

Eye Ward

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Credits for helping to solve Stations:

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Pupillary Reflex:

- i) Light reflex
 - ⇒ Use torch to adjust light on pupil, laterally to medial.
- ii) Relative afferent pupillary defect:
 - ⇒ Direct light beam on one eye than other eye
 - ⇒ It use to check pupillary constriction
- iii) Accommodation reflex.

Visual Acuity

Instructions for test:

- ⇒ No glasses
- ⇒ One Eye close

Test:

1. Snellen's chart test:

- i) Ask the patient to read every word on Snellen's chart
- ii) If the patient is unable to see the top letter, he is asked to count the fingers if he can count the finger than the visual acuity = $1/60$

2. Pinhole test:

In order to find out, if there is refractive error or some other problem.

3. Counting fingers:

- i) If he can count the finger at 50cm than the visual acuity = counting fingers at 50cm
- ii) If he cannot count the fingers, examiners should move his fingers close to the face if her appreciate the movements than the visual acuity = hand movements

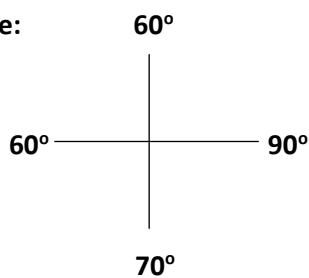
4. Light perception:

- i) In the dark room, he is asked to say when the light is on the or when it is off, if he tells correctly, visual acuity = perception of light (**PL**)
- ii) If he tells the correct direction of light where the light coming from then the visual acuity = perception of light (**PL**) and projection of light is Good.
- iii) If he fails to see the light then he is blind, visual acuity = no perception of light (**PL**)

Visual field

Normal field of vision:

Left eye:



Visual field tests:

Instructions for test:

- ⇒ No glasses
- ⇒ Each eye test separately
- ⇒ Ask the patient to fix his eye on examiners nose
- ⇒ One Eye close of patient and opposite eye closed of doctor.

1. Confrontation test:

- i) Move fingers from 4 quadrant and then ask patient to tell when he is able to watch

2. Cross test:

- i) Move fingers from 4 quadrant diagonally

Extraocular muscle Movements:

1. Binocular
 - i) **H-test:**
 - i. **Dextroversion** is movement of both eyes to the right
 - ii. **Dextroversion elevation** is movement of both eyes to the right upward
 - iii. **Dextroversion depression** is movement of both eyes to the right downward
 - iv. **Levoversion** is movement of both eyes to the left
 - v. **Levoversion elevation** is movement of both eyes to the left upward
 - vi. **Levoversion depression** is movement of both eyes to the left downward
 - ii) **Convergence**
 - iii) **Divergence**
 - iv) **Different color pen test**
2. Uniocular
 - i) **Plus test:**
 - ⇒ **Instructions for test:**
 - ↳ No glasses
 - ↳ Each eye test separately
 - ↳ Focus eye on the finger
 - i. **Elevation**
 - ii. **Depression**
 - iii. **Abduction** finger move outward
 - iv. **Adduction** finger move inward

Hirschberg test

This test is used for the squint, this test is used for **type, degree and angle**.

Point the light on the eye at bridge of nose, than see exotropia, Esotropia, Hypertropia and Hypotropia

- ⇒ **Exotropia** → pupil move laterally
- ⇒ **Esotropia** → pupil move medially
- ⇒ **Hypertropia** → pupil move upward
- ⇒ **Hypotropia** → pupil move downward

Types:

- i) Latent squint (Cover and uncover test)
- ii) Manifest squint (Hirschberg test)

Regurgitation test

- i) Look upward
- ii) Use Little finger to press, if liquid come out than the regurgitation test is positive

Medicines:

1.



Ocumox

Moxifloxacin uses to treat bacterial conjunctivitis (pink eye)

Adverse Effects:

- ↪ Dry eyes
- ↪ Watery eyes
- ↪ Eye pain
- ↪ Blurred vision
- ↪ Mild itching
- ↪ Redness

2.



Blephamide:

Uses:

- ↪ Treat bacterial infections
- ↪ Treat swelling in the eye

Adverse effects:

- ↪ Eye irritation
- ↪ Allergic reactions
- ↪ Increased intra-ocular pressure
- ↪ Cataracts
- ↪ Delayed wound healing
- ↪ Dilated pupils
- ↪ Farsightedness
- ↪ Drooping eyelids

3.



Eyemox-D

Uses:

- ↪ Bacterial infectious treatment

Adverse effects:

- ↪ Pain
- ↪ Dryness
- ↪ Redness
- ↪ Itchiness

Duration:

- ↪ Once a day for 5 to 21 days

4.



Nebra

Uses:

- ↪ Bacterial eye infections treatment

Adverse effects:

- ↪ Eye burning
- ↪ Stinging
- ↪ Irritation
- ↪ Itching
- ↪ Tearing
- ↪ Redness
- ↪ Discomfort

Duration:

- ↪ 30 minutes to few hours

5.



OLOPAT-DS

Uses:

- ↪ Eye burning
- ↪ Itching
- ↪ Watering
- ↪ Redness

Adverse effects:

- ↪ Headache
- ↪ Blurred vision
- ↪ Eye burning
- ↪ Stinging
- ↪ Redness
- ↪ Dryness of eye
- ↪ Eyelid swelling

6.



Rocip

Uses:

- ↪ Bacterial eye infections
- ↪ Conjunctivitis

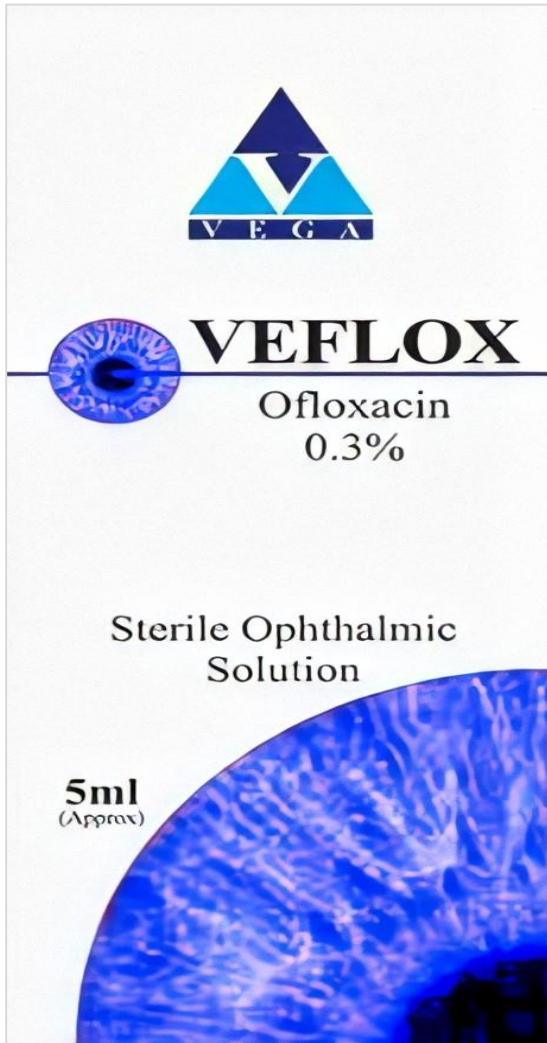
Adverse effects:

- ↪ Eye burning
- ↪ Itching
- ↪ Tearing
- ↪ Redness
- ↪ Discomfort
- ↪ Eyelid crusting
- ↪ Foreign body sensation

Duration:

- ↪ 30 minutes to 4 hours

7.



Veflox

Uses:

- ↪ Bacterial eye infections
- ↪ Conjunctivitis (pink eye)
- ↪ Ulcers of the cornea

Adverse effects:

- ↪ Eye burning
- ↪ Stinging
- ↪ Itching
- ↪ Tearing
- ↪ Redness
- ↪ Discomfort
- ↪ Dizziness
- ↪ Eye pain
- ↪ Facial swelling
- ↪ Sensitivity to light

Duration:

- ↪ 30 minutes to 6 hours

8.



Opta Atropine

Uses:

- ⇒ It is used to widen the pupil before an eye surgery.
- ⇒ It is used to treat eye swelling.
- ⇒ It is used to treat lazy eye (amblyopia).

Adverse effects:

- ↪ Flushing.
- ↪ Restlessness.
- ↪ Feeling irritable.
- ↪ Dry mouth.
- ↪ Dry skin
- ↪ Change in eyesight
- ↪ eye pain

9.



Mydriacyl

Duration:

⇒ 12-20 minutes

Use:

⇒ Pupil dilation
⇒ Mydriatic cycloplegic

Adverse effects:

⇒ Photophobia
⇒ Eye stinging
⇒ Dry mouth
⇒ Temporary blurred vision

10.



Alcaine

Duration:

⇒ 15 minutes → short acting

Use:

⇒ Analgesic
⇒ Local analgesic

Adverse effects:

⇒ Hypertension
⇒ Seizures
⇒ Allergic reactions
⇒ Cardiac arrhythmias

Half-life:

⇒ 1-2 minutes

11.



Cyclopen

Duration:

- ⇒ 2-12 Hours

Use:

- ⇒ Mydriatic
- ⇒ Anticholinergic
- ⇒ Antimuscranic
- ⇒ Swelled eye examination
- ⇒ Amblyopia examination

Adverse effects:

- ⇒ Blurred vision
- ⇒ Eye pain
- ⇒ Dry mouth
- ⇒ Photophobia
- ⇒ Eye stinging
- ⇒ Decrease lacrimation

12.



Ethifrin

Use:

- ⇒ Acid related dyspepsia
- ⇒ Congestion
- ⇒ Hypotension

Adverse effects:

- ⇒ Bradycardia
- ⇒ Vomiting
- ⇒ Severe hypertension

Contraindications:

- ⇒ Angina
- ⇒ Hyperthyroidism
- ⇒ Hypertension
- ⇒ Myocardial infraction

Potential eye injury?

- Blunt
- Penetrating
- Eye burns
- FB

Assess for other injuries as necessary, particularly head and neck injuries.

Adequate examination **not** possible?

Ophthalmology review

- Minimal examination or manipulation of potentially ruptured globe
- Analgesia and antiemetics
- (see Penetrating eye injury guidelines)

Evidence of potentially serious eye injury?

Burn to eye?

Urgent first aid. See management

Superficial FB or small abrasion?

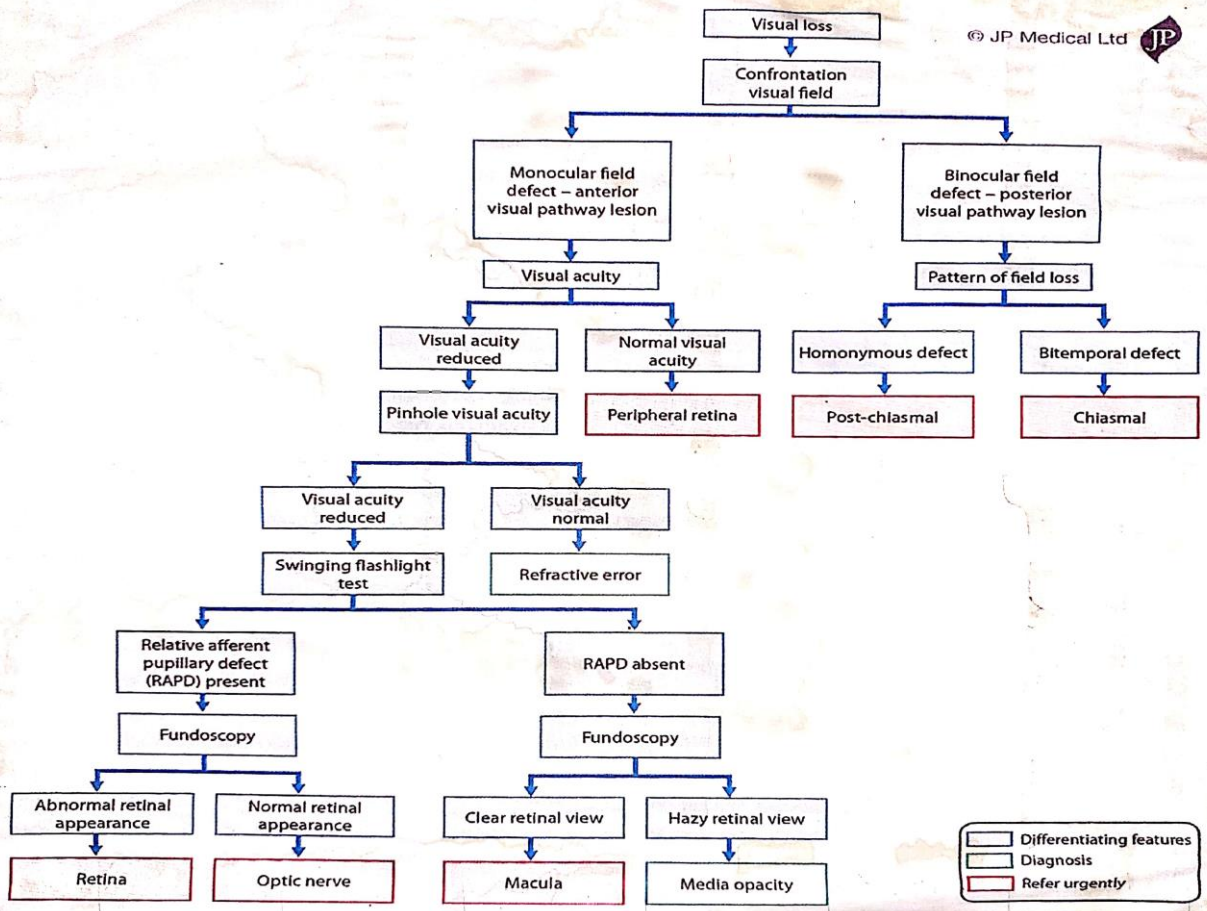
See management

Normal examination & persistent pain or subjective visual disturbance

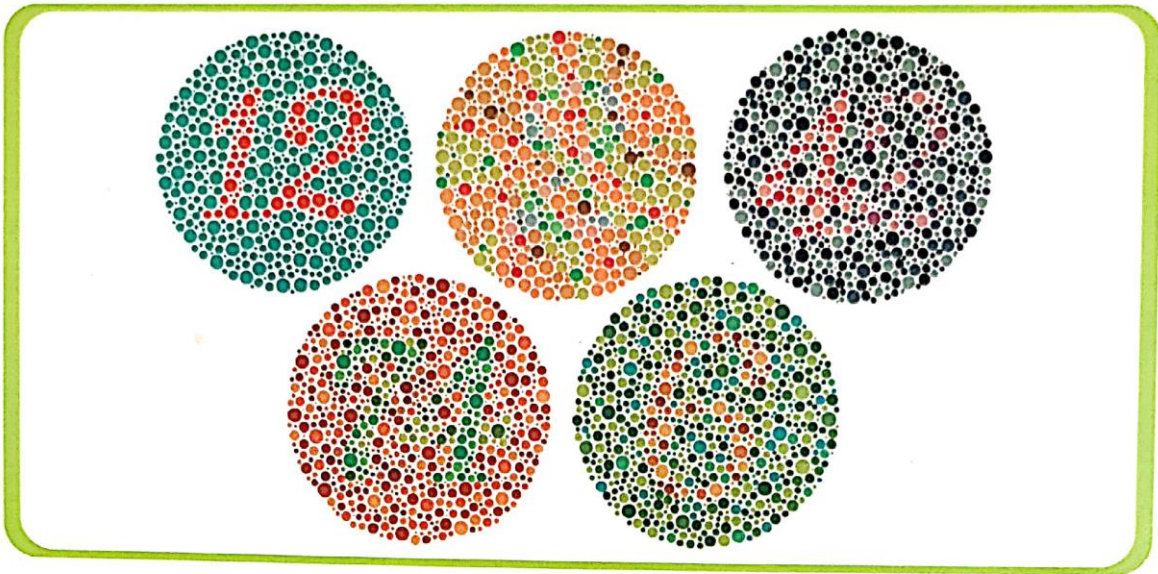
Discuss with ophthalmology before discharging patient

Normal examination and no other symptoms

Discharge



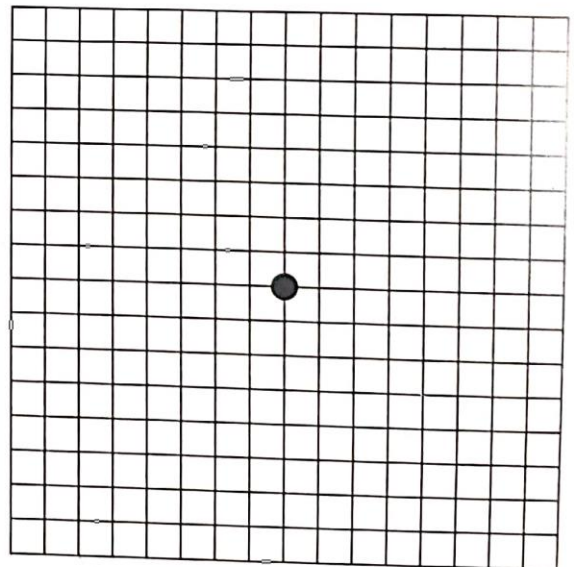
Color Vision Test



The Amsler Grid

A Self Test for Macular Degeneration

1. Hold the grid on a comfortable reading distance (12-15 inches) from your eyes. Make sure you are in good light. If you have reading glasses wear them.
2. Cover one eye.
3. Look directly at the dot in the center.
4. Note whether all lines of the grid are straight or if any areas are black distorted or blurred.
5. Repeat the exercise with the other eye.
6. If any area of the grid looks wavy, blurred or dark, contact your Ophthalmologist immediately, for further testing.



