemic work up

Serum TSH, T3/T4, brain CT, MRI.

D. Clinical signs

Ptosis, chemosis, lid retraction, ophthalmoplagia & lid lag



The Orbit

37.

A. Name 2-findings

Bilateral ptosis, lid retraction

B. Most common cause

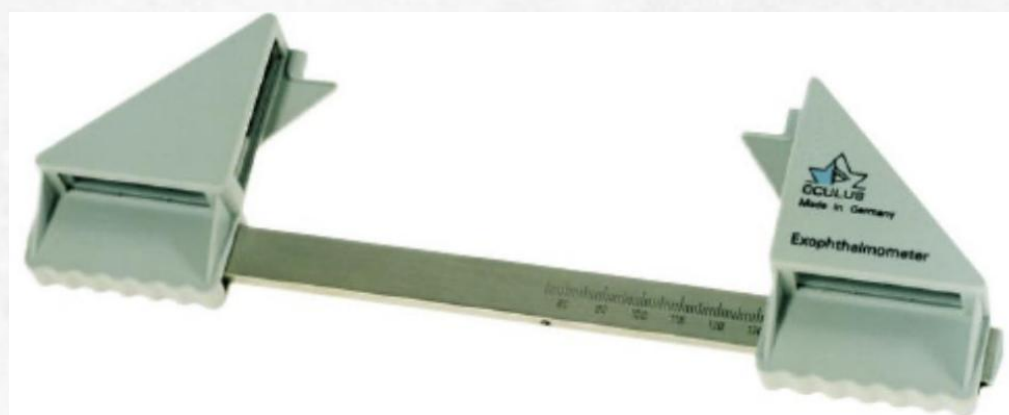
Grave's disease

C. Two complications

Optic nerve compression, corneal ulceration.



38. name of the following :



Hertel exophthalmometer

39. Mention 2 causes of such condition



Thyroid eye disease, retrobulbar hematoma

40.

A. Describe

Unilater left eye proptosis, swelling and erythema

B. 3- differentials

Thyroid eye disease, orbital cellulitis, lymphoma, meningioma.

C. Investigations to do

CBC, thyroid function (TSH, t3/4), ESR, orbital / brain CT & MRI.



Cornea & Sclera

41. Eye sutures.

A. Procedure?

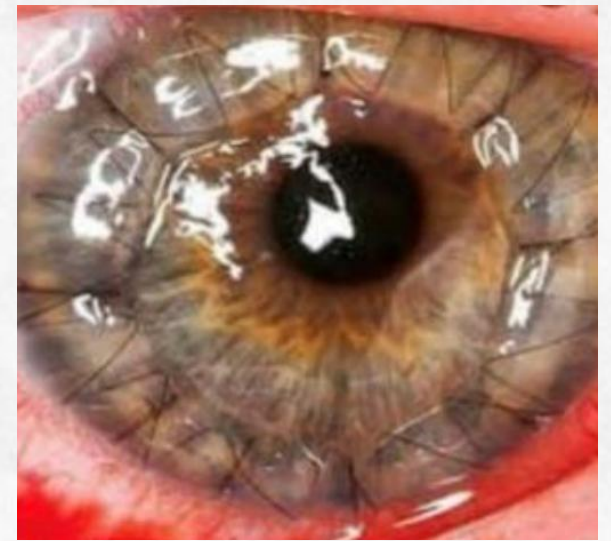
Penetrating Keratoplasty (PKP)

B. Most common cause of failure?

Rejection

C. Which eye drop should the patient continue to use after this surgery?

Topical steroids.



42.

A. Diagnosis?

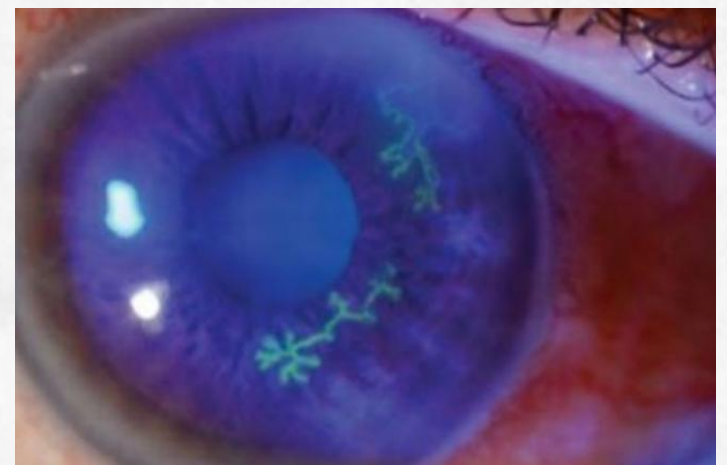
Dendritic ulcer

B. M/C organism?

HSV-1

C. Name 3 symptoms?

Pain, watery discharge, photophobia, eyelid swelling, tearing



43

A. Diagnosis?

Keratoconus

B. What investigation to diagnose?

Corneal topography

C. 3 Treatments?

Corneal cross linking, Keratoplasty, corneal graft



44. Match, chalazion, scleritis, episcleritis, Keratitis, pterygium:



A



B



C



D



E

1- Chalazion: D 2- Scleritis: C 3- Episcleritis: A

4- Keratitis: E 5- Pterygium: B

Cornea & Sclera

45.

A. Name of the test?

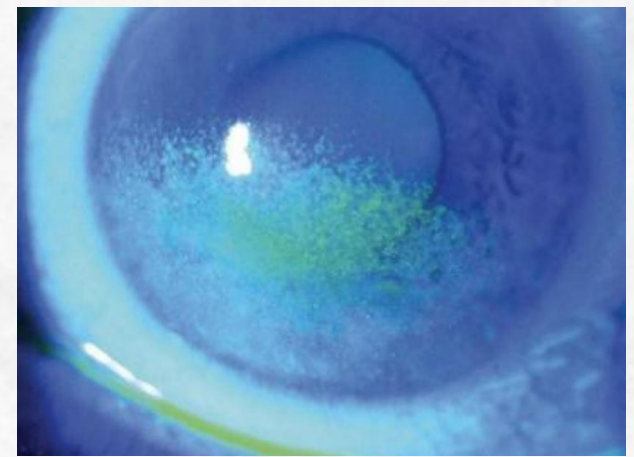
Fluorescein staining

B. Diagnosis?

Exposure keratitis

C. 3 systemic diseases?

Myasthenia gravis, Sjogren, graves ophthalmopathy



46. CI to LASIK surgery other than keratoconus in a male patient (to exclude pregnancy and lactation)?

1. Active corneal disease like infection

2. Severe dryness

47. What is the use of this procedure?



ANSWER: Corneal cross linking for Keratoconus

48. The most likely diagnosis?

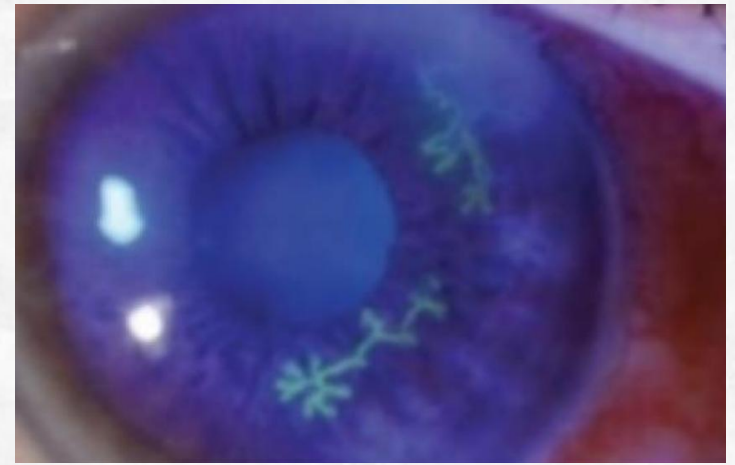


ANSWER: Episcleritis

Cornea & Sclera

49. This disease is caused by?

ANSWER: HSV-1



50. What is the diagnosis?

ANSWER: Intra stromal corneal ring used to treat Keratoconus

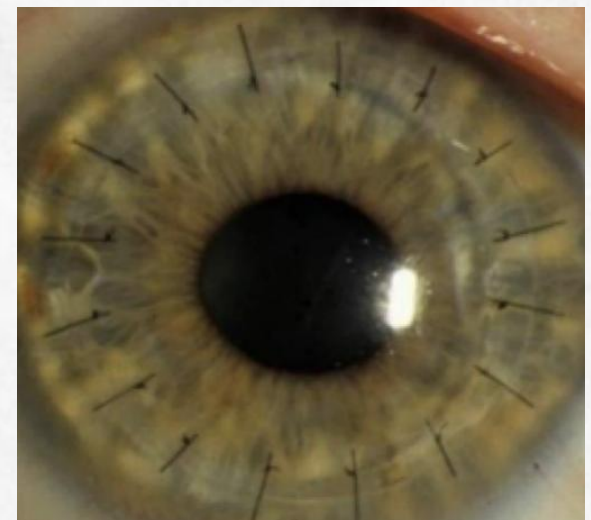


51 What causes of graft rejection?

- 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.



52. This image .

A. The name of this surgery?

Keratoplasty.

B. The most common complication?

Rejection

C. If it recognized early how you will treat?

Steroids



Cornea & Sclera

53. Two cases of painful red eye other than conjunctivitis?

ANSWER: Scleritis, bacterial keratitis



54.

A. Name 3-signs

Hypopyon, ciliary flush, white corneal opacification.

B. Name 3-risk factors

Keratoconjunctivitis sicca, contact lens wearing, prolonged use of topical steroids.



55.

A. Describe what you see

Bulging of the cornea

B. Name 3- treatment modalities

Hard contact lenses/ glasses, corneal cross linking, intrastromal corneal ring, corneal graft

C. Complications of surgical procedure

Endophthalmitis, astigmatism, peripheral anterior synechiae, graft rejection



56.

A. Diagnosis

Dendritic corneal ulcer

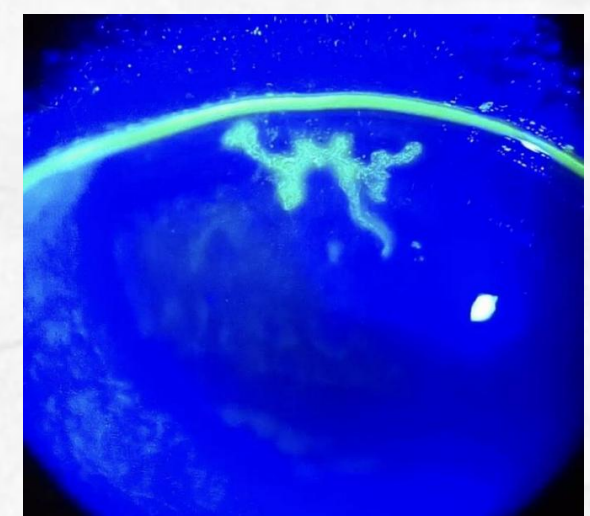
B. Most common cause

Herpetic keratitis (HSV &HZV)

C. If you use topical steroids, the lesion becomes:

(worse, better, no change)

Worse



Cornea & Sclera

57. Mention 2 side effects of the following eyedrop
Other than cataract

Increase risk of bacterial keratitis, corneal thinning & perforation



58.

A. Type of staine used

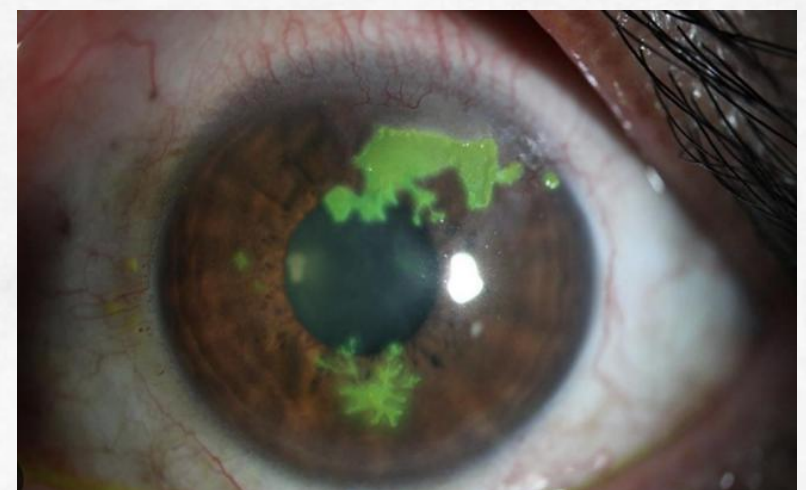
Fluoresceine

B. What is the cause

HSV type 1

C. Which layer of the cornea is involved

Epithelial



59.

A. Describe

Keratoconus, bulging of the mid and inferior part of the cornea with bending of the lower lid (munson's sign)

B. 2-investigations aid in the diagnosis

Corneal topography, corneal tomography, slit lamp, ophthalmoscope

C. Approach to treat.

Spectacles, contact lens, corneal corss linking, intrastromal corneal ring, corneal graft.



60.

A. What is the light type used in this procedure

Riboflavine (vitamin B2) drops with UV light.

B. Which corneal layer the procedure target

Stromal layer

C. Give one indication for such procedure

Keratoconus.



Cornea & Sclera

61.

A. Describe what you see.

Corneal sutures.

B. Name the surgery.

Keratoplasty/ corneal grafting.

C. Two indications.

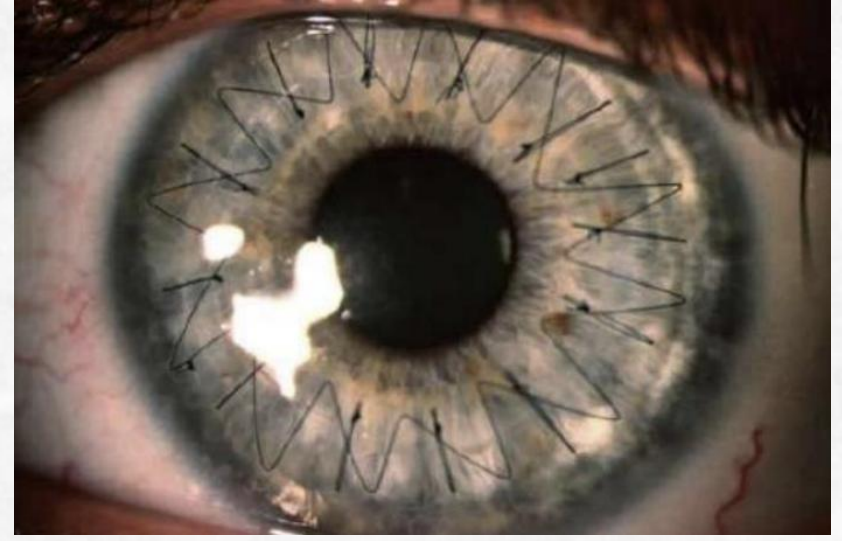
Keratoconus, corneal dystrophy, corneal scars.

D. Two surgical approaches.

Penetrating keratoplasty, anterior lamellar keratoplasty, ..

E. How can this surgery interfere with vision.

Tight non symmetrical suturing may result in astigmatism.



62.

A. Give 2- differentials

Scleritis, episcleritis

B. What systemic diseases associated with your differentials

Rheumatoid arthritis, SLE.

C. How to confirm the systemic diseases you mentioned

RF, ACPA, anti-dsDNA, anti-Smith antibodies

D. Treatment of each

Scleritis: mild cases- topical steroids and oral NSAIDs, severe- systemic steroids or cytotoxics



63.

A. Differential diagnosis

Acanthamoeba keratitis (Ring-shaped stromal infiltrates are characteristic late-stage lesions)

B. Risk factors

Contact lens, prolonged steroid use, eye injury by a plant, exposure to contaminated water.

C. Treatment

Chlorhexidine and propamidine for months and may end by corneal graft



Cornea & Sclera

64.

A. Mention 2-signs

Corneal thinning, Cone-shaped protrusion of the cornea.

B. What causes vision loss in such patient

Secondary to progressive irregular myopic - astigmatism



65.

A. Describe the findings

Corneal thinning, Cone-shaped protrusion of the cornea

B. Lines of treatment

Spectacles, contact lenses, corneal cross linking, intrastromal corneal ring, corneal graft.

C. 3-most common and severe complications that could occur after the surgery

Graft rejection, endophthalmitis, astigmatism.



66. 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

67. name of the following :



Corneal cross linking device

Cornea & Sclera

68.

A. Name 2 presenting symptoms

Vesicular rash on forehead, eyelid and tip of nose (Hutchinson's sign- nasociliary nerve) fever.

B. Name 4 ocular symptoms/signs

Keratitis, iritis, lid swelling and erythema, dendretic ulcers (herpes zoster ophthalmicus) conjunctivitis, scleritis.

C. Name 2 neurological symptoms

V1 pain, headache and hypersthesia.

D. Treatment

Systemic antiviral (acyclovir), derma consult.



69. name of the following :



Trial lens frame

70. name of the following :



Fluorescent dye strep

Lens & Cataract

71. 2 DDx other than cataract?

Retinoblastoma (most important in children).

Persistent hyperplastic primary vitreous (PHPV).

Coats' disease (retinal telangiectasia with exudation).

Retinopathy of prematurity (ROP).

Toxocariasis (ocular larva granuloma).

Corneal opacity (scar, congenital anomaly).



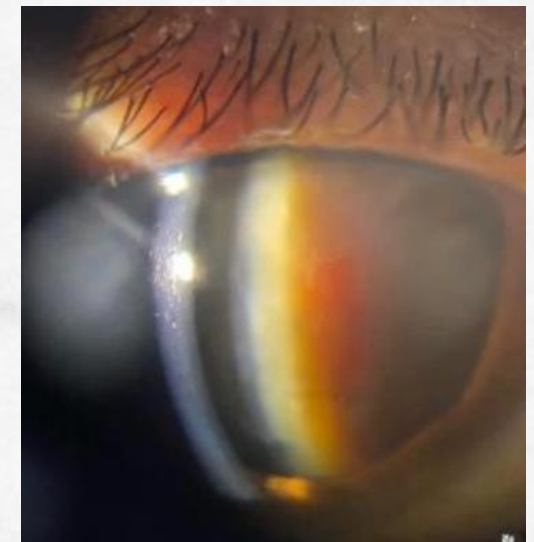
72.

A. What the findings in picture?

nuclear cataract

B. Name 2 surgeries done for this condition?

phacoemulsification, ECC



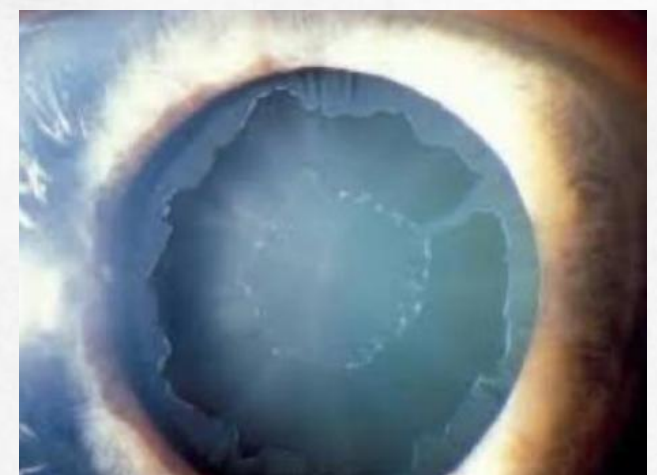
73.

A. Diagnosis?

Pseudoexfoliation syndrome, pseudoexfoliation granuloma

B. Complications?

increased risk during cataract surgery (zonular dialysis, lens dislocation)



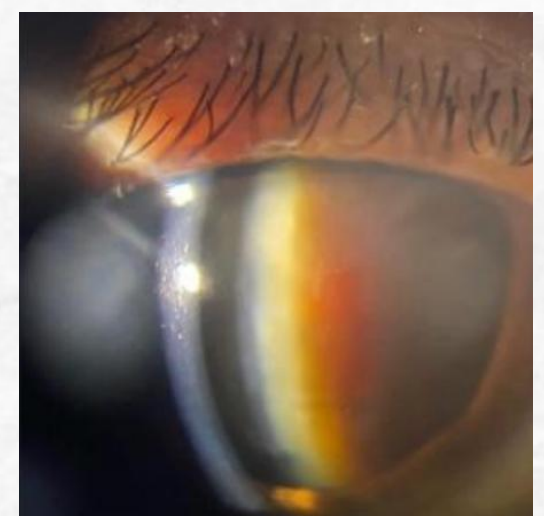
74.

A. What the findings in picture?

Mature nuclear cataract

B. Name 2 Complications if it is left untreated?

Blindness, cataract associated glaucoma, cataract associated uveitis



Lens & Cataract

75.

A. Diagnosis :

Neuclear cataract

B. Treatment :

Surgery:Phacoemulsification, Extra capsular cataract extraction (ECCE), Intracapsular cataract extraction (ICCE)



76.