N. V. CHART



No. 18

زندگی تب "بہتر" ہوتی ہے جب آپ خوش ہوتے ہیں لیکن زندگی تب "بہترین" ہوتی ہے جب آپ کی وجہ سے کوئی دوسرا خوش ہوتا ہے۔

No. 14

کسی کا عیب تلاش کرنے والے کی مثال اس مکھی کی جیسی ہے جو سارا خوب صورت جسم چھوڑ کر صرف زخم پر ہی بیٹھتی ہے۔

No. 12

بڑا انسان وہ ہے جس کی محفل میں کوئی خود کو چھوٹا نہ سمجھے۔

No. 10

نک ایک ایسی بیماری ہے جو انسان کا سکون ختم کر دیتی ہے۔

No. 8

یاد رکھیے! بیماریوں کے علاج کے لیے ڈاکٹر صاحبی بہرہ والا کتاب کر سکتے ہیں، خود سے کوئی دوا ہرگز استعمال نہ کریں۔

No. 6

مہارک ہو، یہ مہربانہ دیکھ کر آپ نے یہ بات کہہ کر آپ کی غمناک آنکھوں کے نشے سے بہت اچھی ہے۔

No. 18

ЭМШ ЕШЭ МЕЭ ШЭМ ЭШЭ ШМЕ

No. 14

МЕЭ ШЭМ ЕШЭ ЭМШ ЭШЭ ШМЕ

No. 12

ЕШЭ ЭМШ МЕЭ ШЭМ ЭШЭ ШМЕ

No. 10

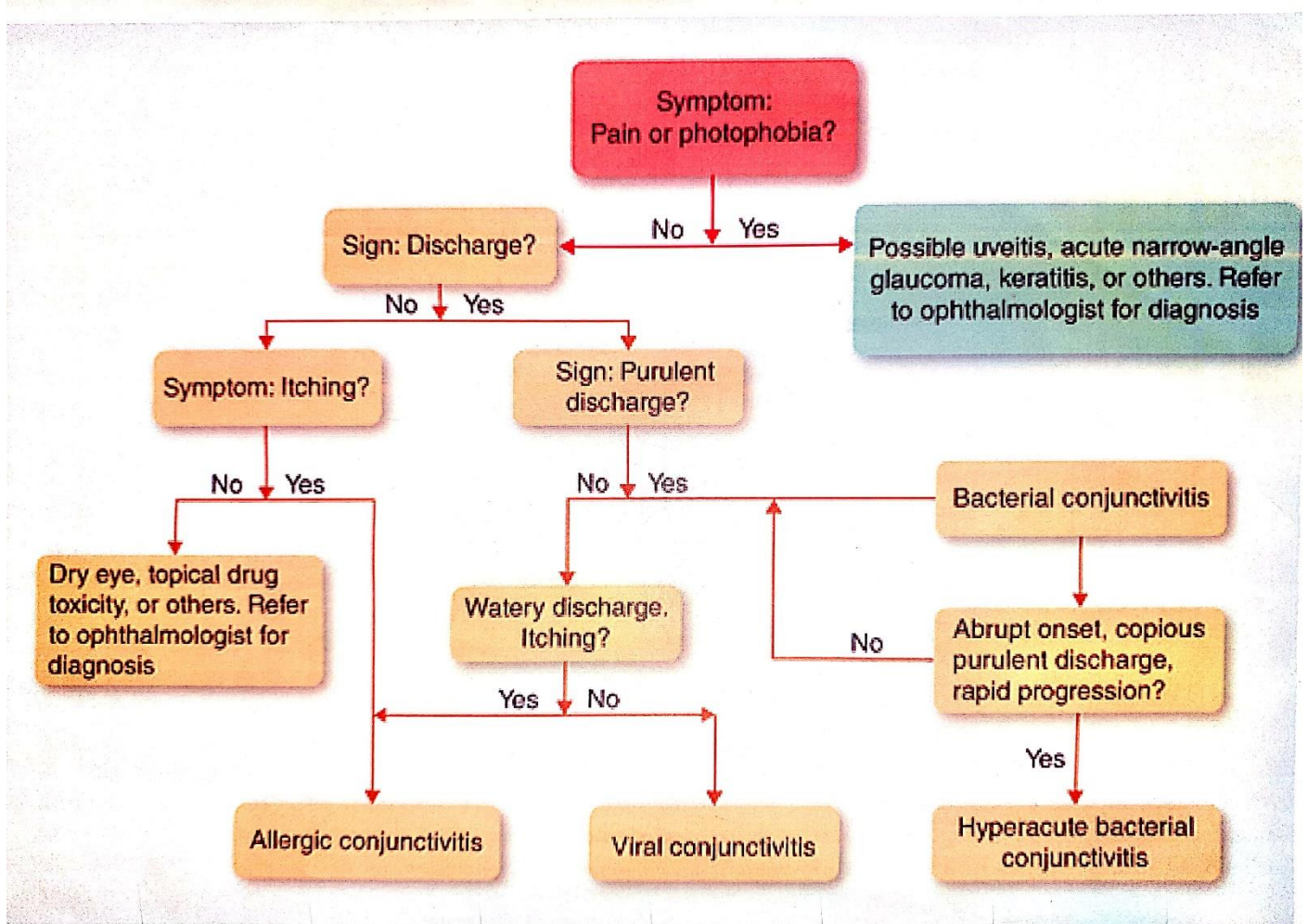
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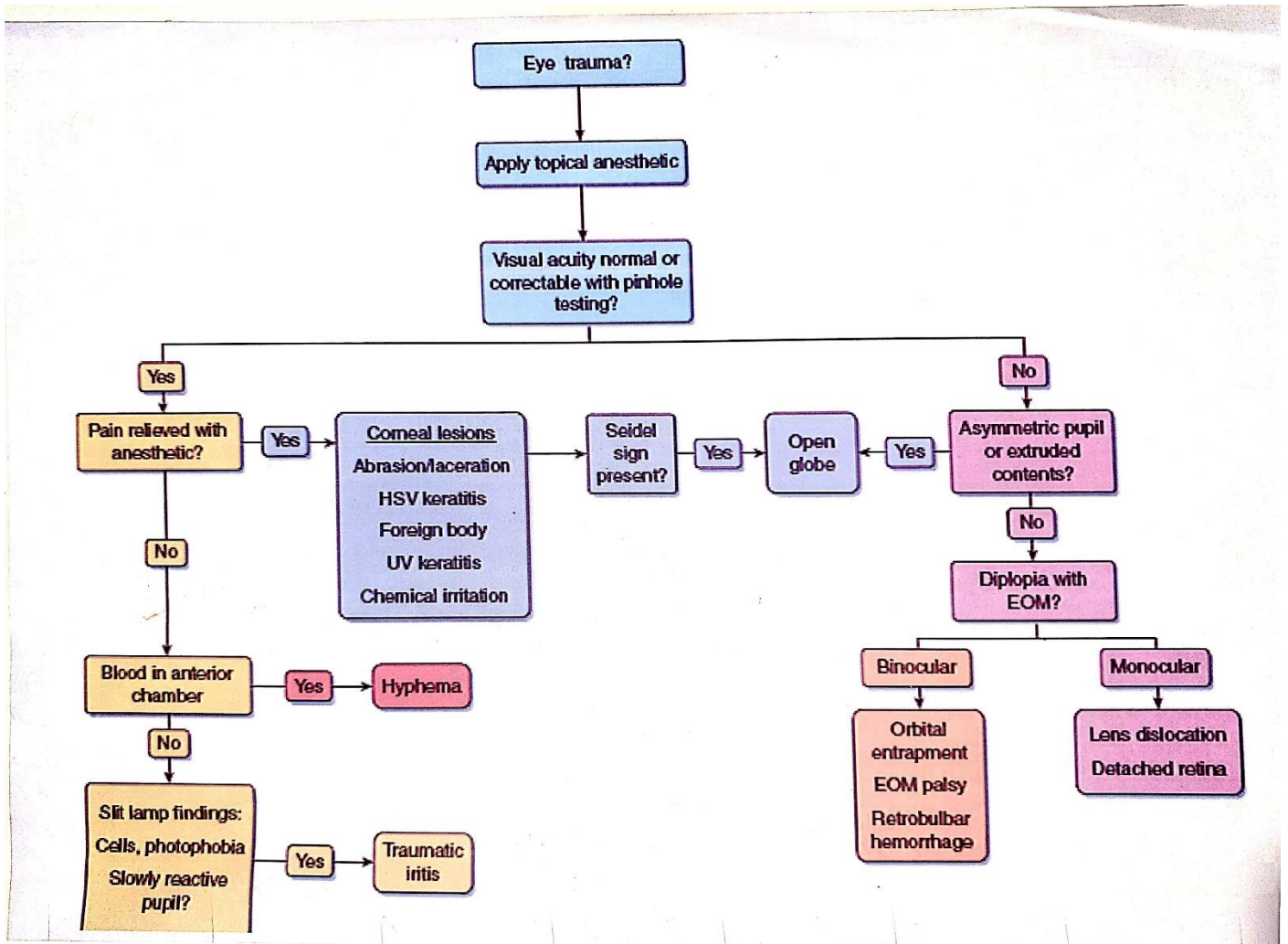
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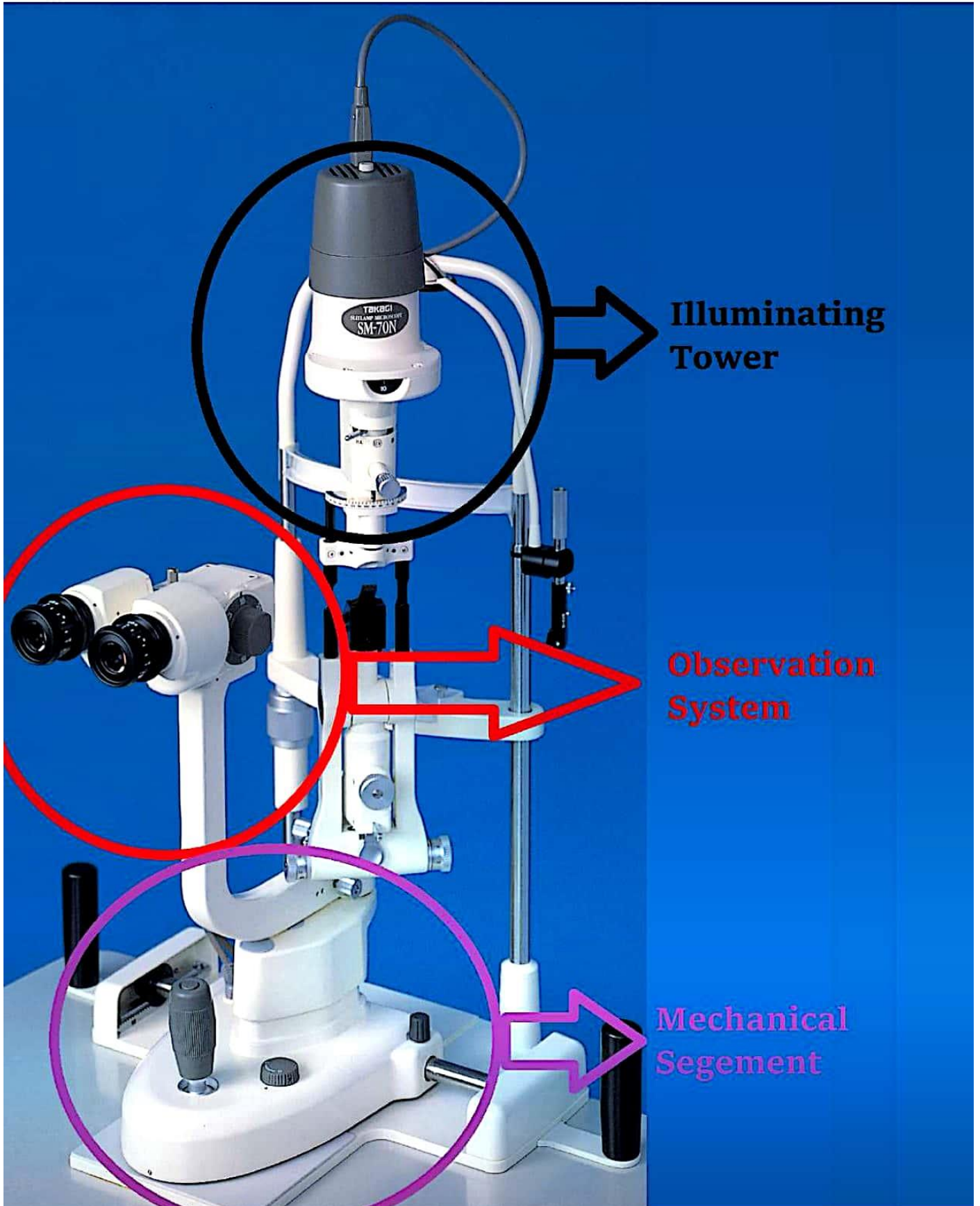
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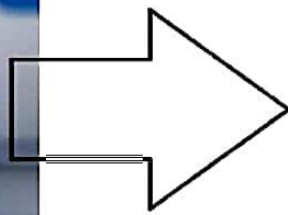




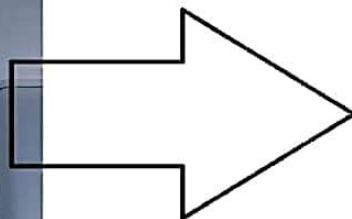
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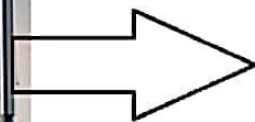
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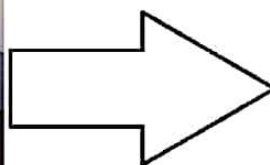
Microscope ocular



Joystick



Head rest



Chin rest



Knob to adjust light intensity

Magnification Knob

Eye OSPE Stations

Station # 1



This young boy presented in eye OPD with upper lid swelling well away from lid margin.

1. What is your diagnosis?

Chalazion

2. What other treatment options are available apart from surgical option?

- **Conservative:**

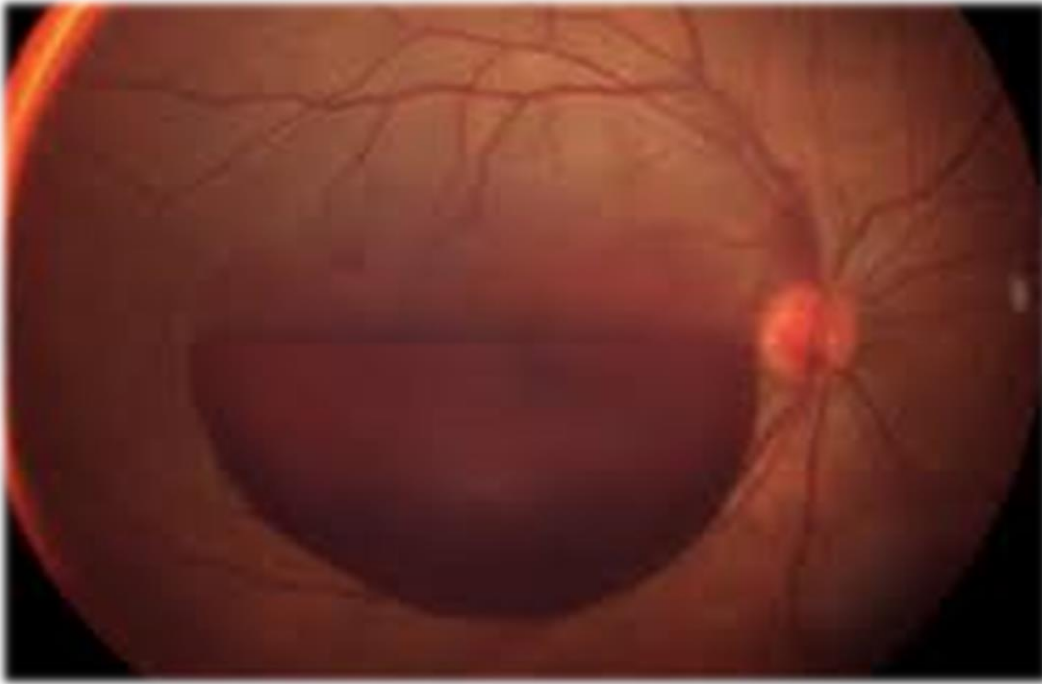
- ↳ Compression
- ↳ Topical antibiotics
- ↳ Topical anti inflammatory

- **Medical:**

- ↳ Corticosteroid injection
- ↳ Systemic antibiotics

3. What type of incision would you prefer and why?

Vertical incision because of glands and vertical incision heals quickly



A 60 year old man presented in the eye OPD with sudden loss of vision with above fundus picture

1. What is your diagnosis?

Preretinal or subhyaloid hemmorage

2. What is the pathogenesis of this condition?

Pathogenesis: This occur b/w retina and vitreous. The blood remains fluid red in colour and moves with gravity forming boat shaped figure in macular area due to peculiar ring shaped attachment of vitreous around macula

3. Name the commonest systemic diseases responsible for this condition?

- ↪ Malignant HT
- ↪ D.M
- ↪ Leukemia
- ↪ Sickle cell anemia
- ↪ Purpura

4. How will you manage this patient?

Investigation

B-scan ultrasonography

Treatment

- ↪ Bed rest with elevation of head
- ↪ Photocoagulation
- ↪ Vitrectomy



This young girl presented in eye OPD with drooping of her left upper eyelid.

1. What is your diagnosis?

Ptosis

2. How will you classify this disease?

- ⇒ Congenital
 - ↳ Simple
 - ↳ Complicated
- ⇒ Acquired
 - ↳ Neurogenic
 - ↳ Myogenic
 - ↳ Aponeurotic
 - ↳ mechanical

3. Enumerate different measurements required to evaluate the disease?

Mild: 2mm

Moderate: 3mm

Severe: 4mm or more

4. Name different surgical options to treat this condition.

- ⇒ Resection of levator muscle
- ⇒ Motais operation
- ⇒ Frontalis suspension
- ⇒ Levator plication

Station # 4



This 55 years old female known diabetic for last 15 years was treated for his retinal problem.

1. What is this treatment known as?

Proliferative diabetic retinopathy

2. Name the retinal condition that led to this treatment?

Diabetes Mellitus

3. What other treatment modalities are available for this retinal disorder?

↳ PRP (pan-retinal photocoagulation)

↳ Anti- VEGF agents

↳ Steroids

↳ Vitrectomy with photocoagulation

4. What is pathogenesis of this condition?

↳ Microangiopathy affecting capillaries (damage to endothelial cells and basement membrane thick-end)

↳ Microvascular occlusion with microaneurysm

↳ Extensive closure lead to ischemia of retina

↳ Causing retinal hypoxia

Station # 5



This patient has painful swelling over lid margin for last 2 days.