A. Name 2 findings related to the condition.

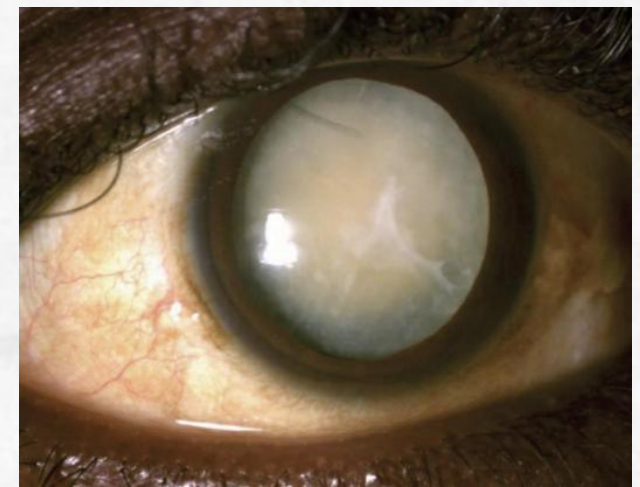
Findings : Complete opaque lens (mature cataract), Leukocoria (white papillary reflex)

B. Two surgical treatment.

Surgical treatment : Phacoemulsification, ECCE

C. Most important post- operative complicaion.

Post -operative complications: Endophthalmitis, Vitrous loss.



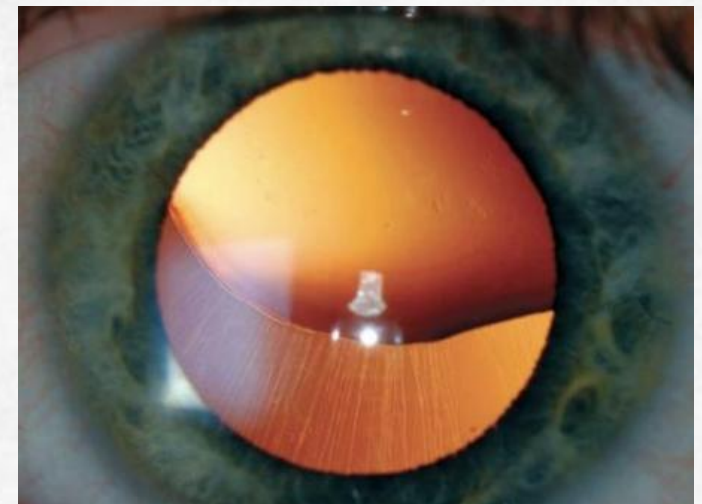
77.

A. What is the diagnosis :

Superior ectopia lentis

B. Mention three possible causes:

Ocular trauma, connective tissue diseases such as Marfan syndrome, metabolic diseases such as homocystinuria



78. 65-year-old woman after cataract surgery; complications one day after operation other than endophthalmitis:

Aqueous humor leakage (Seidel sign)

Retinal detachment

Macular edema.

Lens & Cataract

79.

A. Describe what you see.

Cortical cataract

B. Write 2 treatments for this condition depending on the severity.

Phacoemulsification (ECCE).

C. Write 3 most common AND serious complications post surgery.

Endophthalmitis, vitreous loss, retinal detachment, macular edema



80.

A. Describe what you see

white papillary reflex / loss of red reflex

B. What's the name of this sign.

Leukocoria

C. Name two instruments to view this pathology

Slit lamp/ fundoscope

D. Write 3 possible causes.

congenital cataract, glaucoma, retinoblastoma.



81. 42 Mention two causes other than cataract.



Answer: Retinoblastoma, retinal detachment.

82.

A. Diagnosis

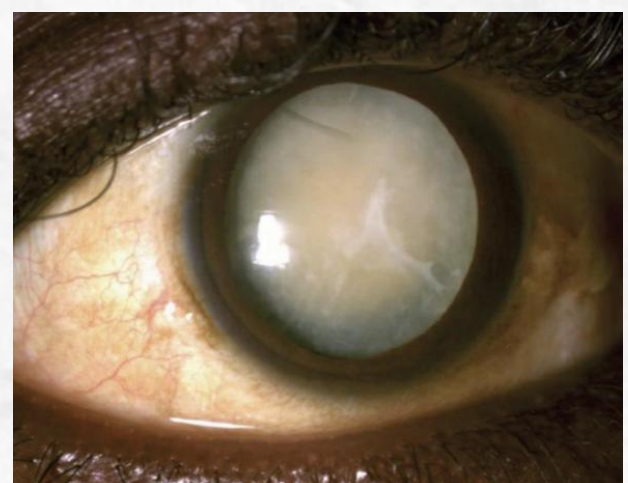
Mature cataract

B. Surgical manegment

Phecoemulisefication, ECCE

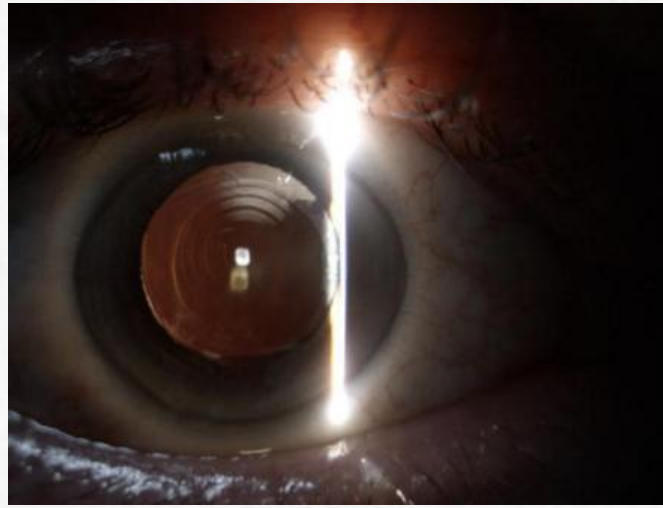
C. Complications of surgery

Endophthalmitis, posterior capsular opacification, iris prolaps, vitreous loss



Lens & Cataract

83. Name of the following :



ANSWER : Pseudophakic lens/ artificial lens

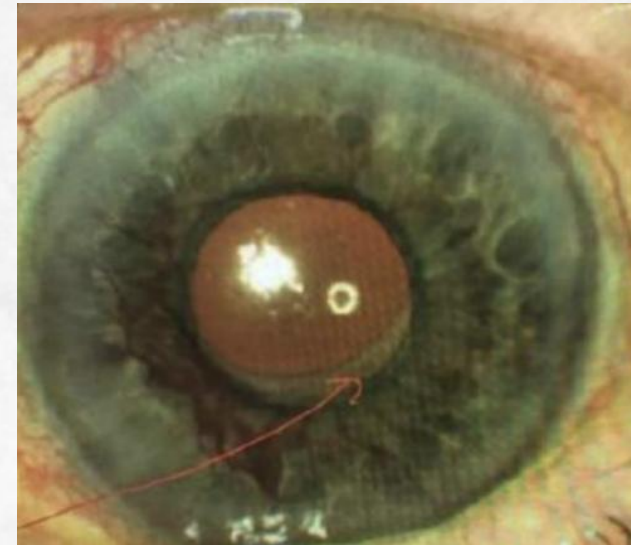
84.

A. Name the surgery the patient underwent

Phacoemulsification (cataract surgery)

B. 2-early complications

Iris prolapse, vitreous loss.



85. 2 Complications of phacoemulsification on the first day post op other than endophthalmitis:

ANSWER: Vitreous loss, iris prolapse

86. How is phacoemulsification better than ECCE:

Small incision, no need for suturing, fewer complications.

87.

A. Describe

Pseudophakic lens

B. 3 Complications

Endophthalmitis, vitreous loss, retinal detachment.



Uveitis

88.

A. Most likely dx?

Anterior uveitis

B. Mention 3 clinical findings?

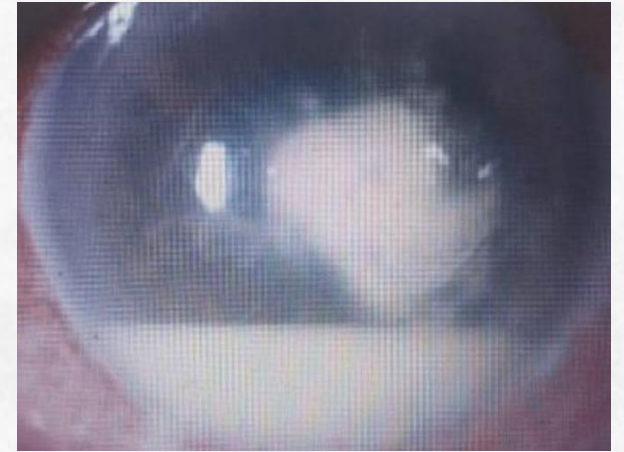
Ciliary flush, Keratic precipitates (KPs), Cells and flare in the anterior chamber

C. Mention three causes?

1. Autoimmune or Systemic Inflammatory Disease: Ankylosing spondylitis

2. Infection: Viral infections (herpes simplex, shingles/herpes zoster), syphilis, and tuberculosis

3. Eye Trauma or Surgery



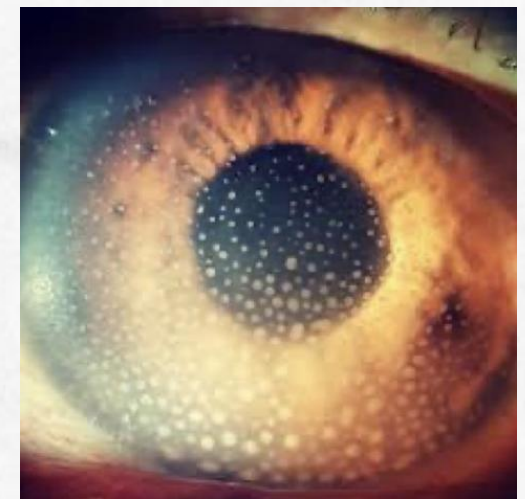
89. Patient with sarcoidosis and this image

A. The name of this sign?

Keratic precipitate

B. Three systemic test to confirm the diagnosis?

Chest x-ray, serum ACE, serum calcium level



90.

A. What's the name of the sign in the first picture?

Posterior Synechia

B. This is the pelvic x-ray of the same patient. What's the most likely diagnosis?

Ankylosing spondylitis.

C. What's the type of HLA associated with this condition?

HLA-B27



91.

A. Diagnosis

Hypopyon

B. Causes

Anterior Uveitis, endophthalmitis, bacterial keratitis



Uveitis

92.

A. Mention 2 abnormalities

Heterochromia, fixed dilated puple of the right eye.

B. Diagnosis

Fuchs' heterochromic iridocyclitis.



93.

A. Mention 3 -complications

Secondary hemorrhage, ↑IOP, secondary open angle glaucoma, corneal blood staining.

B. Treatment

Topical steroids, cyclopentolate



94. Match:

1- Sarcoidosis

2- Wilson's disease

3- AIDS

4- Hashimoto thyroiditis

5- Marfan Syndrome.

A. Corneal deposits

B. CMV retinitis

C. Lid retraction

D. Lens dislocation

E. Scleritis

ANSWER : 1- E 2- A 3- B 4- C 5- D

95. patient present as the following pictures

A. Write one abnormality in each picture

Oral ulcers, hypopyon

B. 2 Differential diagnosis

Bahçet disease, bacterial keratitis.



Glaucoma

96.

A. What type of glaucoma happens early?

**Acute Angle Closure or Traumatic Glaucoma
(secondary openangle glaucoma)**

B. Other possible types happen late?

Angle-Recession Glaucoma

C. Why irrigation indicated?

To remove blood, prevent rebleeding, avoid corneal blood staining, and lower risk of secondary glaucoma.



97. Cyclopentolate eye drop, 2 side effects other than irritation and blurry vision?

1. Photophobia, Dry eyes, conjunctival hyperemia

2. Acute angle closure glaucoma



98.

A. Describe what you see?

Hyphemia

B. possible causes?

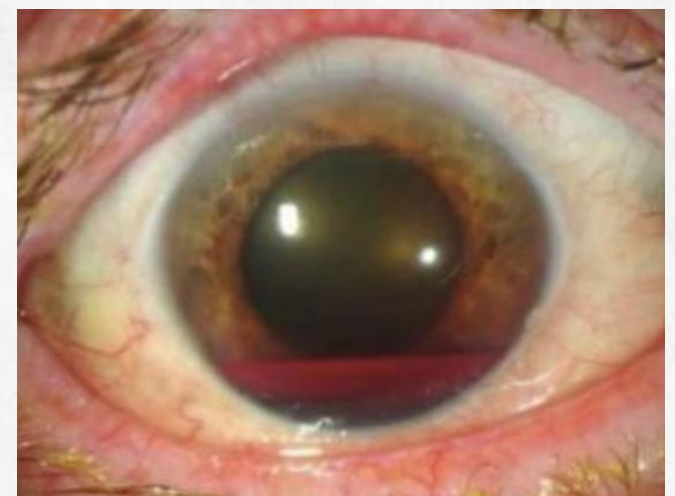
Trauma, post-surgical, diabetes melitus retinopathy.

C. Reasons to treat these conditions/ complications?

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

D. Management

Prevent complications, monitor IOP, eye shield, steroid drops, cycloplegia.



99

A. Name the test?

Tonometry

B. What is the measuring unit?

mmhg

C. What is the normal range?

10-21



Glaucoma

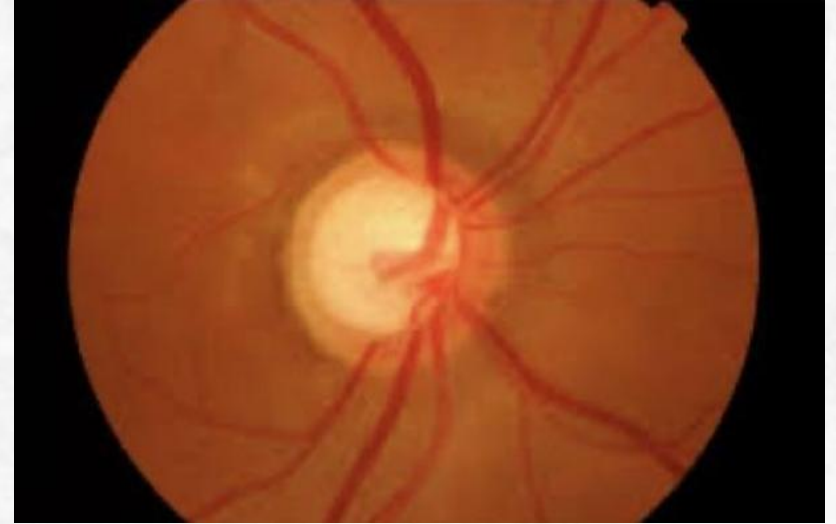
100. The patient diagnosed with glaucoma.
Write 3 test to confirm it.

Goldmann Applanation Tonometry

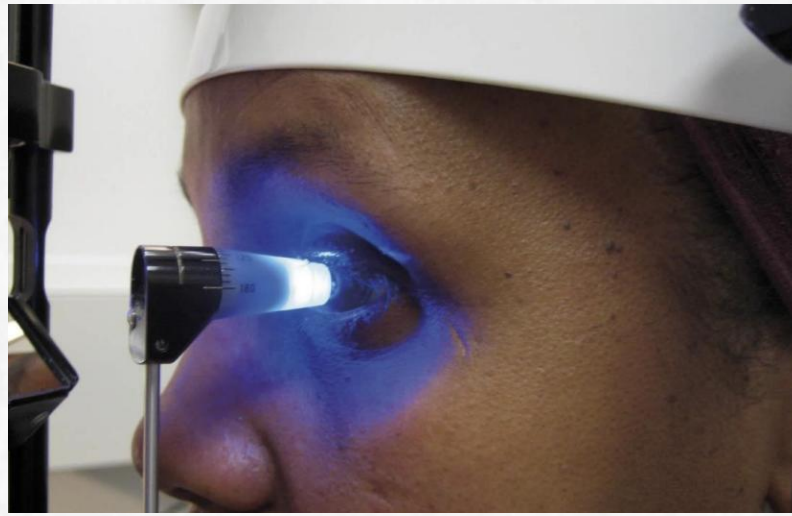
Gonioscopy

visual field examination

OCT (Optical Coherence Tomography)



101. name of the following :



Goldmann applanation tonometer

102. name of the following :



Tonometer

103. 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

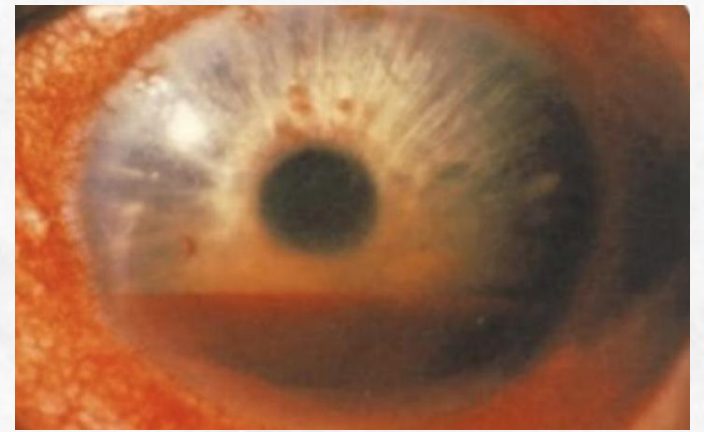
ANSWER: A



Glaucoma

104. 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

105.

A. What's the sign

Optic disc cupping

B. Name 1 cause

Glaucoma

C. Name 2 risk factors not related to ↑IOP

Female, older age, high myopia

D. The medication that is contraindicated if the patient has sulfa-allergy

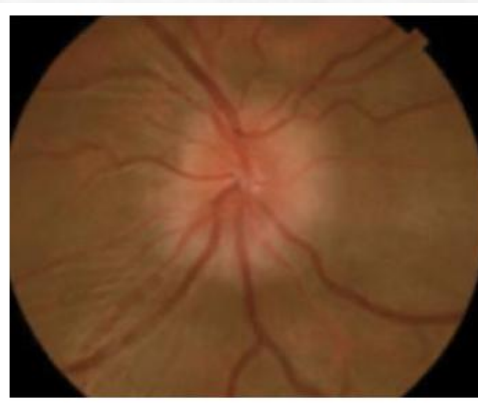


106. mention the abnormalities seen :

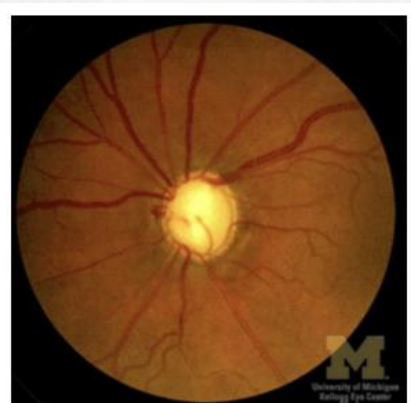
A.



B.



C.



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

107. 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

ANSWER: A

It causes optic disc cupping/atrophy, not edema.

Glaucoma

108. 2 Risk factors for acute angle closure glaucoma

Drugs (antihistamine, cycloplegics), female gender.

109. 2 side effect of Acetazolamide

Paresthesia, metabolic acidosis & kidney stones

110. 2 side effects of topical prednisolone:

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

111. Complications of panretinal photocoagulation:

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

Diabetic retinopathy

112.

A. Diagnosis?

Vitreous Hemorrhage

B. Treatment options?

Conservative:

Bed rest with head elevation (blood settles inferiorly).

Stop anticoagulants if possible.

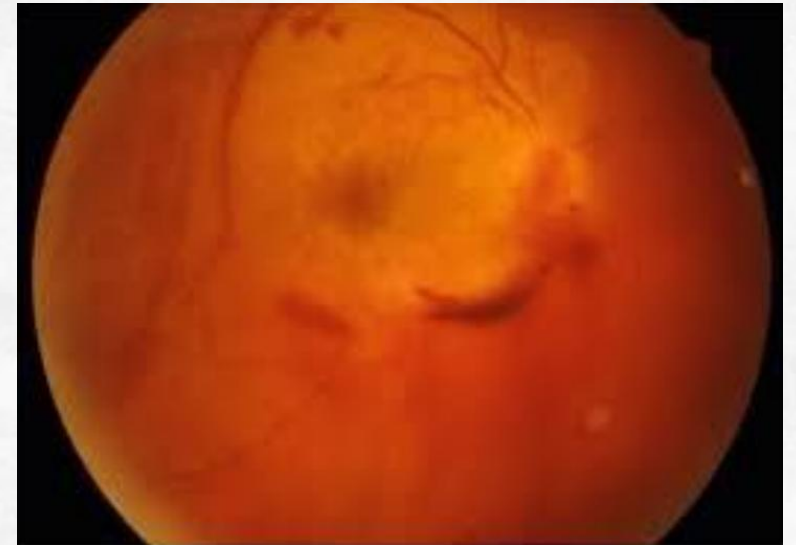
Treat underlying cause (diabetes, hypertension).