1. What is your diagnosis?

Stye

2. How will you define this condition?

Infection of the gland in the eyelid that causes the red bump also called hordeolum

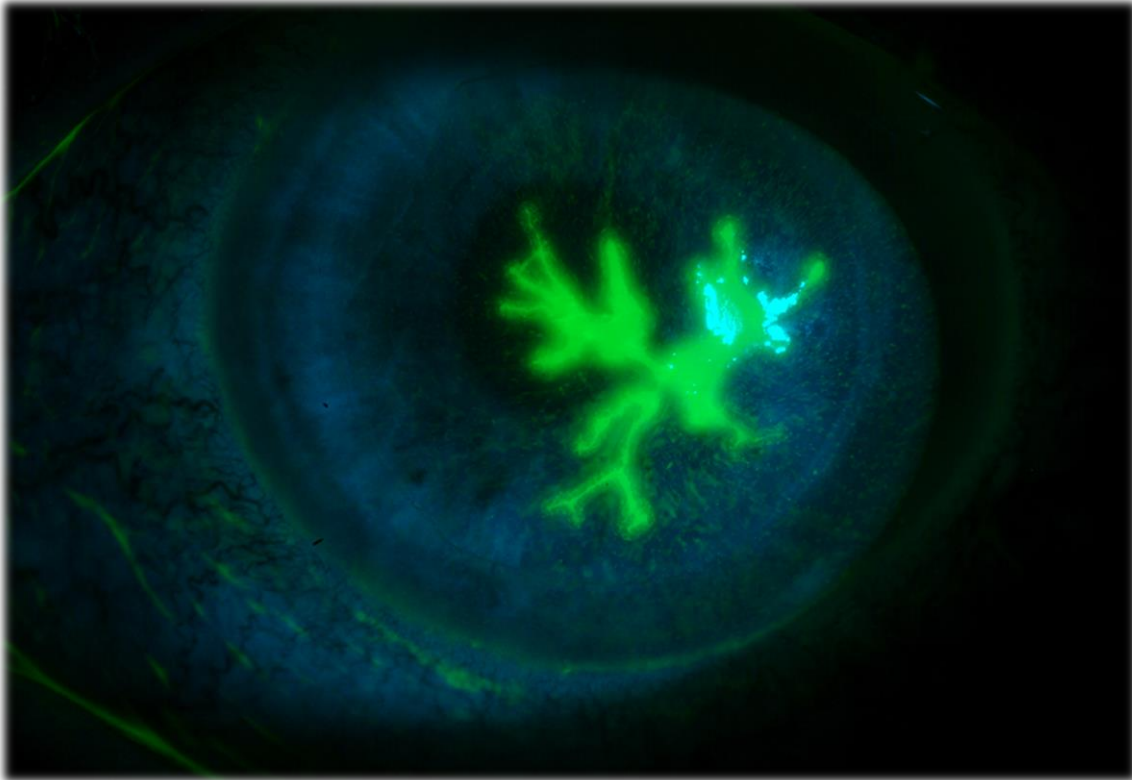
3. Name the causative organism

Staphylococcus aureus

4. How will you manage this patient?

↳ Hot compresses

↳ Antibiotics: doxycycline



A 45 years old male presented in the OPD with a lesion on his right cornea. Flouresein staining is +ve

1. What is this typical lesion known as?

Acute epithelial keratitis

2. What is your diagnosis?

Dendritic ulcer

3. Name risk factors responsible for reactivation of the disease.

Herpes Simplex virus 1, Herpes Simplex virus 2

4. How will you manage this patient?

Antiviral dugs

↳ Acycloguasine

↳ Acyclovir

↳ Topical antibiotic

↳ Cycloplegics

Station # 7



This patient has H/O trauma to cornea of his left eye

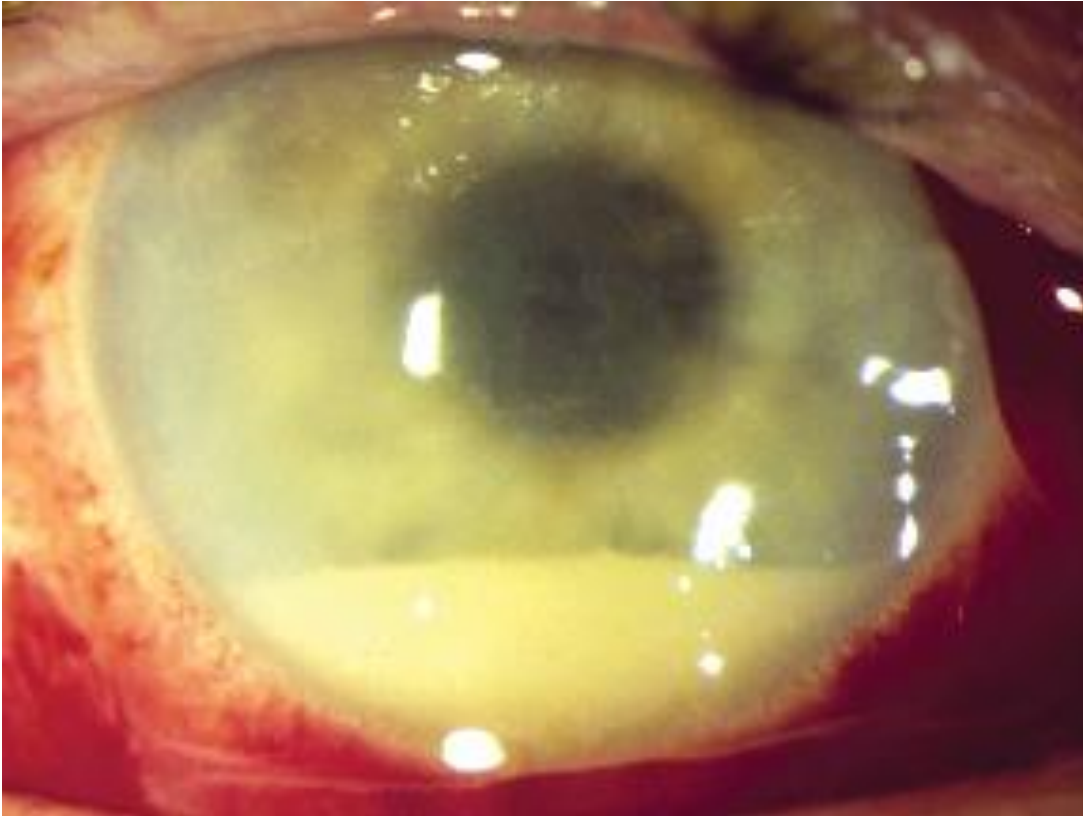
1. What is your diagnosis?

Corneal ulcer

2. What is the name of stain used for corneal staining?

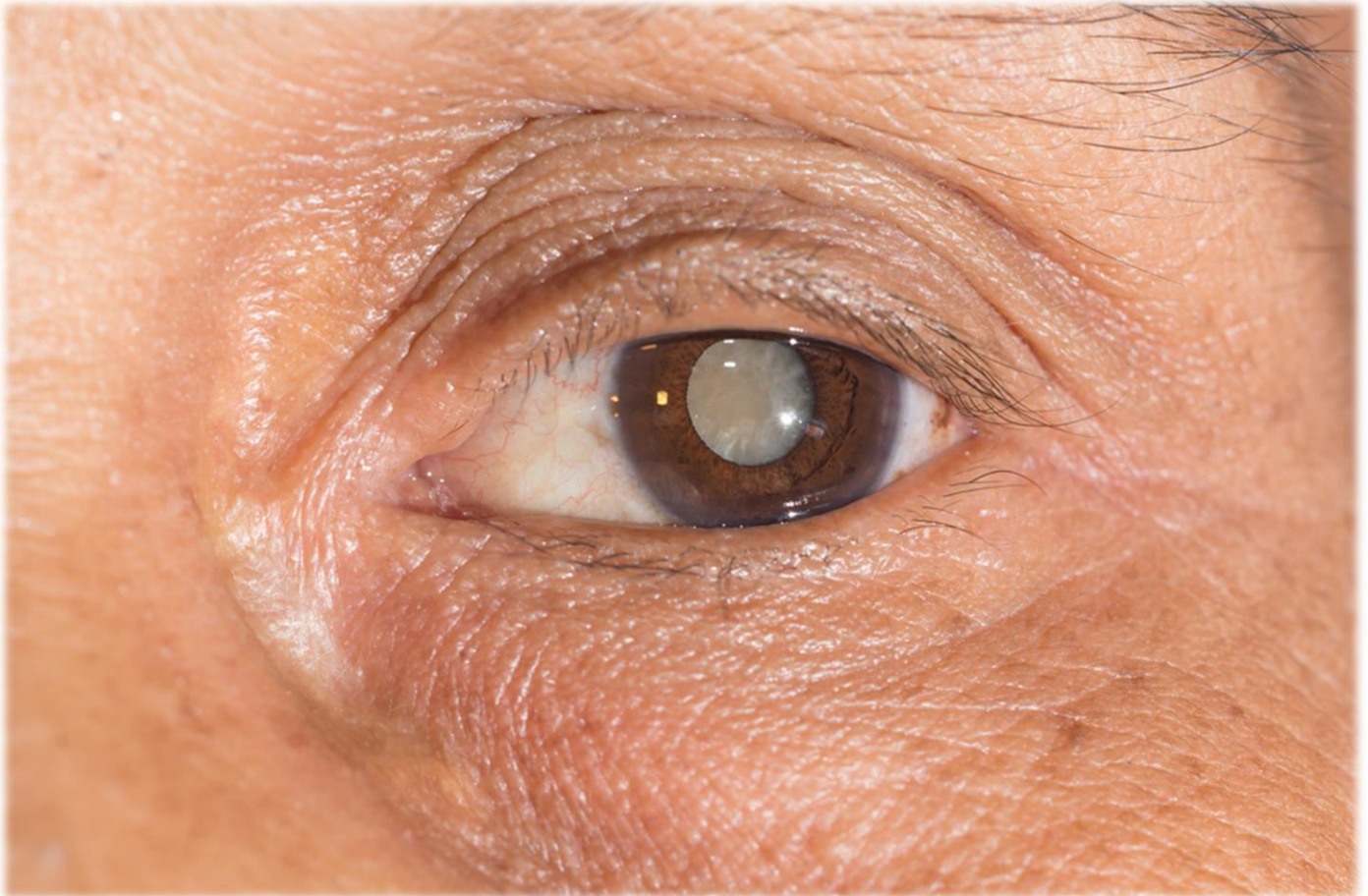
Fluorescence stain

3. How will you manage this case?



The patient had his cataract surgery done 3 days back came to Eye Emergency with severe pain & loss of vision in the operated eye.

- 1. What more signs will you look for in this patient?**
- 2. What is your diagnosis?**
- 3. Name 2 microorganisms responsible for the disease**
- 4. How will you manage this patient?**



This patient gives H/O gradual loss of vision in his Right eye for last 1 year

1. What is your diagnosis?

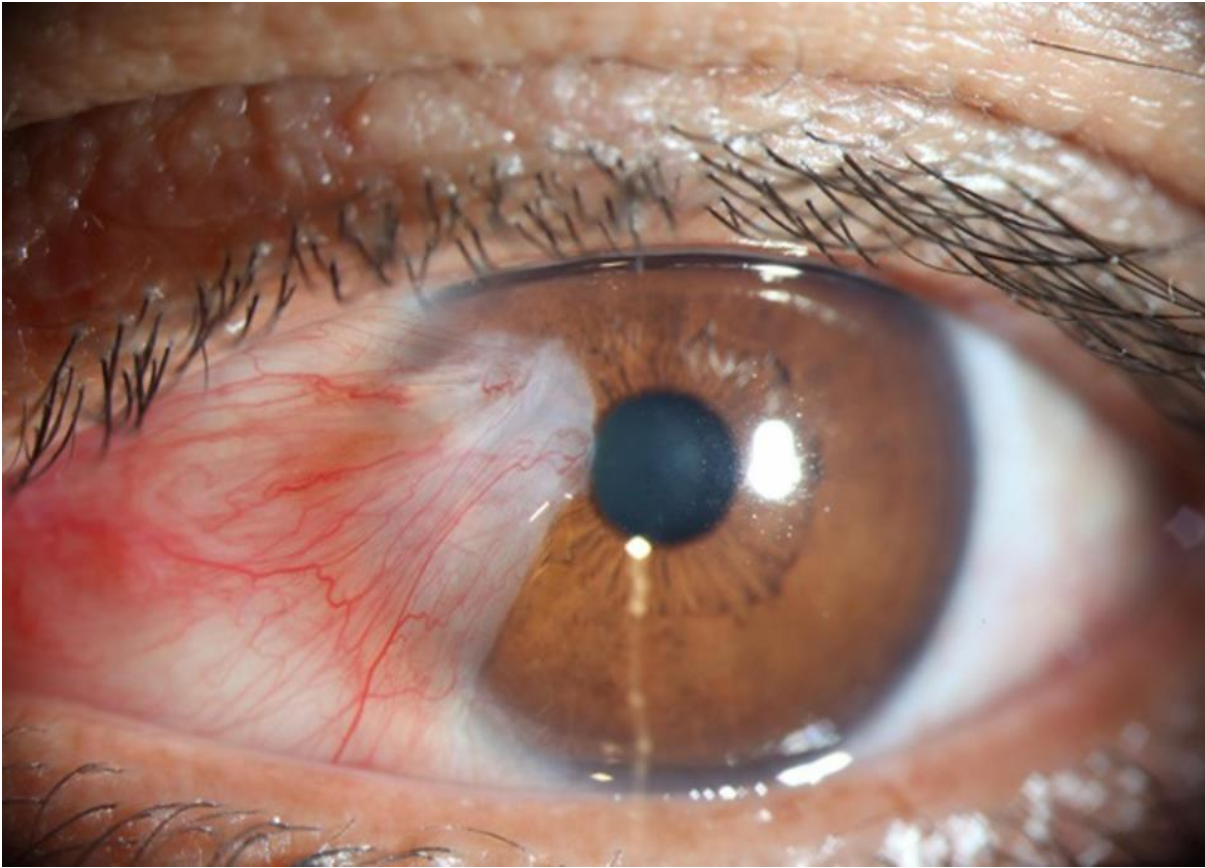
Cataract

2. How will you evaluate this patient for surgery?

3. What surgical options are available for this particular patient?

4. Enumerate per operative complications that can occur during eye surgery of this patient.





This picture shows soft tissue growth encroaching upon the cornea of a patient for last 2 years.

- 1. What is your diagnosis?**
Pterygium
- 2. What is pathogenesis of this condition?**
- 3. What complication can occur if it remains untreated?**
- 4. Give treatment options available for this patient?**



This is picture of a 12 years girl with C/O high grade fever, pain & swollen lids of her Left Eye. She gives H/O severe sinusitis a week ago.

- 1. What is your diagnosis?**
Orbital cellulitis
- 2. Name the most common causative organisms**
- 3. What is pathogenesis of this disease?**
- 4. What are complications of the disease?**

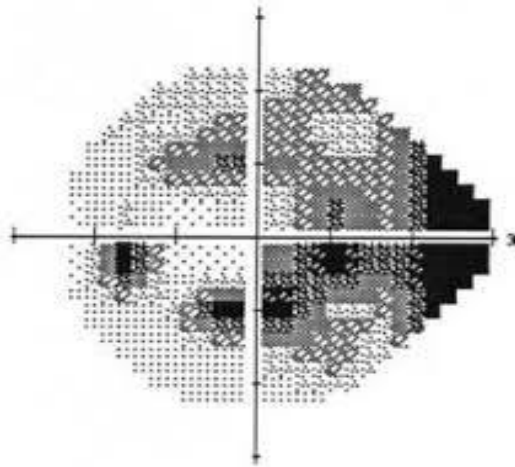
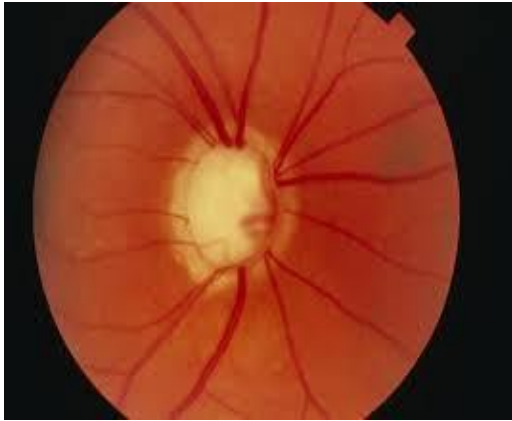
Station # 12



This child presented in the eye OPD with C/O deviation of her eyes since birth.

- 1. What is your diagnosis?**
Squint
- 2. How do you classify this disease?**
- 3. What is pathogenesis of this disease?**
- 4. How will you manage this patient?**

Station # 13



A patient's eye with typical disc changes & visual field defect

1. What is your diagnosis?

Glaucoma/cupping

2. What other important signs will you look for in this patient?

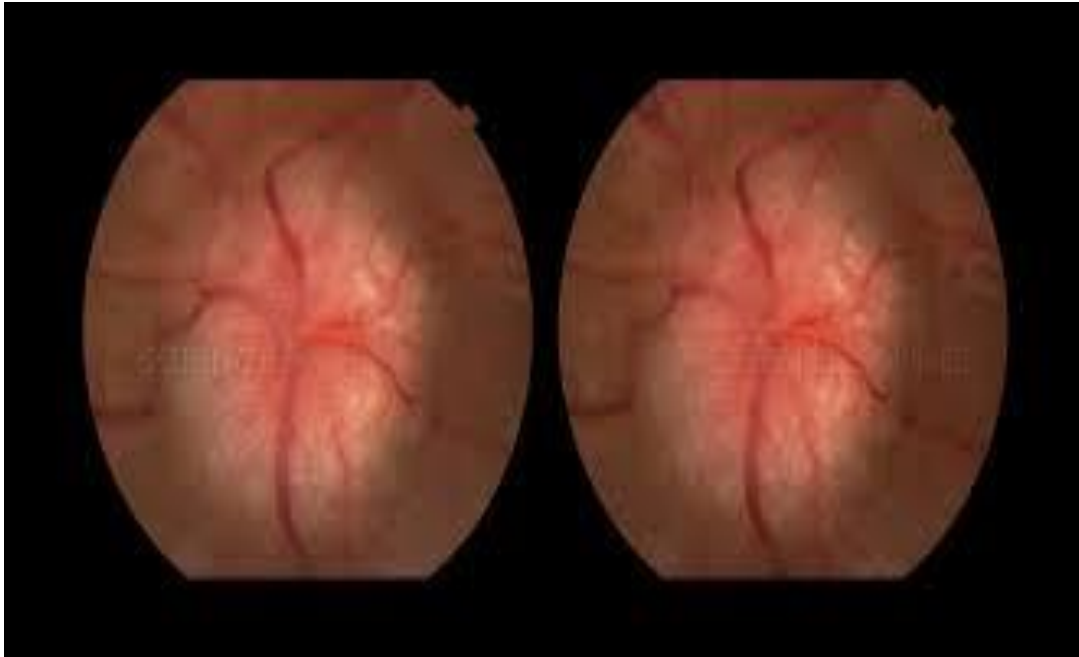
3. What is pathogenesis of this disease?

4. How will you manage this patient?



This old man presented in eye OPD with complaints of frequent watering from his eyes?

- 1. What is your diagnosis?**
Ectropion/ Senile
- 2. What is the underlying pathophysiology?**
- 3. Name any two surgical options you would use?**



A patient presented in emergency with headache, nausea, vomiting and blurring of vision and above fundus picture.

- 1. What is your diagnosis?**
Papillary edema
- 2. What is the differential diagnosis?**
- 3. What is its immediate treatment?**



A Lady presented with this condition of eye, she has history of severe cough and constipation for the last one week

- 1. What is your diagnosis?**
Sub-conjunctival hemmorrhage
- 2. What other conditions can cause this?**
- 3. What is the treatment of this condition?**



A patient has been advised cataract surgery with Intra Ocular Lens Implant (IOL)

- 1. What are various types of IOL available?**
- 2. What are the different parts of IOL?**
- 3. Which is the best site to place the IOL?**



A mother brought her child with leucocoria (white opacity) in Right eye

- 1. What is the differential diagnosis of leucocoria?**
- 2. What is the most common malignancy affecting children before the age of three years?**
- 3. How will you manage this patient?**



A mother brought child of 4 years of age with drooping of Right eyelid

- 1. What is the typical sign visible in the picture above?**
Marcus gunn jaw winking test
- 2. How do you classify this disease?**
- 3. What are the surgical options available for treatment of this disease?**



A 60 years old lady presented in the eye OPD with sudden painless loss of vision of his eye

- 1. What is your diagnosis?**
Tomato splash appearance
- 2. What is the most common factors/ systemic diseases responsible for this condition?**
- 3. Name two important complications of the disease.**
- 4. How will you manage this patient?**

Station # 21:



1. What is Diagnosis?
2. What is Clinical Features?
3. What is treatment?

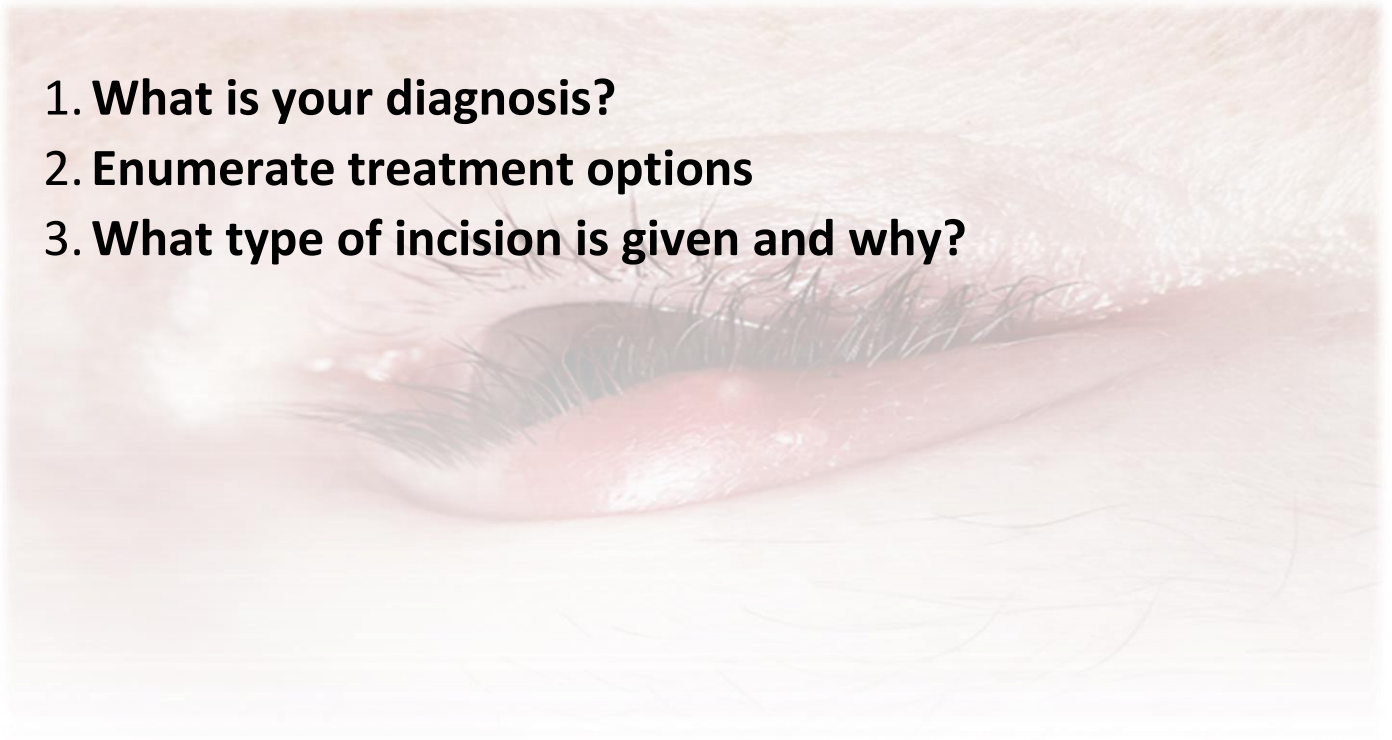
Answers:

1. Buphthalmos
2.
 - ↪ Raised intraocular pressure
 - ↪ Enlarge corneal diameter
 - ↪ Gonioscopic findings
 - ↪ Fundoscopy shows optic disc changes
3.
 - ↪ Goniotomy
 - ↪ Trabeculectomy

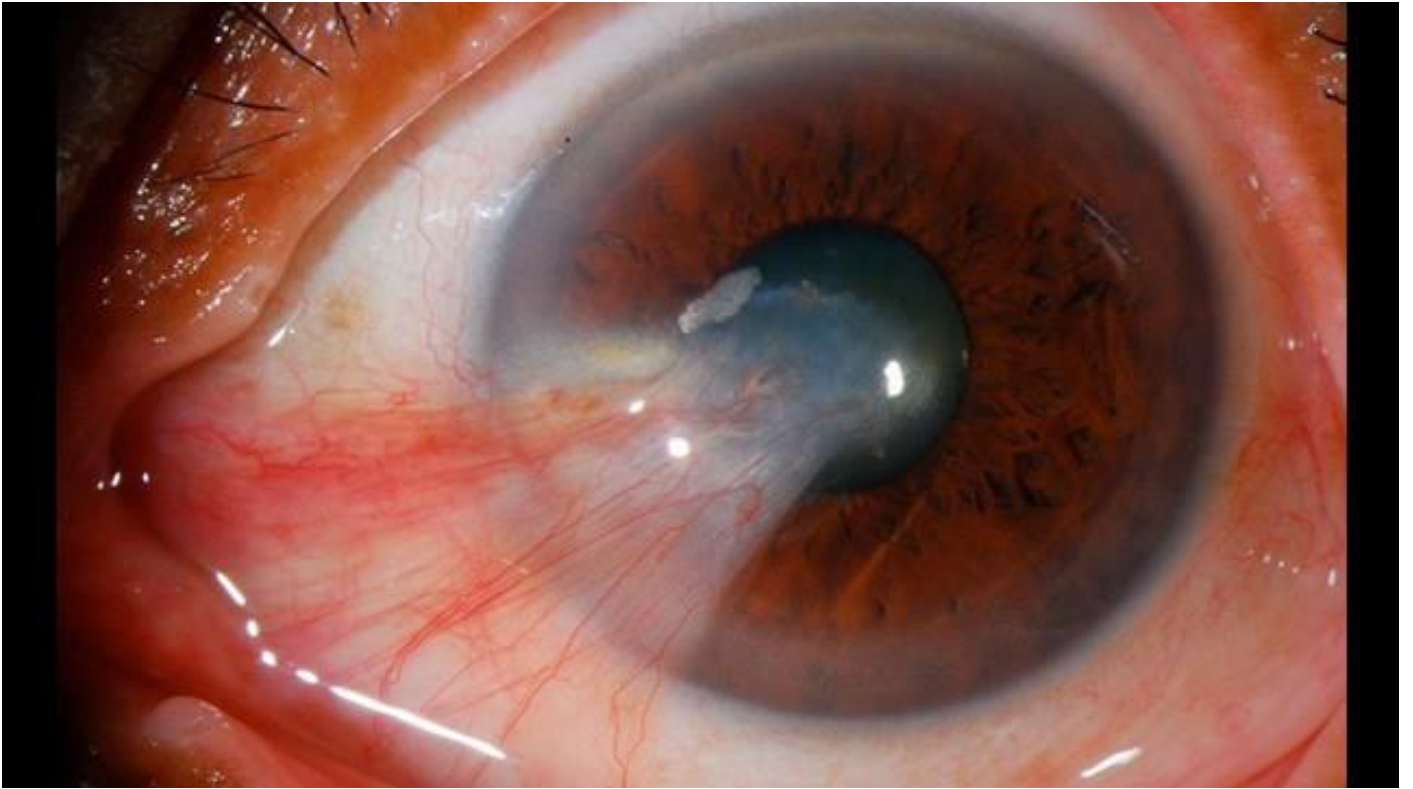
Station # 22:



- 1. What is your diagnosis?**
- 2. Enumerate treatment options**
- 3. What type of incision is given and why?**



Station # 23:



- 1. What is your diagnosis?**
- 2. What is pathogenesis of the disease?**
- 3. How will you treat this patient?**

Station # 24:



A 60 years old women C/O sudden loss of vision of her eye with this fundus picture. She is known diabetic & hypertensive for last 20 years

- 1. What is your diagnosis**
- 2. What are two most common systemic diseases associated with this condition?**
- 3. How will you manage this?**

Answers:

1. Vitreous hemorrhage

2.

↪ **Diabetes**

↪ **Hypertension**

3.

↪ **Bed rest**

↪ **Antivegf**

↪ **Elevation of head**

↪ **Vitrectomy**

Station # 25:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What is being shown in this condition?
- Q.2. What is the diagnosis?
- Q.3. How it can be treated?

1. Munson's sign indication of the lower lid by the cornea when the patient lower the eye
2. Keratoconus
3. Corneal transplant

Station # 26:



- A 60 year old man comes to the Eye OPD with chief complaints of redness, irritation, watering, photophobia and gradual reduction of vision since 3 months

1. What is the diagnosis?

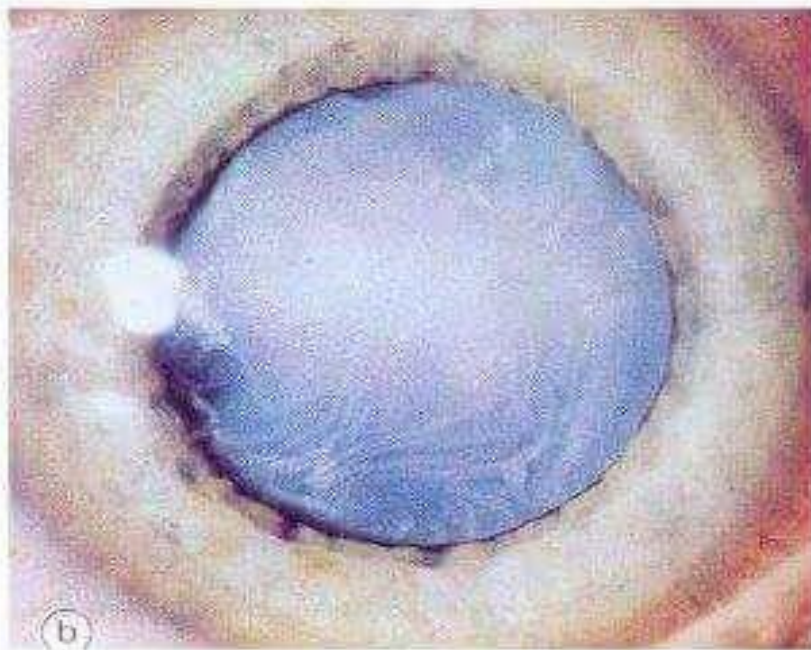
- Anterior Uveitis

2. What is the treatment?

- Mydriatic and Cycloplegics
e.g Atropine eye drops
- Topical steroids
- Antibiotics
- Cytotoxic drugs for steroid resistant cases

Station # 27:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What is the diagnosis? (2)
Q.2. What is the status of the pupil? (1)
Q.3. What is the treatment of choice? (2)

Key of Questions:

1. Hyper mature cataract
2. Pupil is dilated round and regular.
3. Cataract surgery with phakoemulsification.

Station # 28:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

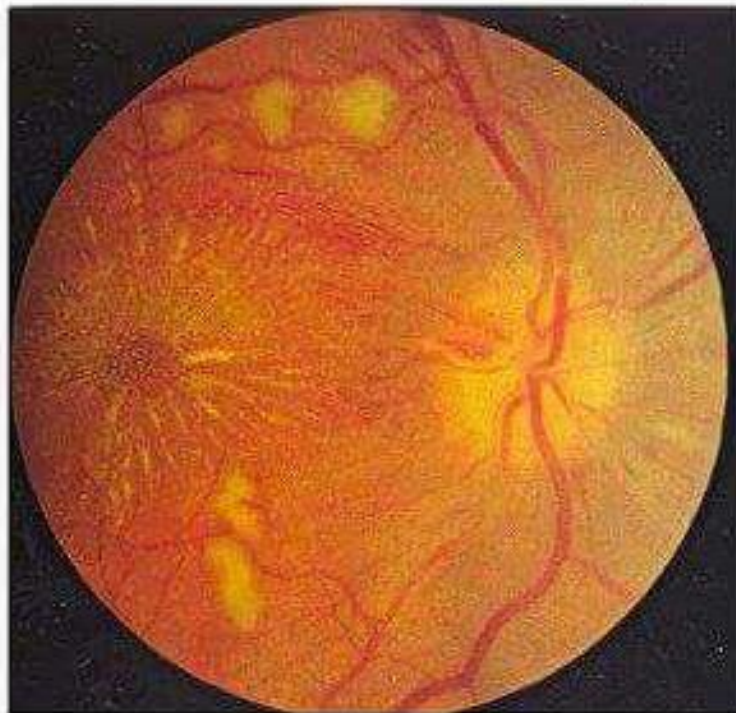
- Q.1. What is likely diagnosis? (2)
Q.2. If tip of nose is involved, which part of eye is affected? (2)
Q.3. What is local treatment? (1)

Key of Questions

1. Herpes Zoster Ophthalmicus
2. Cornea
3. Antibiotic, Steriod, Antiviral Creams.

Station # 29:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

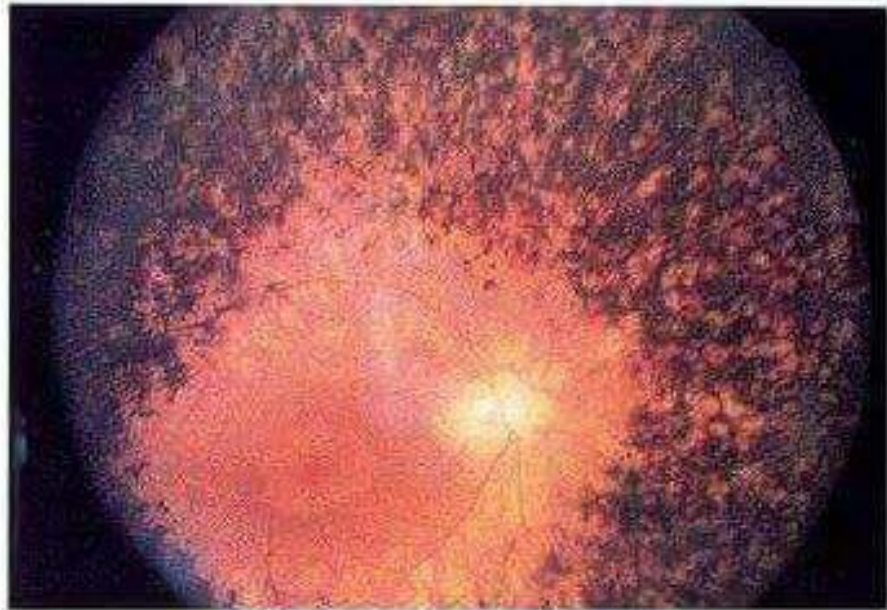
- Q.1. Which systemic disease can cause this fundus picture? (2)
Q.2. Give three findings in this photograph? (2)
Q.3. Can this condition be reversed with the treatment of the disease? (1)

Key of Questions:

1. Hypertension
2. Cotton wool spots, macular star, hemorrhages
3. .yes.

Station # 30:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What are the three findings in this photograph? (3)
Q.2. What is the likely diagnosis of this condition? (1)
Q.3. What is the visual prognosis of this condition? (1)

Key of Questions:

1. Bone spicule pigmentary changes, anterior attenuation, blurring of the disc
2. Retinitis pigmentosa
3. Bad.

Station # 31:

Observe the photographs given below and answer the questions. And the answer the sheet provided and put the sheet in drop box before moving to the next station.