Intervention:

Pan-retinal laser photocoagulation (PRP): if due to proliferative DR.

Intravitreal anti-VEGF injections.

Pars plana vitrectomy: for non-resolving hemorrhage (>3 months), dense



113. NPDR, retinal photo + OCT photo

A. 3 signs?

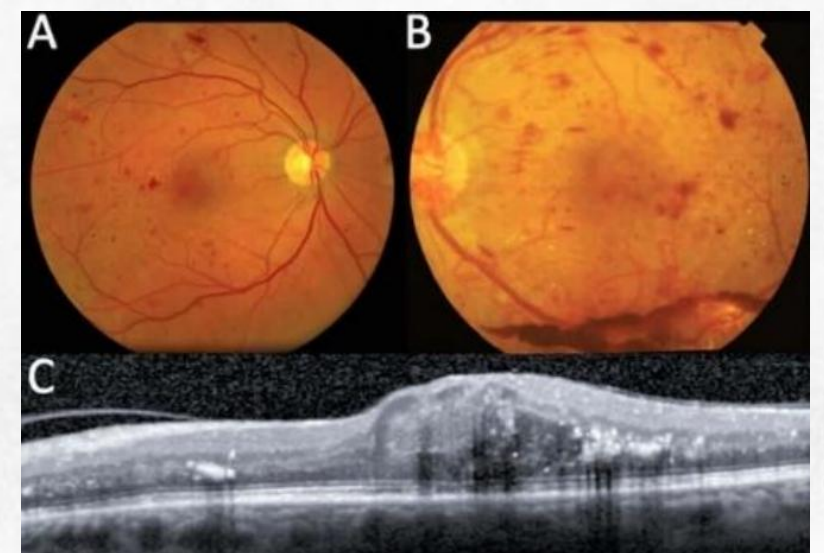
Hard exudates, Micro-aneurysm, Flame shaped hemorrhage

B. Mx?

Strict blood glucose control, close follow up with ophthalmologist

C. What this test & what does it show?

OCT, Macular edema



114.

A. Describe?

Hard exudates, retinal hemorrhage

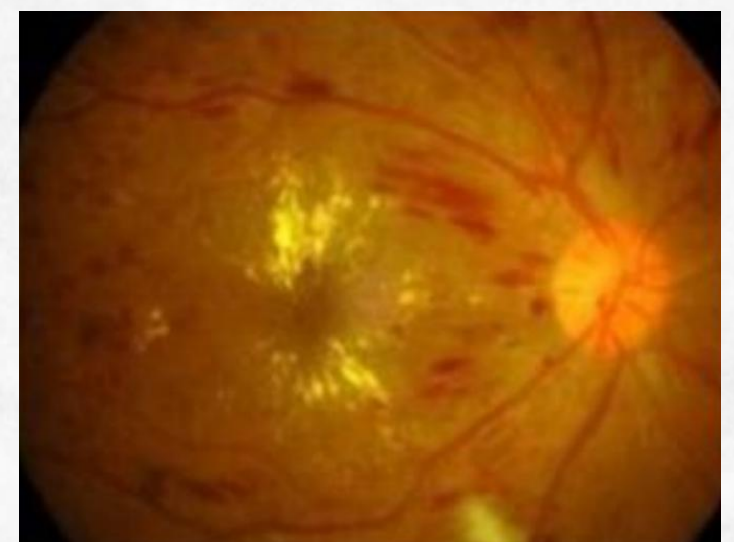
B. Give 2 differentials?

NPDR, hypertensive retinopathy

C. Treatment for each?

1. NPDR ⇒ if mild- moderate : no treatment. Severe : follow up

2. Hypertensive retinopathy: lower the mean arterial pressure



Diabetic retinopathy

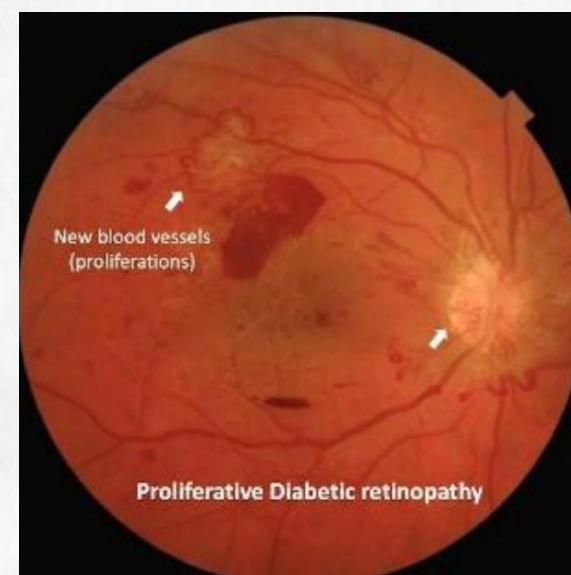
115.

A. Diagnosis?

Proliferative diabetic retinopathy

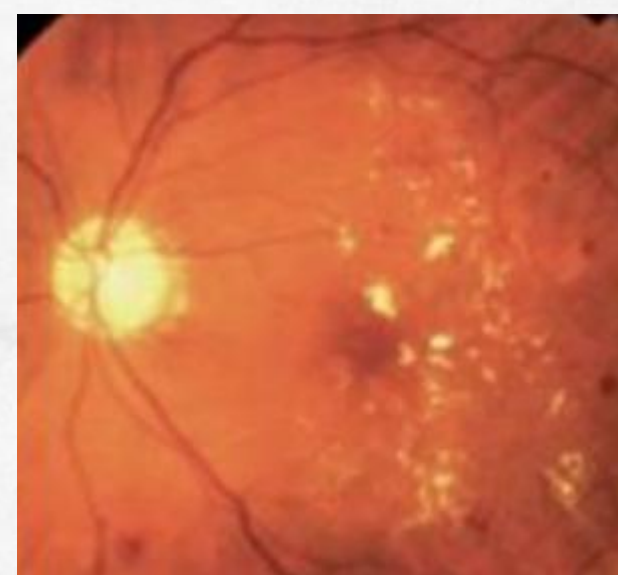
B. Management?

Anti VEGF intravitreal, laser photo coagulation



116. What is the earliest sign in this condition?

Answer: Microaneurysms

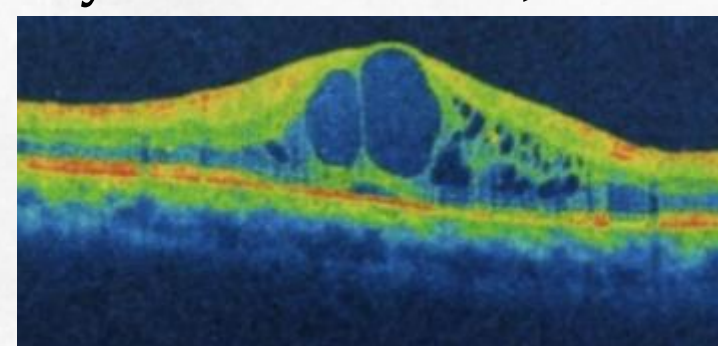


117. This picture + picture of retina with hard exudates very close to macula, best treatment?

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

118. 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.



Diabetic retinopathy

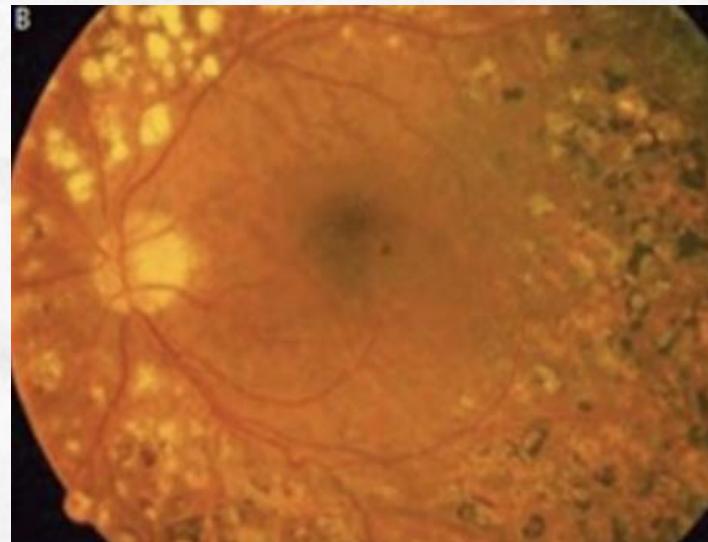
119.

A. Findings:

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

B. Give diagnosis:

Proliferative diabetic retinopathy



120.

A. Name the pathological findings :

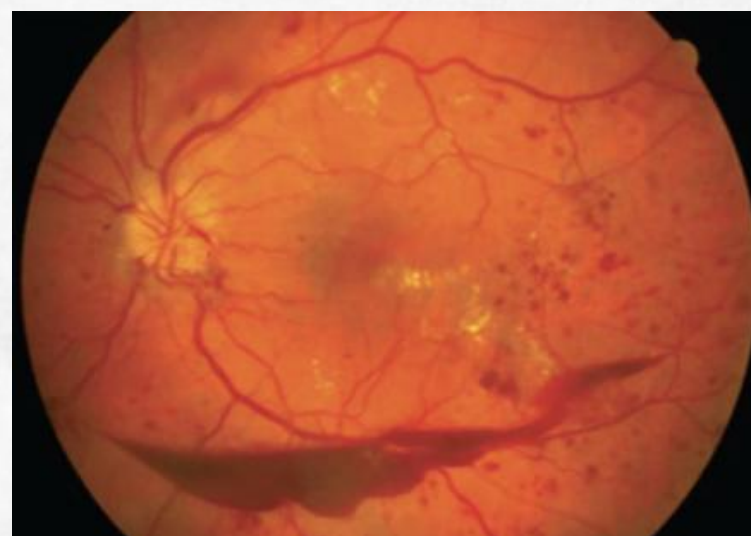
Neovascularization, preretinal hemorrhage, dot/ blot hemorrhage, hard exudates.

B. Most likely diagnosis :

Proliferative diabetic retinopathy

C. Treatment:

Retinal photocoagulation , Anti- VEGF (Avastin)



121.