Questions:

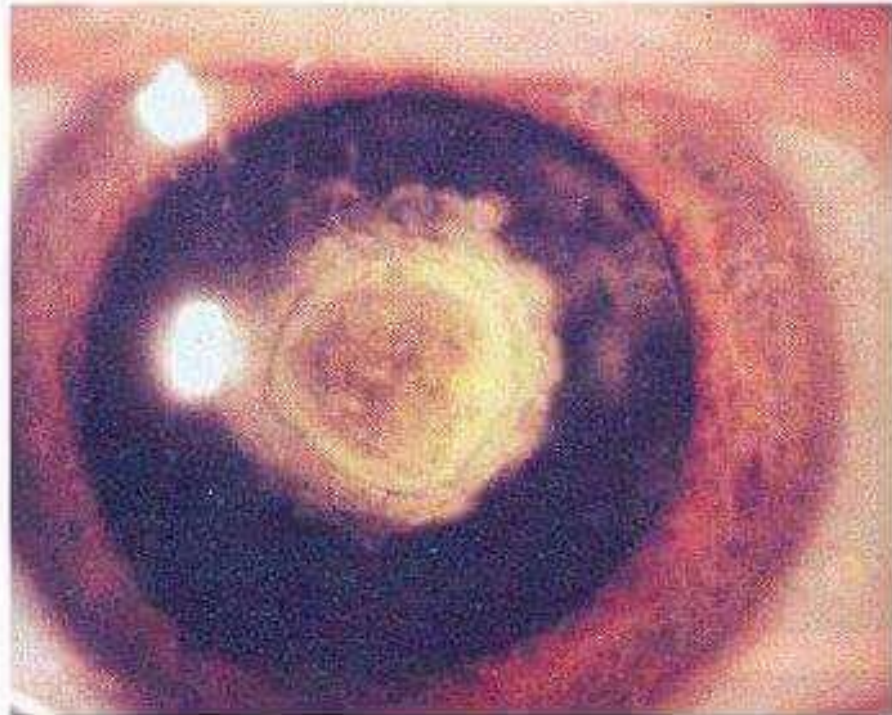
- Q.1. What is clinical diagnosis in this picture? (1)
Q.2. Mention the three tests to evaluate this condition? (3)
Q.3. What is the treatment of your choice? (1)

Key of Questions:

1. Right exotropia
2. Cover test, ocular motility, fundoscopy etc.
3. Squint surgery

Station # 32:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. Name two instruments used to diagnose this posterior sub capsular cataract
- Q.2. Give two causes of complicated (secondary) cataract?
- Q.3. Which pupillary light reflex anticipate good vision?

Key of Questions:

1. Slitlamp biomicroscope, distant direct ophthalmoscope.
2. Chronic anterior uveitis, trauma, retinal dystrophy
3. Brisk pupillary light reflex

Station # 33:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

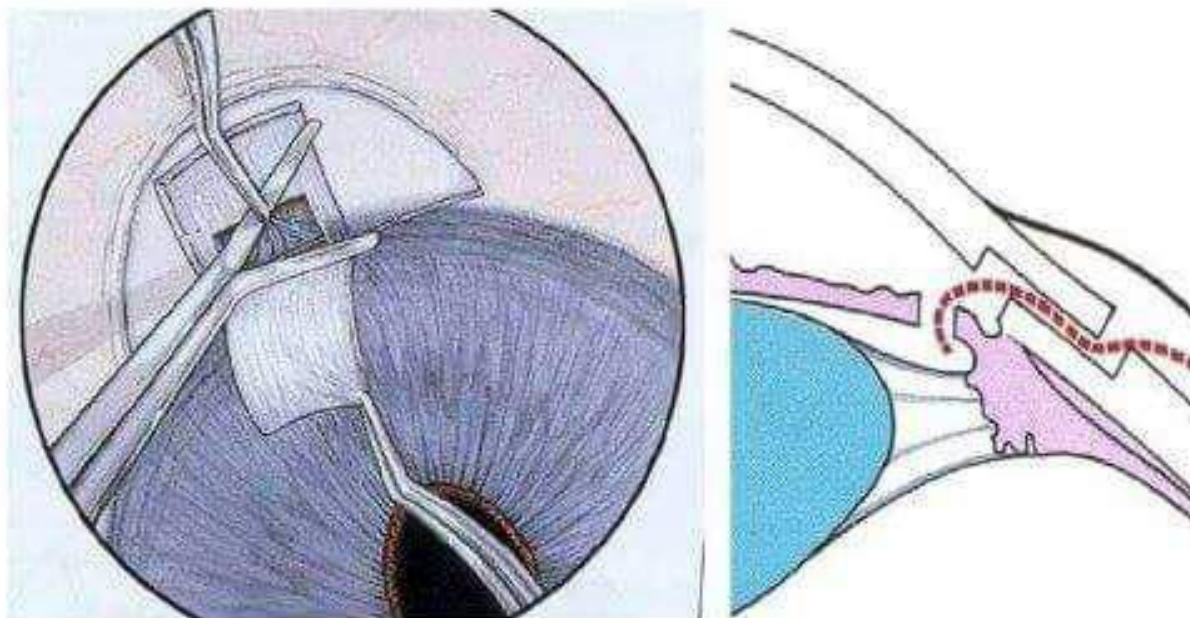
- Q.1. Enlist two procedures for this cortical cataract? (2)
- Q.2. Give two other morphological types of cataract? (2)
- Q.3. Give two late post operative complications of cataract surgery? (1)

Key of Questions:

1. ECCE + IOL , Phaco + IOL
2. Posterior sub-capsular , nuclear sclerosis.
3. PCO, Retinal detachment, glaucoma

Station # 34:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What is the name of this anti-glaucoma surgery? (1)
- Q.2. What is the principal of this surgery? (2)
- Q.3. If IOP is not adequately controlled which two drugs can be added? (2)

Key of Questions:

1. Trabeculectomy
2. Drainage from posterior chamber through artificial passage to sub conjunctiva
3. Carbonic anhydrase inhibitors, beta blockers, prostaglandin analogues etc.

Station # 35:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. Write three signs are visible in this photograph?
- Q.2. What is the diagnosis?
- Q.3. Enlist two investigations?

Key of Questions:

1. Fulness of orbital tissue, , Protuion of the eye and lid retraction and edema
2. Thyroid Eye Disease
3. Thyroid status and CT-Scan and MRI.

Station # 36:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1 Write two observations /signs? (2)
Q.2 Which is the likely diagnosis? (1)
Q.3 Give two other causes of red eye? (2)

Key of Questions

1.
 - a. Pupildiallated
 - b. Circum cilliary congestion.
2. Acute congestive glaucoma
3.
 - a. Uveitis
 - b. Keratitis
 - c. Conjunctivitis

Station # 37:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

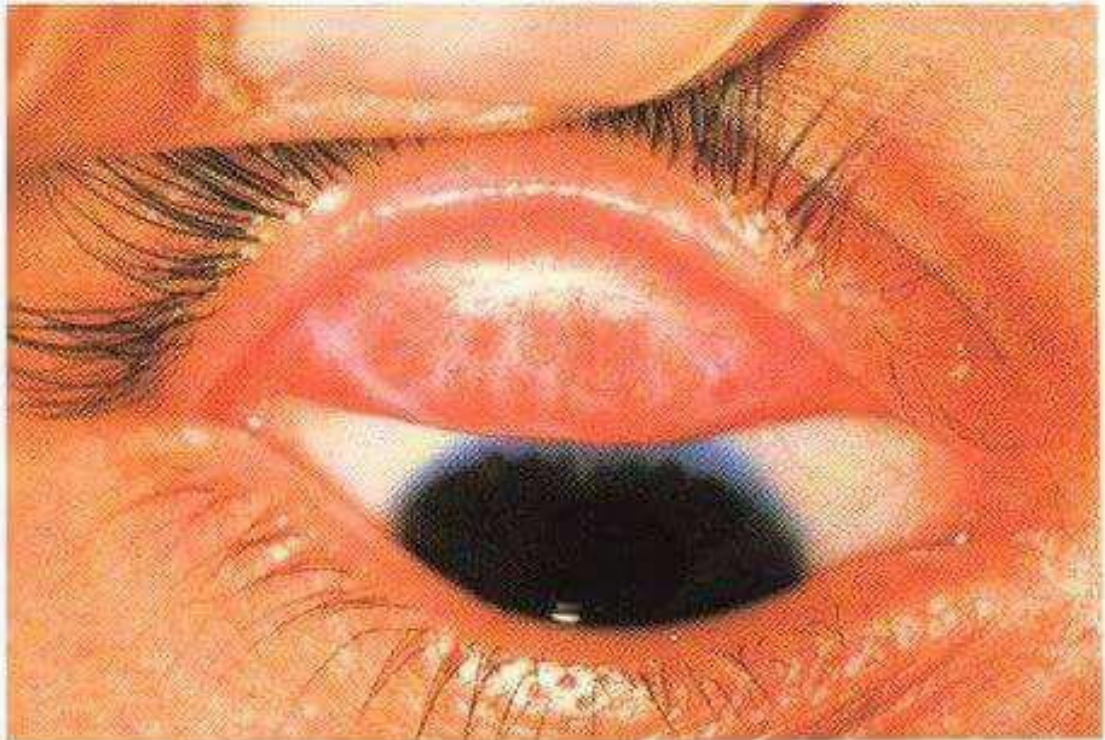
- Q.1. What is the apparent difference in the two eyes? (2)
Q.2. Which instrument is used to measure the difference? (1)
Q.3. Give two immerging diagnostic investigations? (2)

Key of Questions:

1. Protusion of the right eye.
2. Exophthalmometer
3. Ultra-sound, CT-Scan, MRI.

Station # 38:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. The fibrosing sub-conjunctival white line and herbart's pits are diagnostic of:
- Q.2. What is the treatment of this condition in active phase?
- Q.3. What other complications can occur in upper lid margin?

Key of Questions:

1. Chronic trachoma
2. Azithromycin, doxycyclin
3. Entropion / trichiasis.

Station # 39:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What is the likely diagnosis in the left eye? (1)
Q.2. Two significant features seen in this photograph? (2)
Q.3. What is the surgical treatment of the choice? (2)

Key of Questions:

1. Primary congenital glaucoma (Buphthalmos)
2. Increased corneal diameter, blue sclera
3. Goniotomy / Trabeculectomy

Station # 40:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- | | | |
|------|---|-----|
| Q.1. | What is the manifest ocular posture of eye? | (2) |
| Q.2. | Which nerve is involved? | (1) |
| Q.3. | Mention two options of treatment? | (2) |

Key of Questions:

1. Right eye convergent squint
2. CN-VI (abducent)
3. Botulinium toxin injection, surgery

Station # 41:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. Write three signs you have notice of this condition? (2)
Q.2. What is the likely diagnosis? (1)
Q.3. Give two surgical procedures to correct it? (2)

Key of Questions:

1. Stained corneal ulcer, circum ciliary congestion, hypopyon.
2. Hypopyon corneal ulcer
3. Conjunctival flap, tarsorrhphy, keratoplasty

Station # 42:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

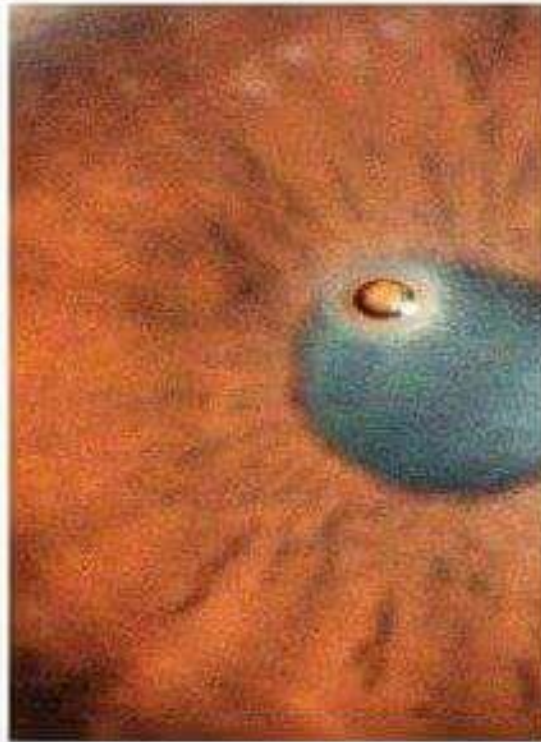
- Q.1. Mention two signs observed in this photograph? (2)
- Q.2. Name one sympathomimetic drug is used to dilate one pupil? (1)
- Q.3. What are the two types of hyper mature cataract? (2)

Key of Questions:

1. Dilated pupil, white lens with brown nucleus dipping down
2. Phenyl epinephrine
3. Morgagnion, sclerosing

Station # 43:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



- Q.1. What is the diagnosis? (2)
Q.2. How you get rid of it? (2)
Q.3. What you will prescribe after the procedure? (1)

Key of Questions:

1. Corneal Foreign Body
2. Removal with needle under local anesthesia and under magnification
3. Antibiotics eye drops

Station # 44:



1. What is the main positive finding in the picture?

– Proptosis.

2. Enumerate the main investigations that will help you reach a diagnosis.

A) Radiological investigations:

- X-rays.
- CT-scan.
- MRI.
- Ultrasonography.

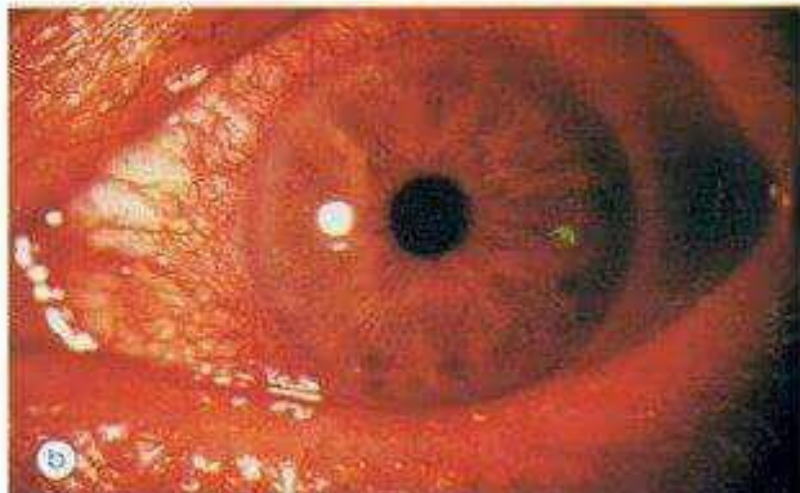
–

B) lab investigations:

- Routine tests: CBP, TLC, DLC, ESR, Urine examination.

Station # 45:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

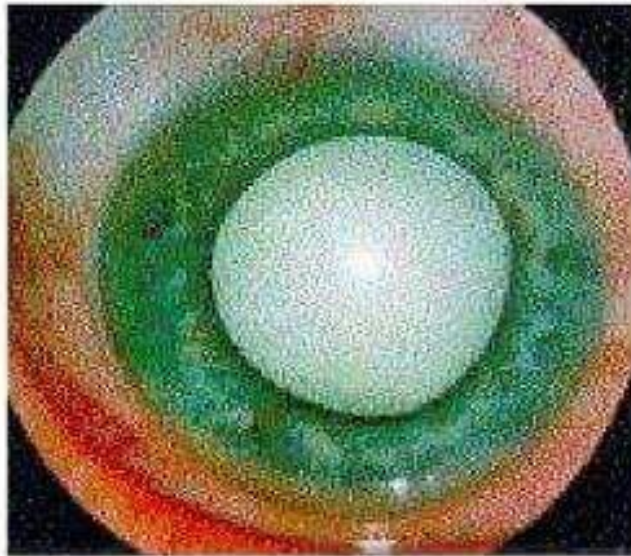
- Q.1. What is the likely diagnosis? (2)
Q.2. Give two signs suggestive of diagnosis? (2)
Q.3. What is the treatment of the choice? (1)

Key of Questions:

1. Acute anterior uveitis
2. Circumciliary congestion , smaller pupil
3. Steroid

Station # 46:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. What is the diagnosis? (2)
- Q.2. What is the treatment of your choice? (1)
- Q.3. If pupil is not reacting to light in this case. What visual outcome is anticipated?

Key of Questions:

1. Mature-cataract
2. Phakoemulsification with intra ocular lens implantation
3. Not good.

Station # 47:

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

Q.1. Give two finding in this photograph? (2)

Q.2. Which is the likely cause? (2)

Q.3. What will happen in this lesion? (1)

Key of Questions:

1. Peripheral corneal opacity, pulled eccentric pupil.
2. Trauma, perforated corneal ulcer.
3. lesion will be reduce

Station # 48:



divergent squint

Right sided

Exotropia

- What is your diagnosis?
- What is its pathogenesis?
- How you will treat this condition?