A. Name three pathological changes in the image

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

B. What is the diagnosis

Proliferative diabetic retinopathy



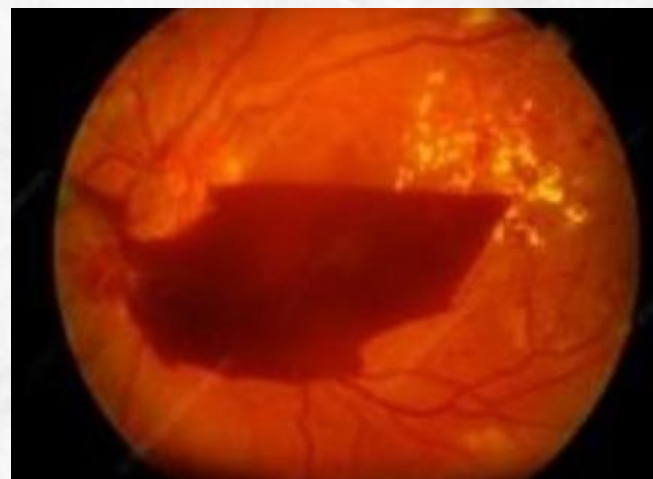
122.

A. Mention three abnormalities

Pre-retinal hemorrhage, hard exudates, neovascularization.

B. Mention two lines of management

Intravitreal Anti-VEGF, laser photocoagulation (proliferative DR)



Diabetic retinopathy

123. name of the following



Fundoscope/ ophthalmoscope

124.

A. Describe what you see

Retinal laser photocoagulation marks

B. Mention 2 complication of such procedure

Reduce night vision, exudative retinal detachment, macular edema

C. If you know that the patient has diabetic retinopathy, what stage is most likely to be

Proliferative DR.



125.

A. Name of the image

Optical coherence tomography - OCT

(OCT alone wasn't accepted)

B. Diagnosis

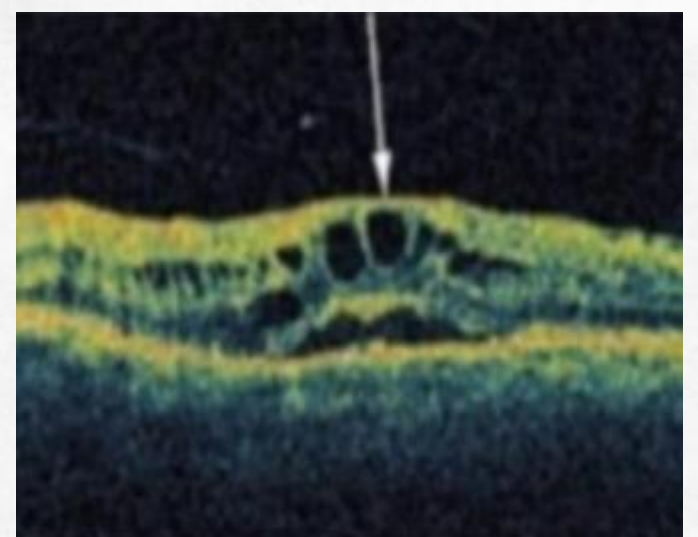
Macular edema

C. 2-possible causes

Diabetic retinopathy, post intraocular surgery(cataract), retinitis pigmentosa

D. Treatment

Intravitreal Anti-VEGF injections, laser photocoagulation, topical steroids .



Diabetic retinopathy

126.

A. Describe

Neovascularization of the iris - rubiosis iridis

B. Mention 2-causes

Diabetic retinopathy (proliferative), chronic uveitis



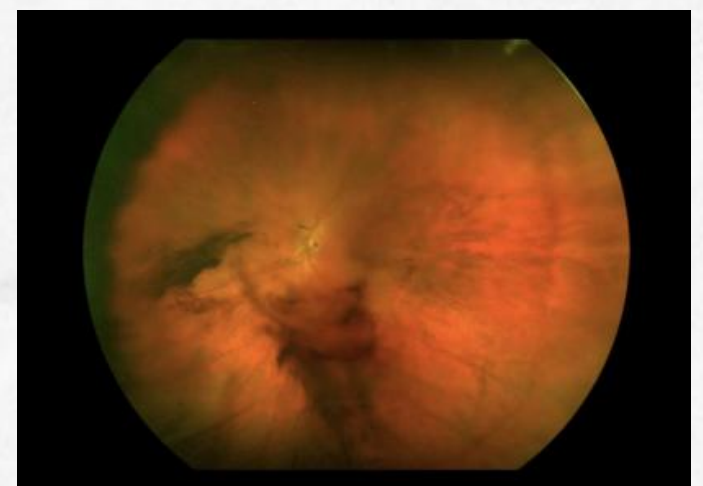
127.

A. Differential diagnosis

Diabetic retinopathy, truma, retinal tear.

B. 3- investigations

HbA1C, blood glucose, blood pressure, fluorescein angiography



128.

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

Strabismus

129. Esotropia in a 3-year-old. 2 causes (excluding congenital)?

1. **Refractive error**

(especially uncorrected hypermetropia → accommodative esotropia).

2. **Neurological / acquired causes:**

Sixth nerve palsy.

CNS lesions (e.g., tumor, hydrocephalus).



130.

A. Describe what you see?

Paralytic squint- right 6th nerve palsy

B. Write to possible causes?

Diabetes, high ICP, Neoplasm -meningioma



131. Name the muscles used and be specific?



ANSWER:

1. **Right medial rectus muscle**

2. **Left lateral rectus**

132. Which of the following is NOT a cause of esotropia?

A. Wide nasal bridge

B. Hypermetropia

C. Amblyopia

D. Cataract

Answer: A

Wide nasal bridge = Pseudoesotropia

Amblyopia can be both, cause and result.



Strabismus

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

Answer: Inferior rectus

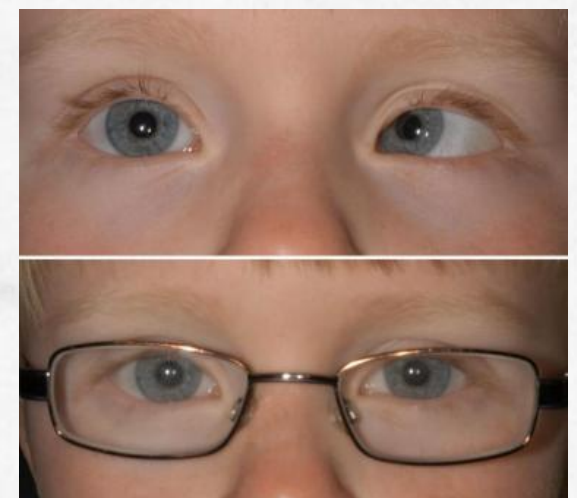
135.

A. What is the finding in this image :

Esotropia in the left eye.

B. After considering the lower image, what is the diagnosis?

Accommodative esotropia secondary to hypermetropia



136. Matching :

- | | |
|----------------|--------------------------------|
| 1- Leucokoria | A. Upward deviation of the eye |
| 2- Anisocoria | B. White pupil |
| 3- Hypertropia | C. Asymmetric pupil size |
| 4- Aniseikonia | D. Lazy eye |
| 5- Ambylopia | E. Asymmetric image size |

ANSWER: 1- B 2- C 3- A 4- E 5- D

137.

A. Describe what you see.

Paralytic squint- right 6th nerve palsy

B. Write 2 possible causes.

Diabetes, high ICP, Neoplasm -meningioma

C. What systemic workup would you do.

CBC, ESR, ANCA, fundoscopy Head & neck CT, MRI.

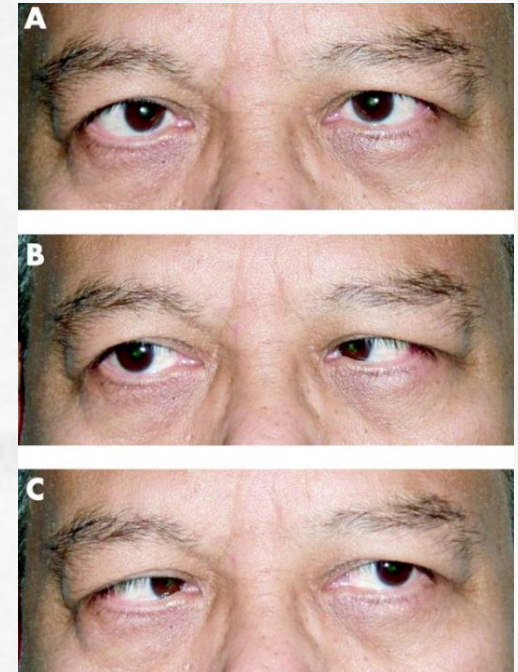


Strabismus

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

Answer:

raised ICP, Inflammation (sarcoidosis, vasculitis), trauma, Cavernous sinus thrombosis.



139.

A. Name the condition

Strabismus (accommodative esotropia caused by hyperopia)

B. Type of glasses

Positive glasses (convex lenses, eyes look bigger).



140. name of the following



Prism bar

Used to measure the angle of deviation in strabismus

141.

A. Mention 2- abnormalities

Right eye esotropia and ptosis.

B. Differential Diagnosis

Cranial nerve 3 palsy, intracranial artery aneurysm, tumor, HTN, high IOP.



Strabismus

142.

A. What is the chief complaint of the patient

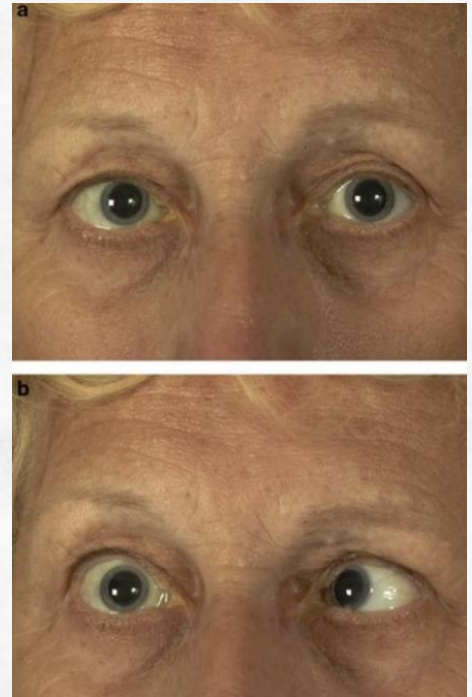
Diplopia

B. 2-causes of the condition

6th nerve palsy, acoustic neuroma, meningioma, vasculitis, high icp.

C. 3-risk factors

Diabetes, hypertension, history of head trauma, history of neurological disease.



143.

A. Describe

Left eye esotropia (strabismus)

B. Differential diagnosis

Accommodative esotropia (untreated hyperopia), infantile esotropia, nonaccommodative esotropia (cataract, stress, retinoblastoma).



144. Causes of vision loss in graves disease :

ANSWER: Optic N. Compression & corneal ulceration

145. Causes of anisocoria :

ANSWER: Horner's syndrome & Adie's syndrome

146. Causes of myopia in a 33 female patient :

ANSWER: D.M , cataract & Keratoconus

Loss of Vision

147. Sudden visual loss + retinal break.

A. Diagnosis?

Rhegmatogenous Retinal Detachment

B. Presentation?

Sudden painless visual loss.

Flashes of light (photopsia).

Floaters (“black spots” or “cobwebs”).

Curtain or shadow descending across visual field.

C. Two lines of treatment?

Laser Photocoagulation / Cryotherapy

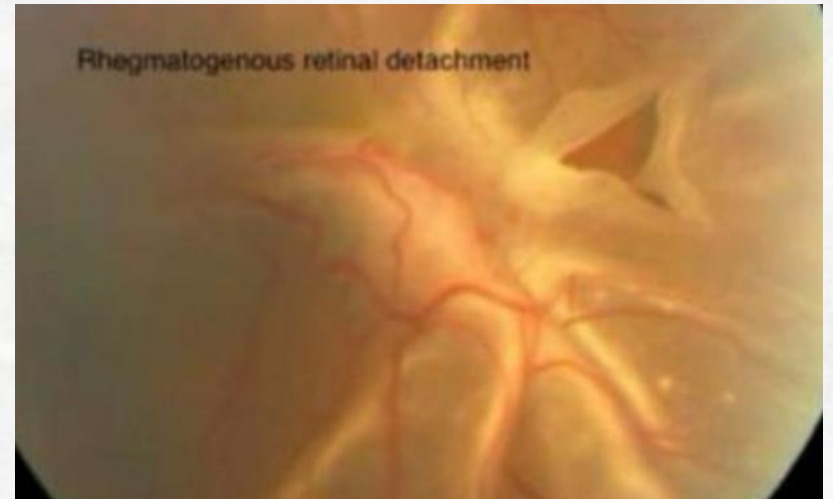
Seals small retinal tears before detachment progresses.

- Surgical repair options (for established detachment):

Scleral Buckling - indents sclera to close retinal break.

Pars Plana Vitrectomy - remove vitreous traction, inject gas/oil tamponade.

Pneumatic Retinopexy - gas bubble injection with positioning



148.

A. Describe?

Retinal tear with detachment

B. Main symptoms?

Painless sudden vision loss

C. Mx?

Surgical repair (vitrectomy, pneumatic retinopexy)



149.

A. Diagnosis?

Branch retinal vein occlusion

B. Causes?

Atherosclerosis / cardiovascular disease

Hyperlipidemia Hypercoagulability



Loss of Vision

150.

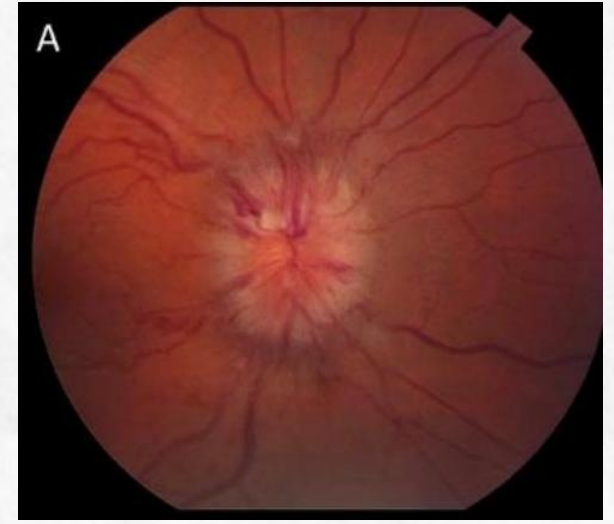
A. Describe, what do you see?

Optic disc swelling

(not papilledema) to say it's papilledema we need to see both eyes

B. Give 3 DDX?

- **Papilledema**
- **Optic n. glioma, meningioma**
- **Central retinal vein occlusion (CRVO).**



151. 35 yr old female presented with sudden painful visual loss, RAPD, visual acuity 6/60,

A. Describe optic disc?

Pale optic disc, swollen and hyperemic disc

B. The reason for vision loss in his case is mainly due to?

Optic neuritis

C. Mx?

Give high dose steroids



152. (This question specifically answered by Dr.Osama who wrote it)

A. Describe the visual Defect?

Incongruous left homonymous hemianopia

B. where is the lesion (location)?

Right optic tract or lateral geniculate body lesion



153.

A. 3 signs?

Diffused grey white cloudy discoloration of the retina (pale retina), diffuse narrowing of retinal arterioles, slow segmented blood flow (boxcarring), cherry red spot (accentuated fovea)

B. Diagnosis?

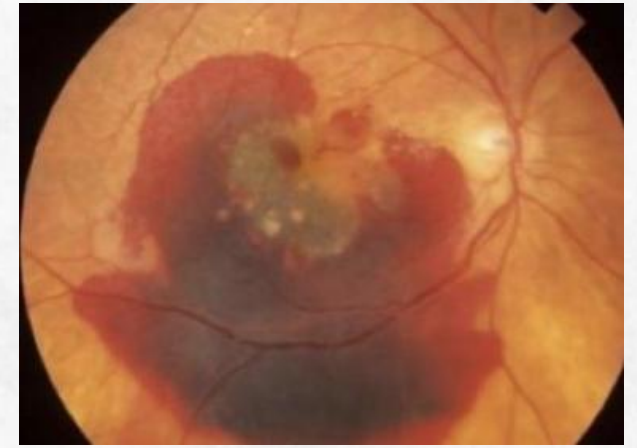
CRAO



Loss of Vision

154. 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.

155.

A. What is the type of this retinal detachment?

Rhegmatogenous retinal detachment

B. Write two symptoms?

Floaters, scotoma, vision loss.

C. 3 lines of treatment?

1. Vitrectomy

2. Surgical repair

3. Laser photocoagulation & anti-VEGF



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

A. Diagnosis

Retinal detachment

B. Mention 2 risk factors for this condition.

Cataract surgery, myopia



157.

A. Finding

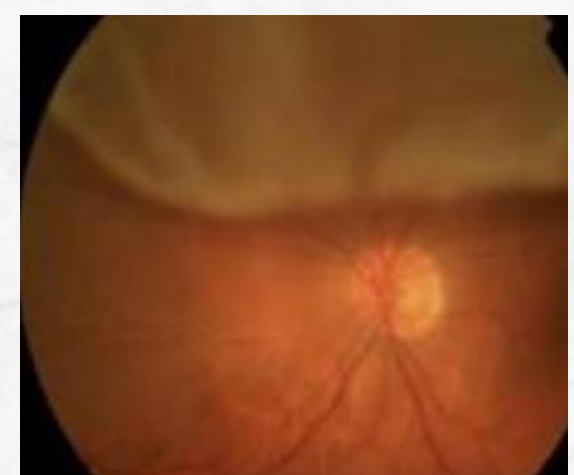
Retinal Detachment

B. Symptoms

Floaters, Scotoma, Visual loss

C. Treatment

Surgical repair



Loss of Vision

158.

A. Describe

Reddish area at the center of the macula/ central retinal artery occlusion (cherry red spot)

B. Treatment

Dislodge the embolus/ revascularization



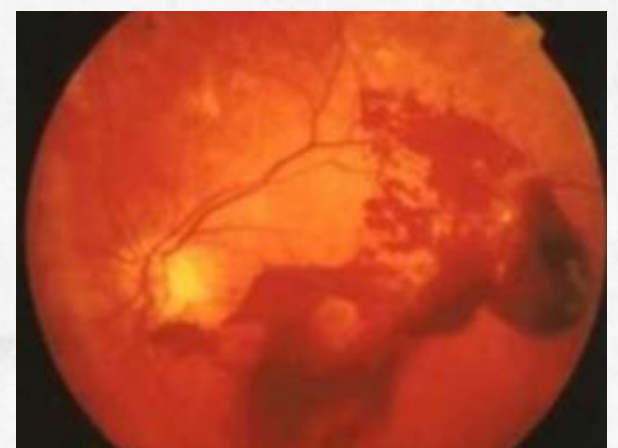
159. 65-year-old man presented with sudden painless vision loss

A. Cause:

Vitreous hemorrhage

B. Differential Diagnosis

Proliferative diabetic retinopathy, head trauma.



160. 31 year old female present to ED with Sudden onset headache and vomiting.

A. Describe

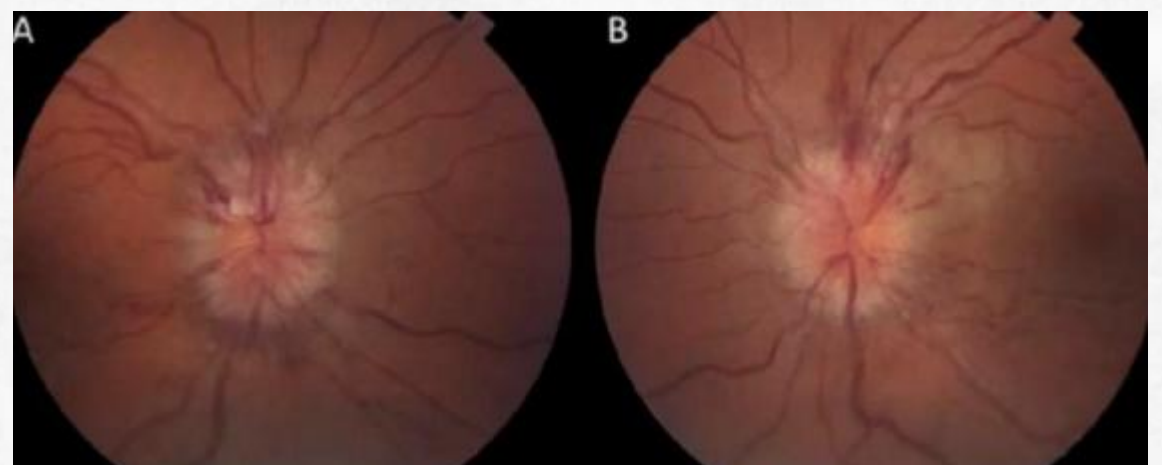
Papilledema (bilateral optic disc swelling with high icp)

B. Differential

Pseudotumor cerebri, malignant hypertension, brain tumors.

C. 2-causes

↑ ICP, uncontrolled HTN.



161.