Station # 49:



convergent squint

Right sided esotropia

- What are your findings?
- What is its pathogenesis?
- How you will treat this case

Ptosis (Ward)

- ⇒ Introduction
- ⇒ Consent
- ⇒ Bilateral examination of eyes
- ⇒ Operation history
- ⇒ Scar mark
- ⇒ Investigations:
 - ↳ Heirschberg test
 - ↳ Palpable fissure height
 - ↳ Lid crease
 - ↳ Levator function test
 - ↳ Fatigability
 - ↳ Bells phenomena
 - ↳ Cogan twitch sign
 - ↳ Marcus gunn jaw wink test

Cataract

- ⇒ Vision test with pinhole
- ⇒ Vision test without pinhole
- ⇒ Ophthalmoscope
- ⇒ Slit lamp
- ⇒ Finger test



Eyelid lifter



Castroveijo needle holder



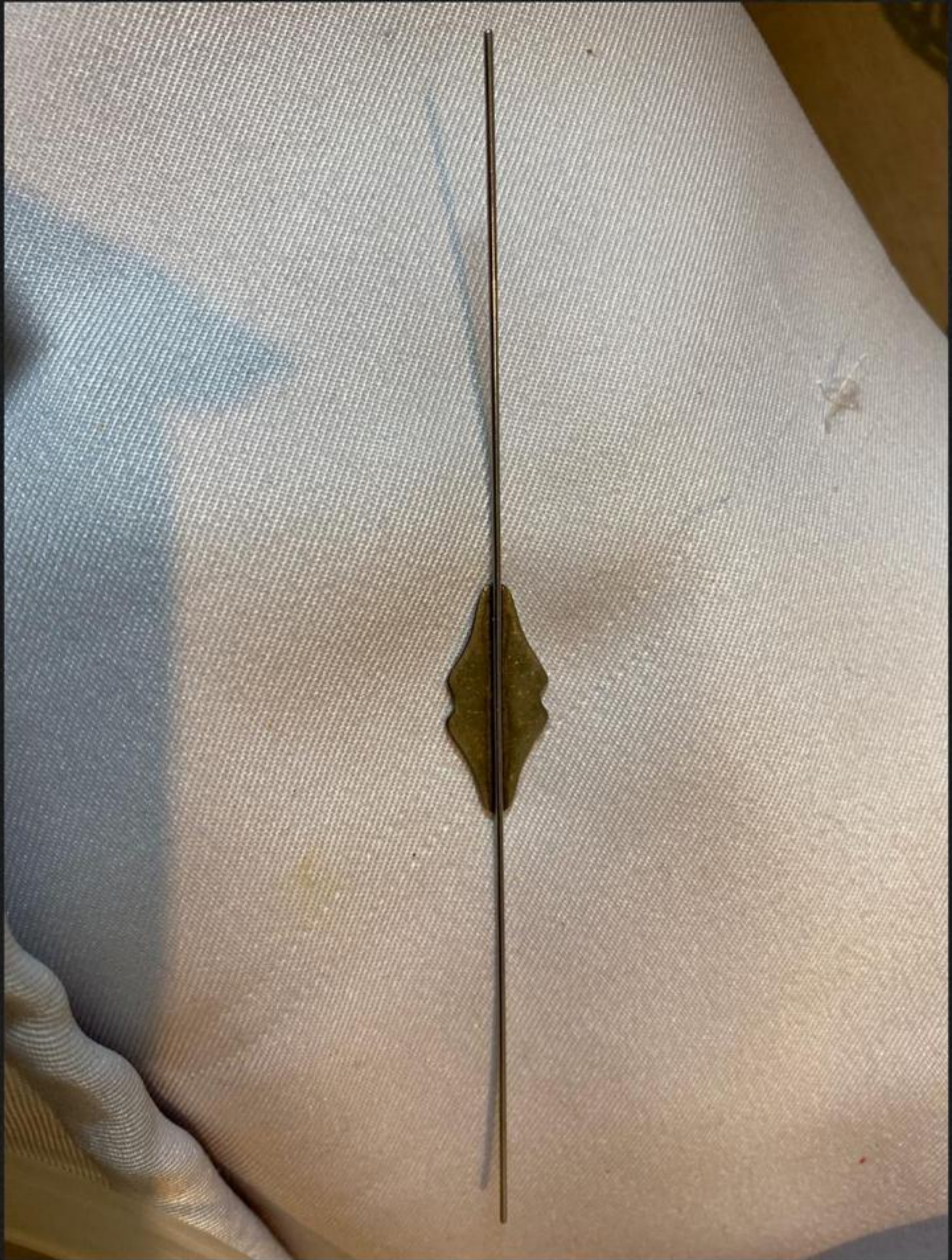
Punctum dilator



Plain forcep



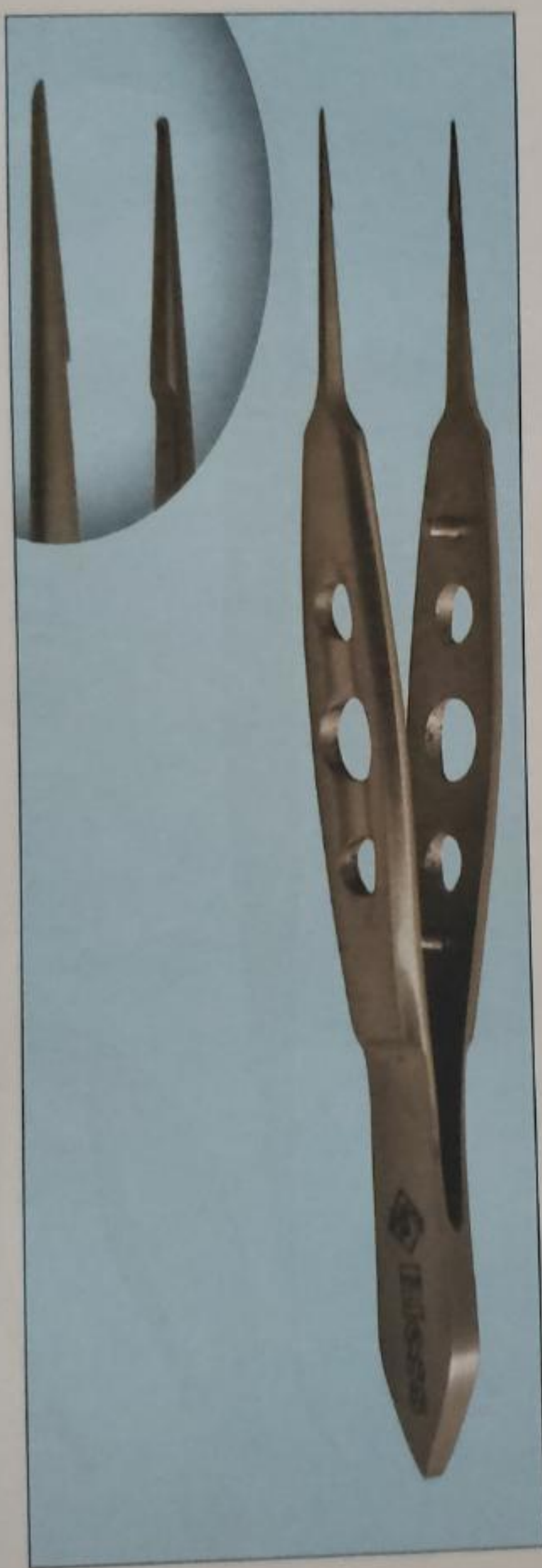
Entropiom clamp



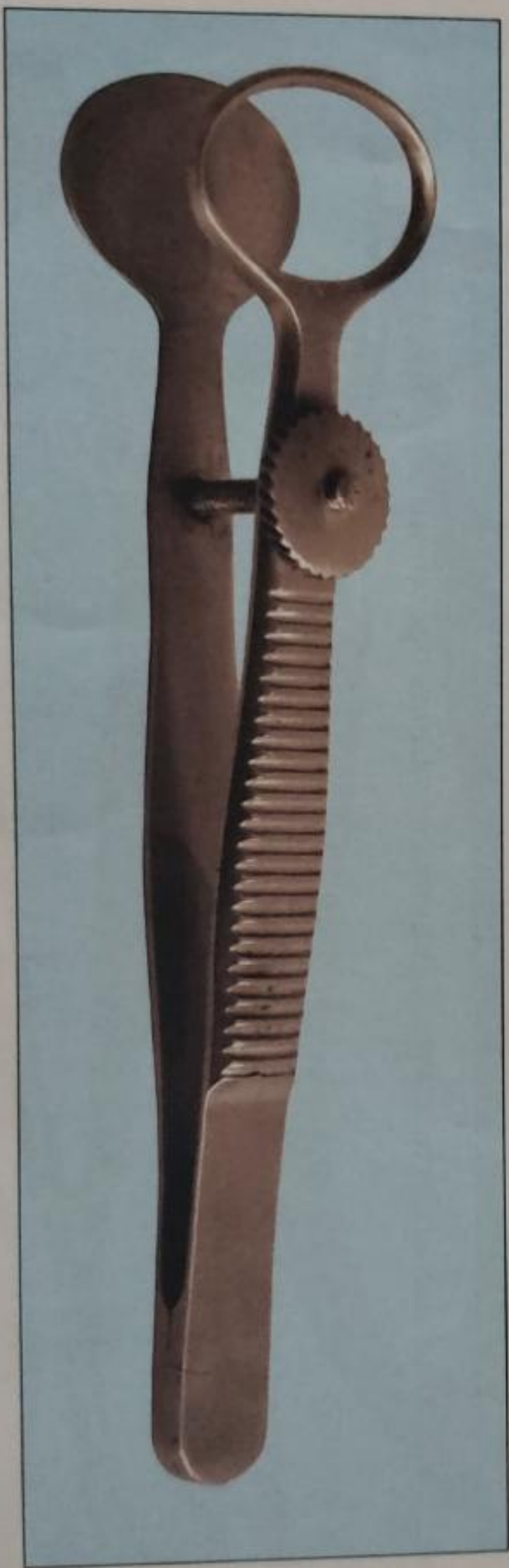
Lacrimal probe



Chalazion clamp







5. Suture Tying Forceps

The forceps has very fine plain tips.



Uses: To hold the suture during suturing for cataract, glaucoma, repair of corneal and/or scleral tears and keratoplasty operations.

6. Arruga's Intracapsular (Capsule Holding) Forceps





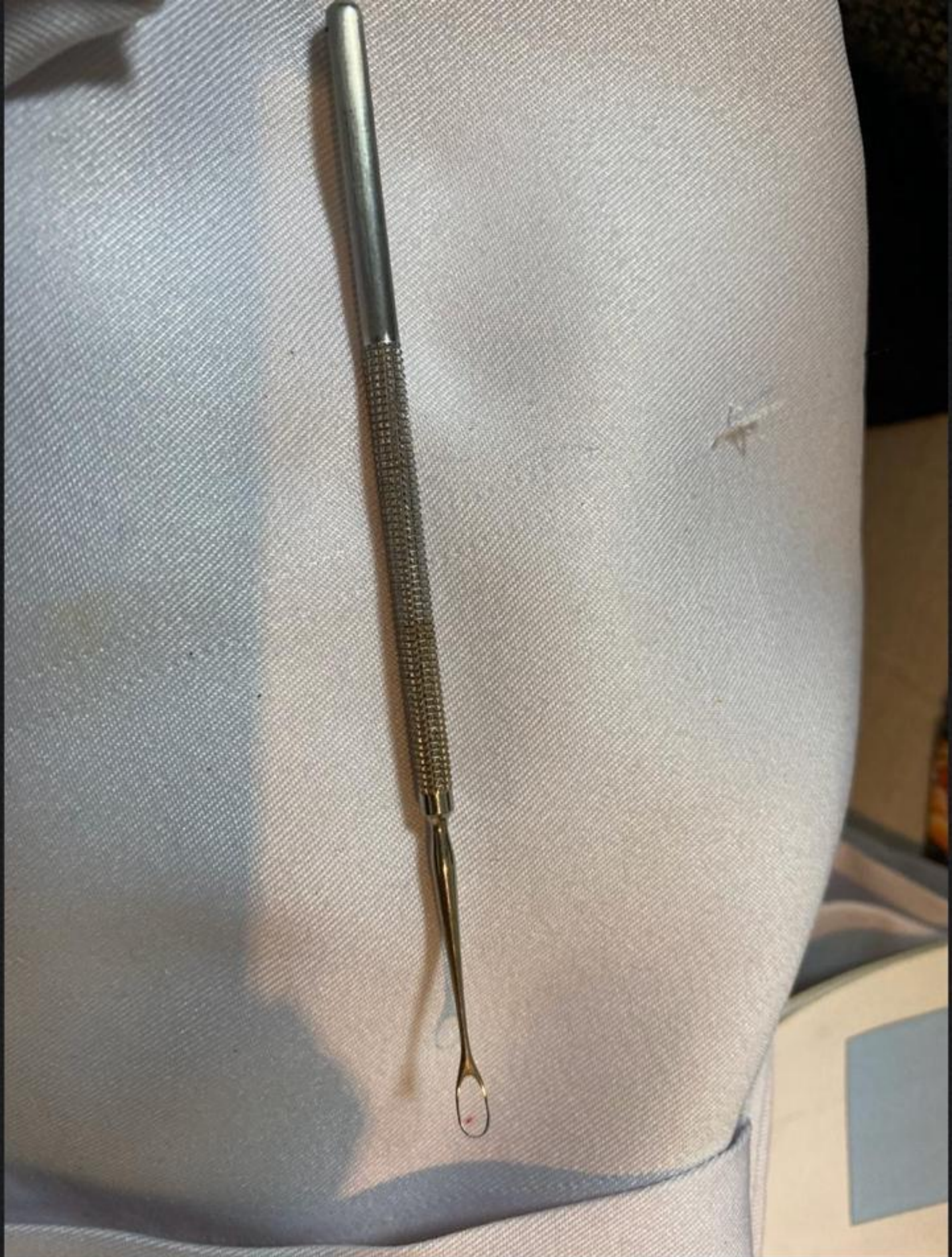
Suture tying forcep



Wire speculum



Kelman mcpherson forcep



Wire vectis



Castroveijo caliper



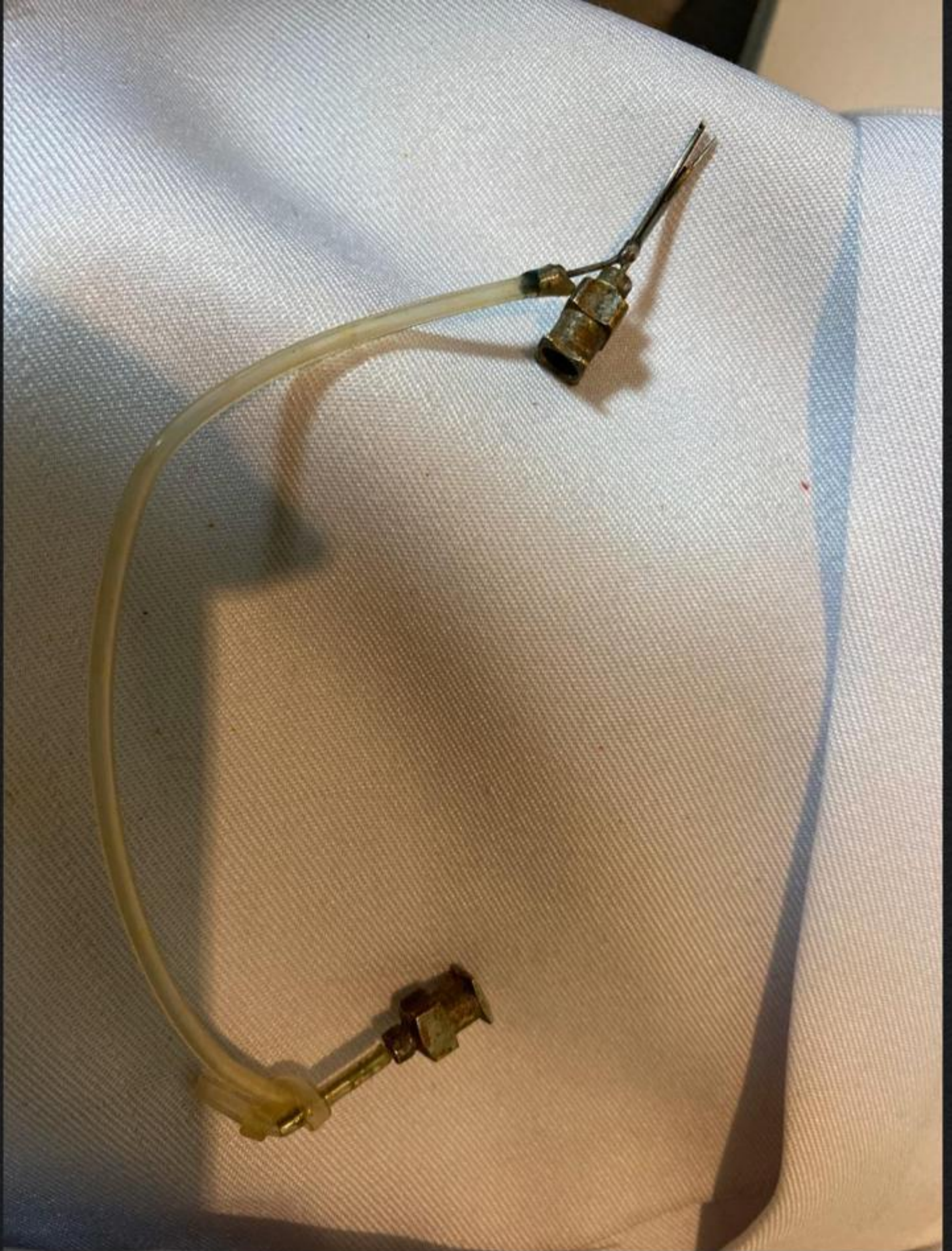
Foreign body spud



Hook and retractor



Chalazion scoop



Two way irrigation and aspiration cannula

Uses-Bacterial
infection-As in
conjunctivitis



A/E-temporarily
burning . Eye di
scomfort,
itching,
redness,
tearing, eyelid
crusting,
Foreign body
sensation

Duration-30
mints to 4
hours

Use-Acid related
dyspepsia ,Congestion,
Hypotension

Contraindications -Angina
Hyperthyroidism
Hypertension
MI

A/E-Bradycardia
vomiting
Severe hypertension



ALLERGAN

Blephamide

LIQUIFILM™

OPHTHALMIC
SUSPENSION

STERILE 5 ml

uses-treat
Bacterial eye inf
ections and to
treat swelling in
the eye.