A. Describe **Retinal detachment**

B. Causes

Trauma, high myope, diabetic retinopathy, intraorbital surgery.



Loss of Vision

162. Match

- 1- Sudden painful visual loss
- 2- Sudden painless visual loss
- 3- Gradual painful visual loss
- 4- Gradual painless visual loss
- 5- Transient visual loss

- A- Cataract
B- central retinal vein occlusion
C- Acute angle glaucoma
D- Migraine
E- Herpes zoster ophthalmicus

ANSWER: 1- C 2- B 3- E 4- A 5- D

163. 2 risk factors of sudden painless vision loss

ANSWER: DM, glaucoma, hypertension, A.fib.

164.

A. Thickness of (A) at its center

0.5mm

B. The 2 parts of (B)

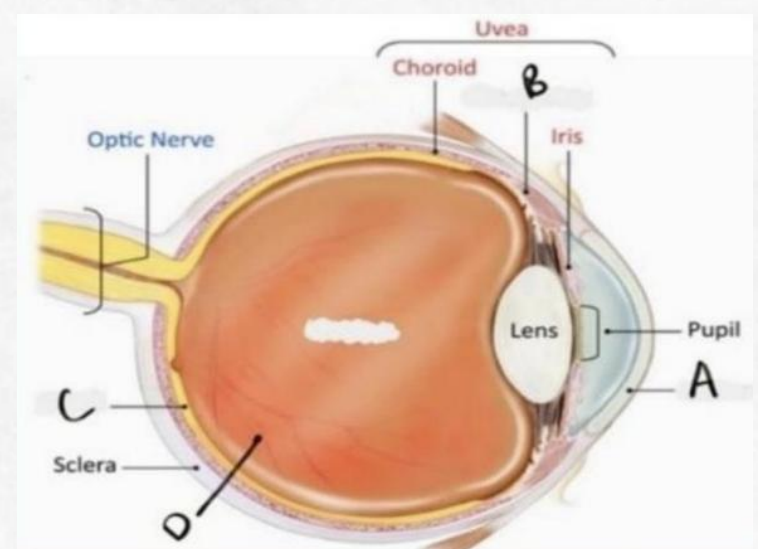
Pars plana/ pars plicata

C. Most anterior part of (C)

The inner neurosensory retina

D. Composition of (D)

Vitreous humor



165.

A. Name the test

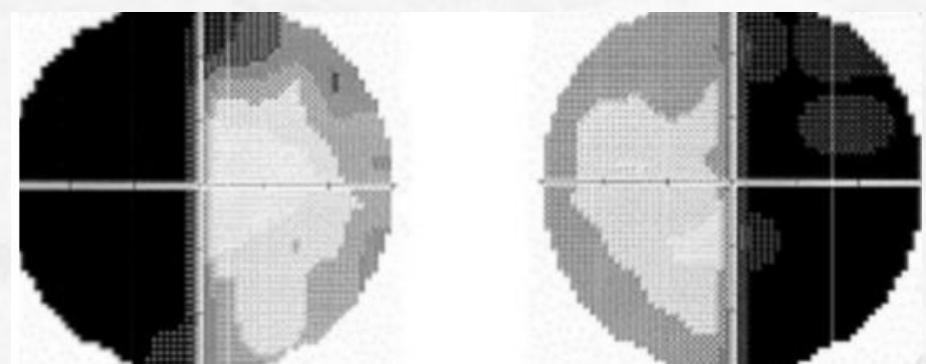
Visual field test

B. Other test helps in diagnosis

Optic nerve head imaging (OCT)

C. Give one differential

Pituitary adenoma compressing optic chiasm



Ocular Emergencies

(Eye injuries)

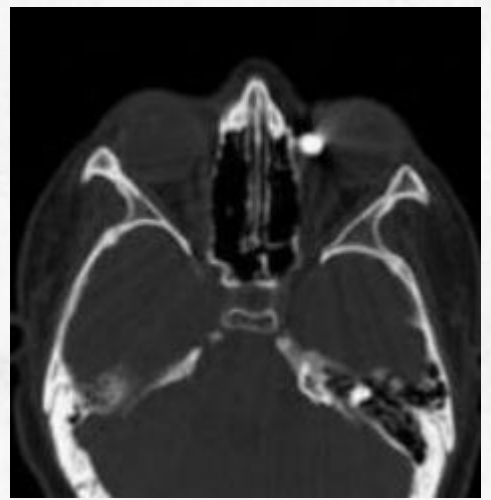
166.

A. Describe what you see?

CT scan showing Hyperdense foreign body in left orbital area with radiating beams indicating a metallic nature.

B. Two exams to be done:

Slit lamp & Tonometry



167.

A. Findings

Opacification of the cornea, white conjunctiva

B. Possible causes

Chemical burns, alkali

C. Treatment

Continuous irrigation for 30-60 minutes



168.

A. Describe what you see?

Hyphemia

B. one possible cause?

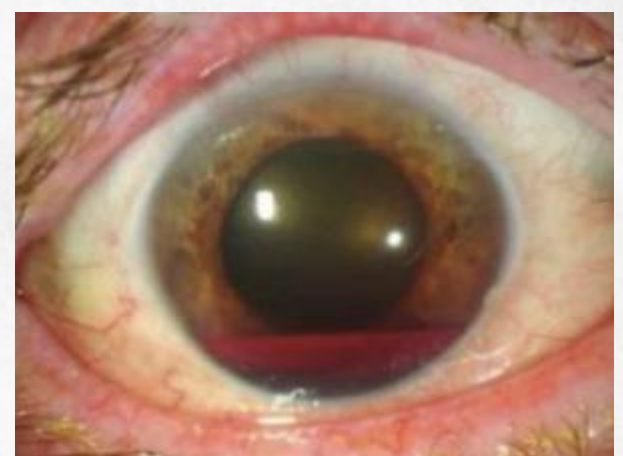
Trauma

C. Reasons to treat these conditions/ complications?

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

C. Why irrigation indicated?

To remove blood, prevent rebleeding, avoid corneal blood staining, and lower risk of secondary glaucoma.



169.

A. Describe the findings:

Chemosis, opacification of the cornea, ciliary flush.

B. Differential diagnosis :

Chemical burn injury.

C. management:

water irrigation.



Ocular Emergencies

(Eye injuries)

170. 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.



A. Differential diagnosis:

ACUTE closed angle glaucoma

B. Management :

Timolol drops, prostaglandin drops, YAG laser iridotomy or surgical iridectomy.

171.

A. Describe :

Cloudy cornea, intensely red conjunctiva with prominent dilated blood vessels and limbal ischemia.

B. Differential diagnosis:

Chemical burn injury.

C. Treatment:

Water Irrigation for 30-60 min.



172.

A. Name three pathological findings:

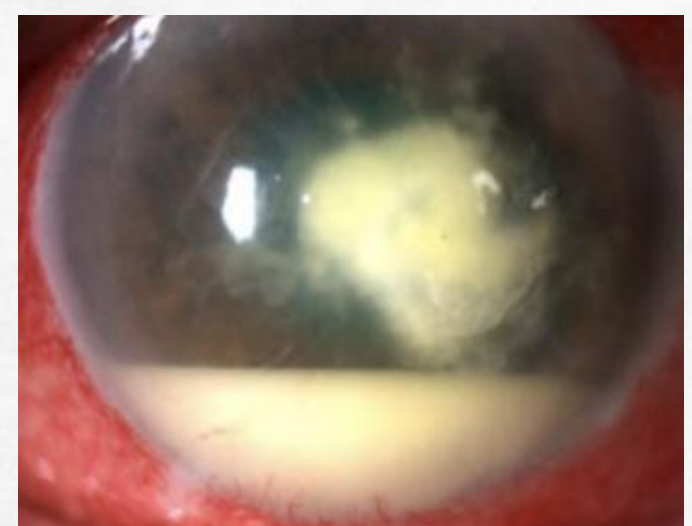
Hypopyon, white corneal opacity, ciliary flush

B. What is the most likely diagnosis:

Bacterial keratitis.

C. What is the treatment:

Topical Broad spectrum Abx.



Ocular Emergencies

(Eye injuries)

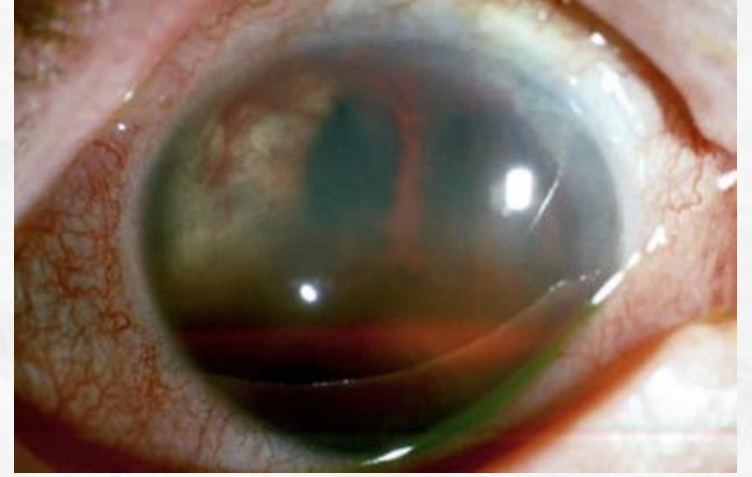
173.

A. Name two pathological findings.

Name two pathological findings : Hyphemia, ciliary flush, area of active bleeding from superior iris.

B. Mention three causes.

Mention three causes : trauma , Sickle cell anemia , rubeosis iridis.



174.

A. Imaging type

Axial CT of the head.

B. Findings

Hyperdense foreign body in left orbital area with radiating beams indicating a metallic nature.

C. What do you do next?

Prophylactic Antibiotics, Tetanus prophylaxis, urgent ophthalmologic evaluation, NPO.



175. This is the eye of a patient following a trauma.

A. Mention 2 findings you see in the picture.

Hyphemia, conjunctival injection, limbus ischemia.

B. What's the type of glaucoma in this patient.

Secondary open angle glaucoma (clogging by RBCs).



176. 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.

Ocular Emergencies

(Eye injuries)

177.

A. Describe

Rhegmatogenous retinal detachment/ subretinal fluid from 10:00 clockwise to 3:00, extending posteriorly to just involve the center of the fovea.

B. Patient presentation

Sudden painless monocular vision loss / flashing lights and blurred vision/ curtain-like vision loss.

C. Treatment

surgical repair / vitrectomy



لا تنسوني من صالح دعائكم

Malek Abu Rahma

The End
Good Luck シ