A/E-
eye irritation,
allergic reaction
s,
increased
(IOP), cataracts,
delayed wound
healing,
dilated pupils,
farsightedness,
drooping eyelid,
and

St 9

A/E-
eye burning,
stinging,
irritation,
itching,
tearing,
redness,
discomfort

Uses-
bacterial eye in
fections
treatment

Nebra
(Tobramycin)

EYE DROPS

Duration-30
mins to few
hours

PHYSICIAN'S SAMPLE
NOT FOR SALE

STERILE OPHTHALMIC
SOLUTION

Manufactured by:
REMINGTON PHARMACEUTICAL INDUSTRIES (PVT) LTD.
18 Km. Multan Road, Lahore - Pakistan



Moxifloxacin
uses- treat
bacterial
conjunctivitis
(pink eye)

A/E-dry eyes
watery eyes;
eye pain or
discomfort;
blurred vision.
mild itching,
redness

Use-Analgesic
Local Anesthetic

A/E-Hypertension
Seizures

Allergic reactions
Cardiac arrhythmias

Half life-1-2 mints

Duration-15 mints -Short
acting

الكين

ALCAINE[®]

(Proparacaine Hydrochloride 0.5%)

STERILE OPHTHALMIC
SOLUTION

15 ml

Alcon[®]

a Novartis company

Use-Pupil dilation
Mydriatic cycloplegic

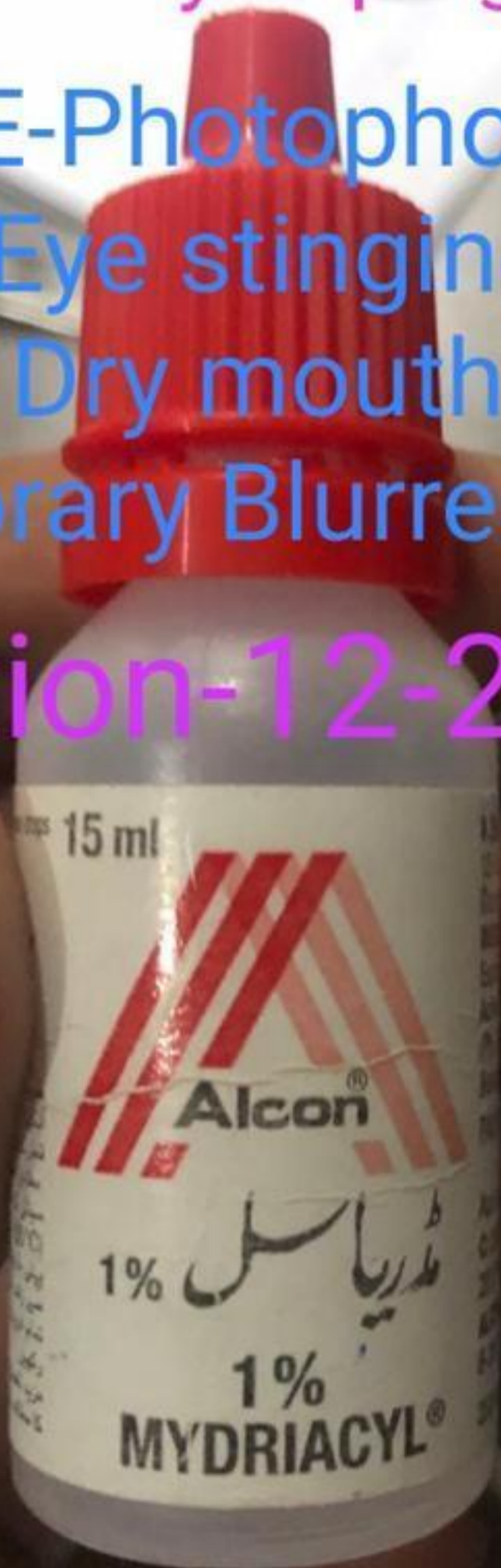
A/E-Photophobia

Eye stinging

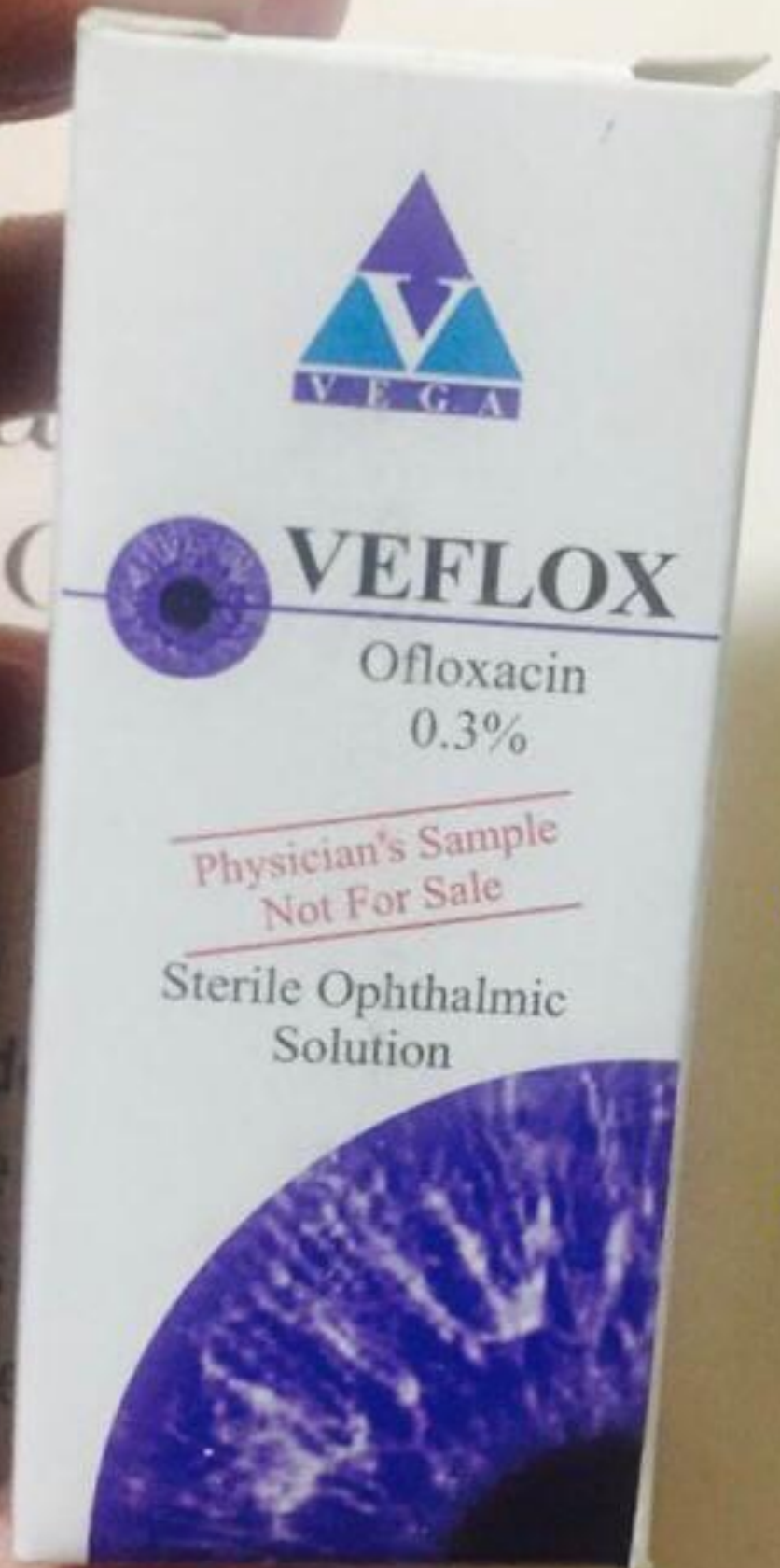
Dry mouth

temporary Blurred vision

Duration-12-20 mints



Duration-30
mints-6 Hours



uses- Treat
bacterial
infections of
the eye, including
conjunctivitis
(pink eye) and
ulcers of the
cornea.

St 2

A/E- stinging
burning
discomfort
, itching, redness,
dryness, tearing,
sensitivity to light,
pinkeye
(conjunctivitis),
facial
swelling, eye pain,
and infrequently,
dizziness or
nausea.

ssor of
chemics at

Uses- treat
itching, burning,
redness,
watering, and
other eye



A/E-Headache,
blurred vision,
burning/
stinging/
redness/
dryness of
the eye, eyelid
swelling, or a
feeling as

Uses-Bacterial
infections treatment

A/E-pain
dryness
redness
itchiness



Duration-once a day
for 5 to 21 days

ical
almology

book

St 4

on covers the entire curriculum of
graduate medical students. In this
new chapters have been added



5 dendritic ulcer

- What is Lesion?
- What is most common cause of such findings?
- What are different drugs used to treat this condition?



staining of crneal ulcer with flourescine stain

- What is Lesion?
- Enumerate treatment options.
- What are three basic aims to treat it?

Viral corneal ulcer
Antivirals... Acyclovir
Debridement, interferon monotherapy, atropine,
keratoplasty
Aims... To prevent chronic epi. Ulcer, corneal opacity,
hypopyon

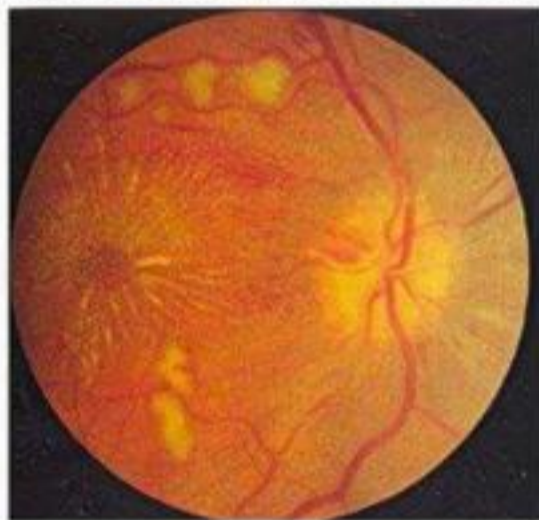


Note: Use right (>) and left (<) arrow keys to navigate through th

OSPE in Ophthalmology
MBBS Third Professional Examination

Area : Retina , Optic Nerve
Topic : Hypertensive retino pathy
Types of Station: Static

Observe the photographs given below and answer the questions. And the answer sheet provided and put the sheet in drop box before moving to the next station.



Questions:

- Q.1. Which systemic disease can cause this fundus picture? (2)
Q.2. Give three findings in this photograph? (2)
Q.3. Can this condition be reversed with the treatment of the disease? (1)

Key of Questions:

1. Hypertension
2. Cotton wool spots, macular star, hemorrhages
3. yes.

Note: Use right (>) and left (<) arrow keys to navigate through th

OSPE in Ophthalmology
MBBS Third Professional Examination

Area : Neuro Ophthalmology / Squint / Inj

Topic : Right exotropia



1.Spring catarrh.. 2.IgE mediated immune response
 type1 hypersensitivity... 3.avoid exposure to allergen..
 Beta radiation.. Sodium cromoglycate..
 Desensitization... 4.T corticosteroids.. Acetylcysteine.
 DiSodium cromoglycate. Cryotherapy.. Immune
 modulators.. Supratarsal steroid inj.. Nsaids

- What is your diagnosis?
- What is its Pathogenesis?
- What measures you will advise patient to take care? (1.5)
- Enumerate drugs used to treat this condition. (1.5)



...towards cornea
 ...ane.
 ...reactival autograft or am
 ii. Mitomycin C: may be used at the time of surp
 after surgery in the form of topical drops
 iii. Radiation: beta rays may
 a dose of 2500

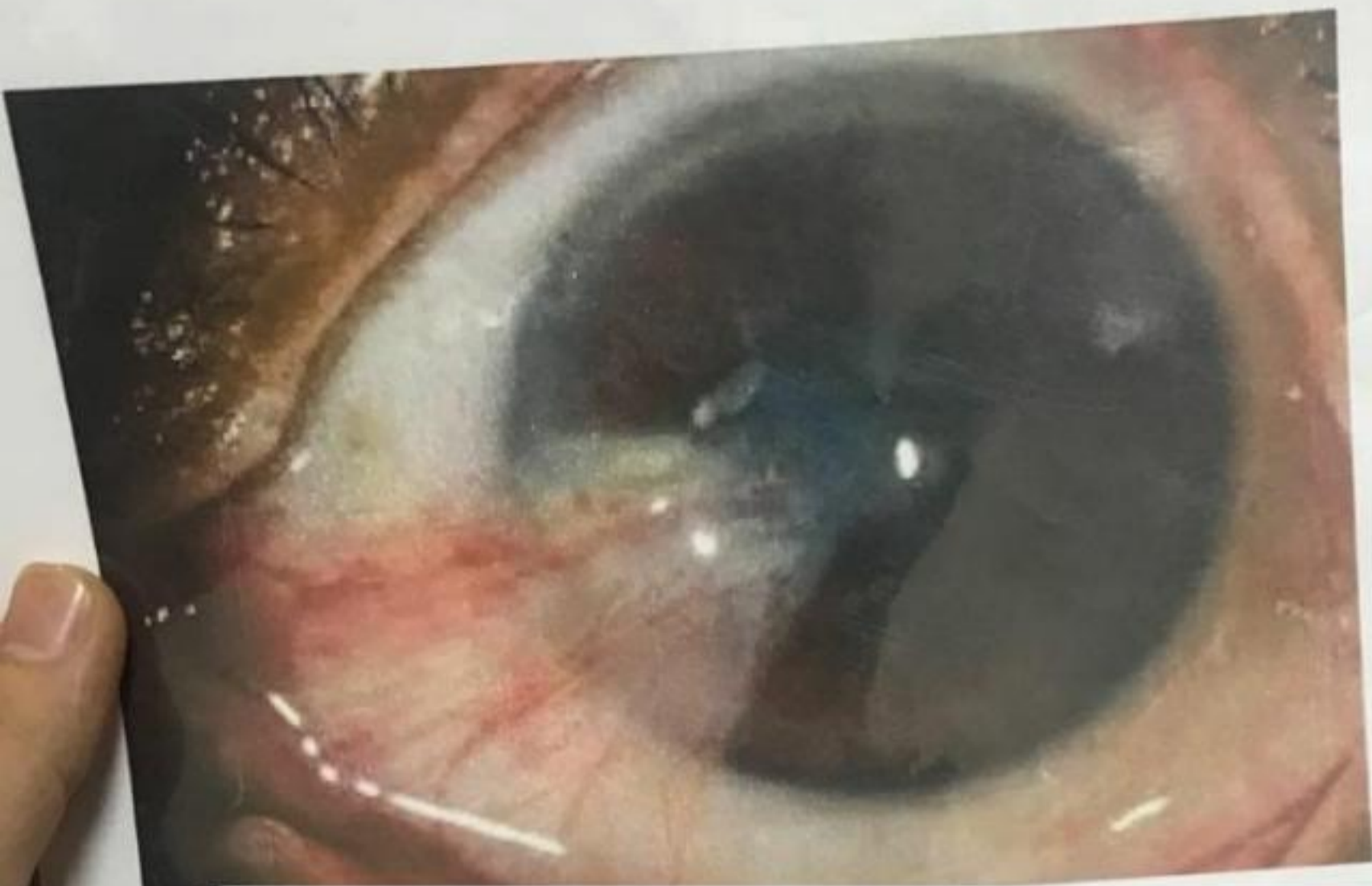
No	Points

OPHTHALMOLOGY
OSPE
STATION

what is your diagnosis
what is its prophylactic treatment



Ophthalmia neonatorum.. 2.aseptic delivery..
Proper antenatal care treat vaginal inf.. If
mother suspected to have gonococcal or
clamydial inf.. Than 1% tetracycline ointments
into eye



Pterygium.. 2. Degenerative condition of subconjunctival tissue proliferate as a triangular sheet of fibrovascular granulation tissue invade cornea and stroma and bowman mem..3. atropic no treatment... Progressive. simple excision.. Pterygium resection with key hole lamellar keratoplasty recurrent... Mucous mem autograft... Lamellar corneal graft... Amniotic mem graft.. Mitomycin C... Thiotepa.. Transposition method..

- What is your Diagnosis? (1)
- What is Pathogenesis of the disease? (1)
- How will you treat this patient? (3)

Vitrealous

OPHTHALMOLOGY
OSPE
STATION

- a. What is your diagnosis
b. What are five most common systemic
diseases
associated with this condition.

Vitrealous hemorrhage..
2. diabetes..malignant
hypertension

hemorrhage



1. Describe this picture 1
2. Name the sign shown in this picture. 1
3. What is the cause of this phenomenon? 1
4. How will you treat this patient? 2

1. Marcus gun ptosis 2. jaw winking phenomenon 3. misdirected 3rd and 5th cranial nerver.. 4 resection levator... Motais operation... Frontalis suspension



mature cataract..

2. Ecce.. lccc..
Phacoemulsification..
Phacolysis.. 3. retro
peribulbar hemorrhage..
Ocular penetration..
Retinal vascular spasm
optic nerve injury.. 4. post
capsular opacification

- What is your diagnosis?
- What are different surgical techniques used to treat?
- Enumerate complications of local anesthesia in this case.
- What is most common Late Post-operative complication after surgery?



- 1. Raised ICP.. Space occupying lesion.. Malignant hypertension..
- 2. Orbital.. Abscess cellulitis 3. Ocular... CRVO.. Uveitis

papilloedema



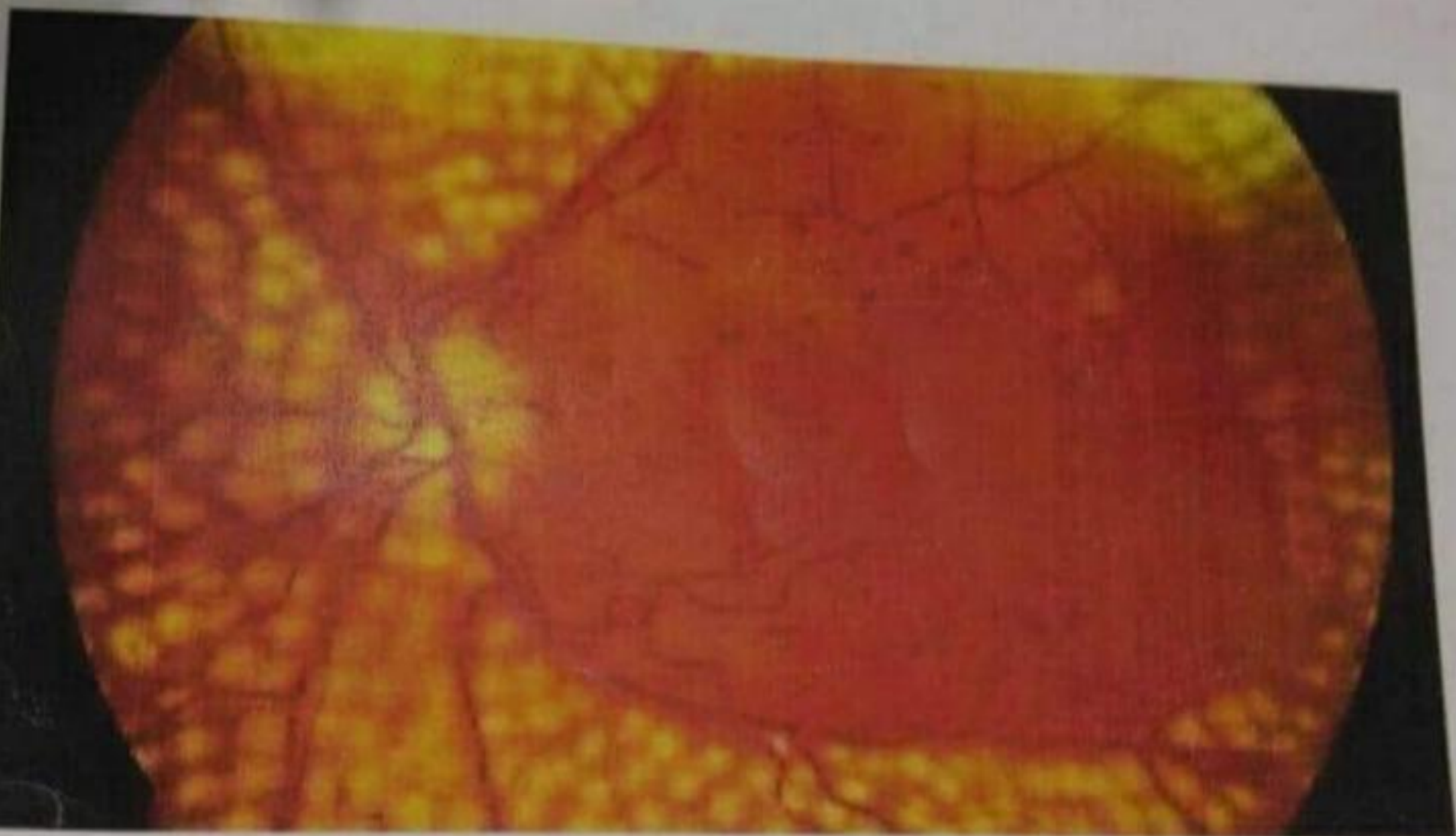
- Treat underlying cause..
- Surgical decompression of nerve... Peritoneal shunt

- What is your diagnosis?
- Enumerate its common causes.
- What are its treatment options?



Thyroid exophthalmos.. 2. Von graefe's..
Joffroy's.. Mobius sign... 3. sys idodine
antithyroid drug.. Sys corticosteroids.. Corneal
lubricant.. Lat tarsoraphy.. Radiotherapy..
Orbital decompression

- What is your diagnosis? (2)
- Enumerate three prominent signs in this patient. (1.5)
- How you will treat this condition? (1.5)



Panphotocoagulation

1



subconjunctival hemorrhage

- What is this?
- What are its causes?
- What are its treatment options?

(1)

① Subconjunctival Hemorrhage

② Trauma , D.M, H.T, Bleeding Disorder.

③ Self healing
Artificial Tear
Antibiotics Cover

2



Rt

papilloedema

- What is your diagnosis? (1)
- Enumerate its common causes. (2)
- What are its treatment options? (2)

(2)

① papilloedema

② Intracranial space occupying lesion - cyst, tumor, abscess
Intracranial H.T

Intracranial Infection

Trauma

Intracranial hemorrhage

③ - Treat underlying cause

- Diuretics (Acetazolamide, Mannitol)

- Repeated LP

- Ventriculolumbar-peritoneal shunt

- Nerve sheath compression

3



chalazion

- What is your diagnosis? (1)
- Enumerate treatment options. (2)
- What type of incision is given and why? (2)

with warm compression

(3)

① Chalazion

② Conservative ⇒ Expression - Compression

⇒ warm compress

⇒ Topical steroid - Antibiotic drops.

Medical ⇒ Subconjunctival corticosteroid

⇒ Antibiotics

Surgery ⇒ Incision and curettage

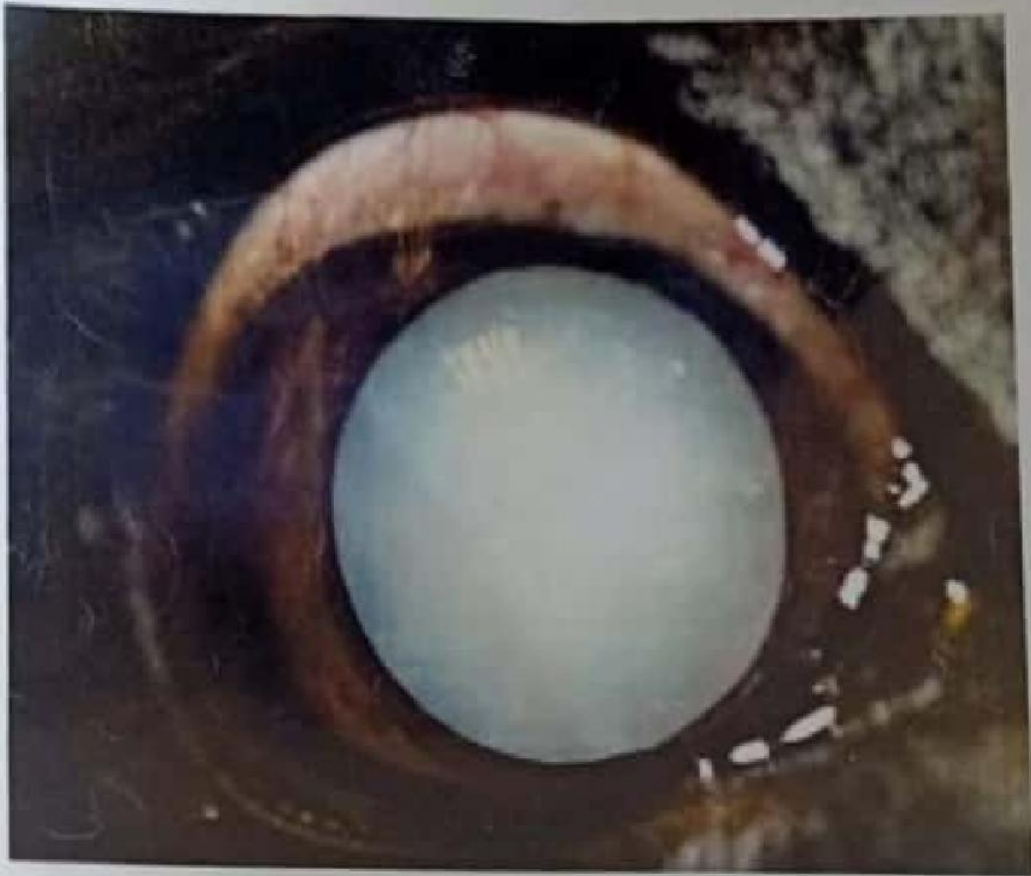
③ Vertical incision is given due to.

① prevents incision of meibomian gland ② prevents incision of vessels

③ Heals rapidly

④ cosmetically better incision.

4



cr **Mature cataract**

- What is your diagnosis? (1)
- What are different surgical techniques used to treat? (2)
- Enumerate complications of local anesthesia in this case. (1)
- What is most common Late Post-operative complication after surgery? (1)

(4)

① Mature Cataract

② Techniques ⇒

- ⊙ ICCE

- ⊙ ECCE ⇒ Phaco

 - ⇒ FSL

 - ⇒ manual small incision surgery

 - ⇒ conventional ECCE.

 - ⇒ Phacolytic

- ⊙ Pars Plana Lensectomy.

③ Complications of local Anesthesia ⇒

- ⊙ Retrobulbar hemorrhage

- ⊙ perforation of globe

- ⊙ optic atrophy.

④ Complication ⇒ Chronic endo-ophthalmitis.



Thyroid eye diseases

OB

STATION 11

- What is your diagnosis? (2)
- Enumerate three prominent signs in this patient
- How you will treat this condition? (1.5)

(5)

① Thyroid eye disease. (Thyroid exophthalmos)

② Signs →

- ⊙ Von-Graefe's sign
- ⊙ Stellung's sign
- ⊙ Kocher sign

③ Treatment →

- ⊙ Systemic iodine
- ⊙ Anti-thyroid drugs
- ⊙ Systemic corticosteroid.
- ⊙ Artificial tears
- ⊙ Surgical → Tarsorrhaphy

6



**ptosis(marcus gun jaw
ptosis)**

1. Describe this picture 1
2. Name the sign shown in this picture. 1
3. What is the cause of this phenomenon? 1
4. How will you treat this patient? 2

(6)

- ① ptosis (Marcus gun jaw winking ptosis)
- ② Marcus gun jaw winking phenomenon - mandibular
- ③ Cause \rightarrow Misdirected cross innervation b/w 5th^{ab} and 3rd nerve

④ Treatment \rightarrow

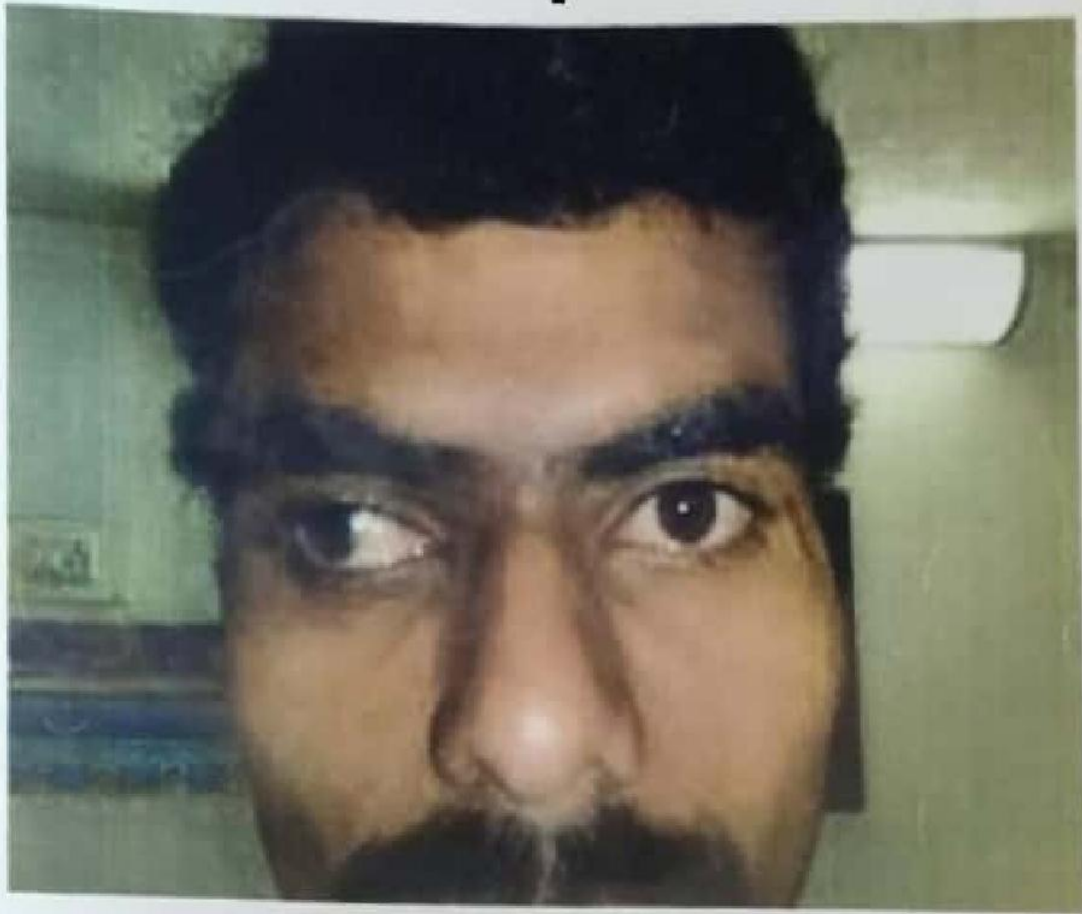
Medical \rightarrow Treat underlying cause.

Surgery \rightarrow Same as of ptosis \odot Fasanella - serrod operation

\odot Levator resection \odot sling operation \odot Aponeurotic strengthening \odot Hess operation.

(7)

7



right exotropia

Dev

- What is your diagnosis? (2)
- What is its pathogenesis? (1)
- How you will treat this condition? (2)

(7)

① Right exotropia...

② Pathogenesis → Medial rectus of right is weakened. due to trauma or neurological lesion in 3rd nerve.

③ Treatment is

- ⊙ Orthoptic exercise
- ⊙ Occlusion
- ⊙ Optical correction
- ⊙ Surgery → resection
→ recession

(8)

① Congenital ALA obstruction.



nasolacrimal duct obstruction

A mother brought her 3 month baby with complaints of watering from his right eye since birth. There is no history of any birth trauma:

- a. What is most likely diagnosis? 1
- b. What is differential diagnosis of epiphora at this age? 2
- c. What treatment will you advise for this patient? 2

→ reflexion

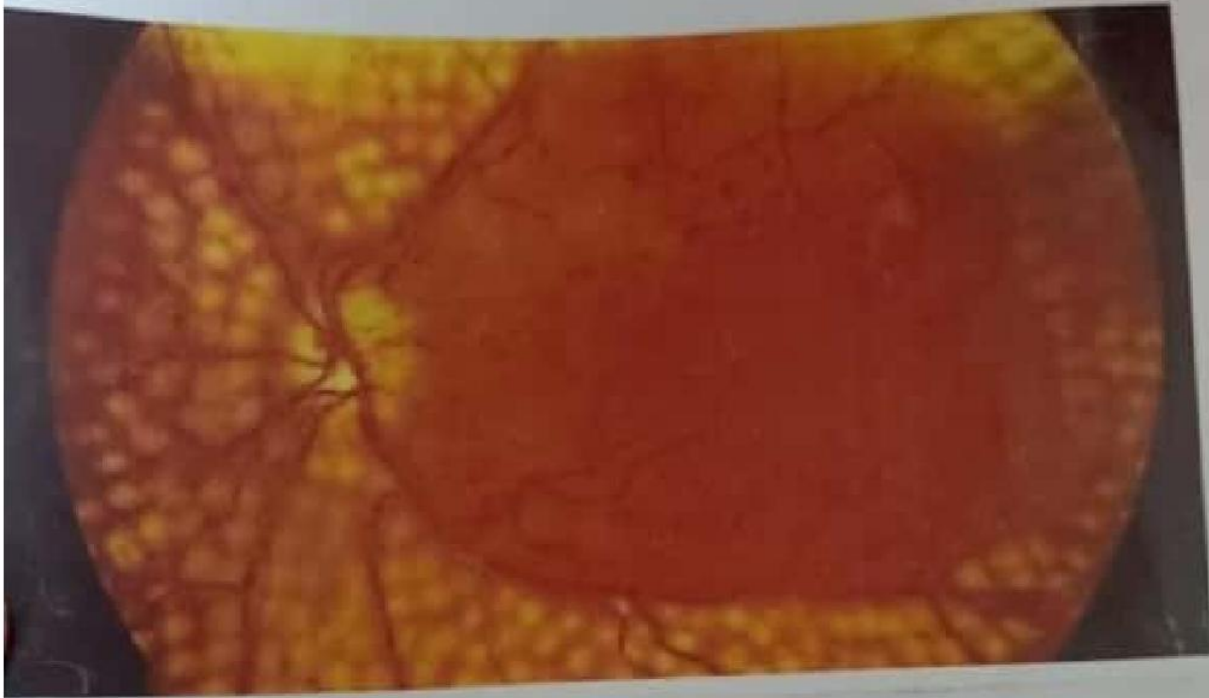
(8)

- ① Congenital NLD obstruction.
- ② D/Dx → ~~① Asthma~~ ① Punctal Ateisia
 - ② Congenital glaucoma.
 - ③ Conjunctiviti
 - ④ Keratitis
 - ⑤ Uveitis

- ③ Treatment → ① Spontaneous patency
 - ② massage
 - ③ Antibiotics

If not treated within 6 months → probing, syringing → DCR

9



panretinal photocoagulation

- What is your Diagnosis? (1)
- Name two Most Common causes of this disorder. (2)
- How will you manage this Patient? (2)

(9)

- ① Proliferative diabetic retinopathy treated by Panretinal Photocoagulation.
- ② Proliferative Diabetic Retinopathy (D.M)
H.T
- ③

10



Rt1

vitreous hemorrhage

A 60 year old man presented in the eye OPD with sudden loss of vision with above fundus picture

- What is your diagnosis? 1
- What is the pathogenesis of this condition? 1
- Name the commonest systemic diseases responsible for this condition? 1
- How will you manage this patient? 2

(10)

① Vitreous hemorrhage

② - Abnormal vessels

- Inflamed vessels

- Rupture of vessels

- Blood from adjacent pathology to retina.

③ D.M

④ Conservative → Bed rest

head elevation.

Medical → Intravitreal ~~ant~~ anti-VEGF

Treat underlying cause.

Surgery → Pars Plane Vitrectomy.



01

orbital cellulitis

This is picture of a 12 years girl with C/O high grade fever, pain & swollen lids of her Left Eye. She gives H/O severe sinusitis a week ago.

- a. What is your diagnosis? 1
- b. Name the most common causative organisms 1
- c. What is pathogenesis of this disease? 2
- d. What are complications of the disease? 1

(11)

① Orbital Cellulitis

② Staph. aureus, strept. pneumoniae, A. influenza.

③ Path. → Extension of infection from paranasal sinuses
in 90% cases Ethmoid sinuses
→ Trauma

→ Local, hematogenous, post surgical spread.

④ Cavernous Sinus Thrombosis

Meningitis.

Subperiosteal abscess

Blindness

Death.

12



central retinal artery occlusion

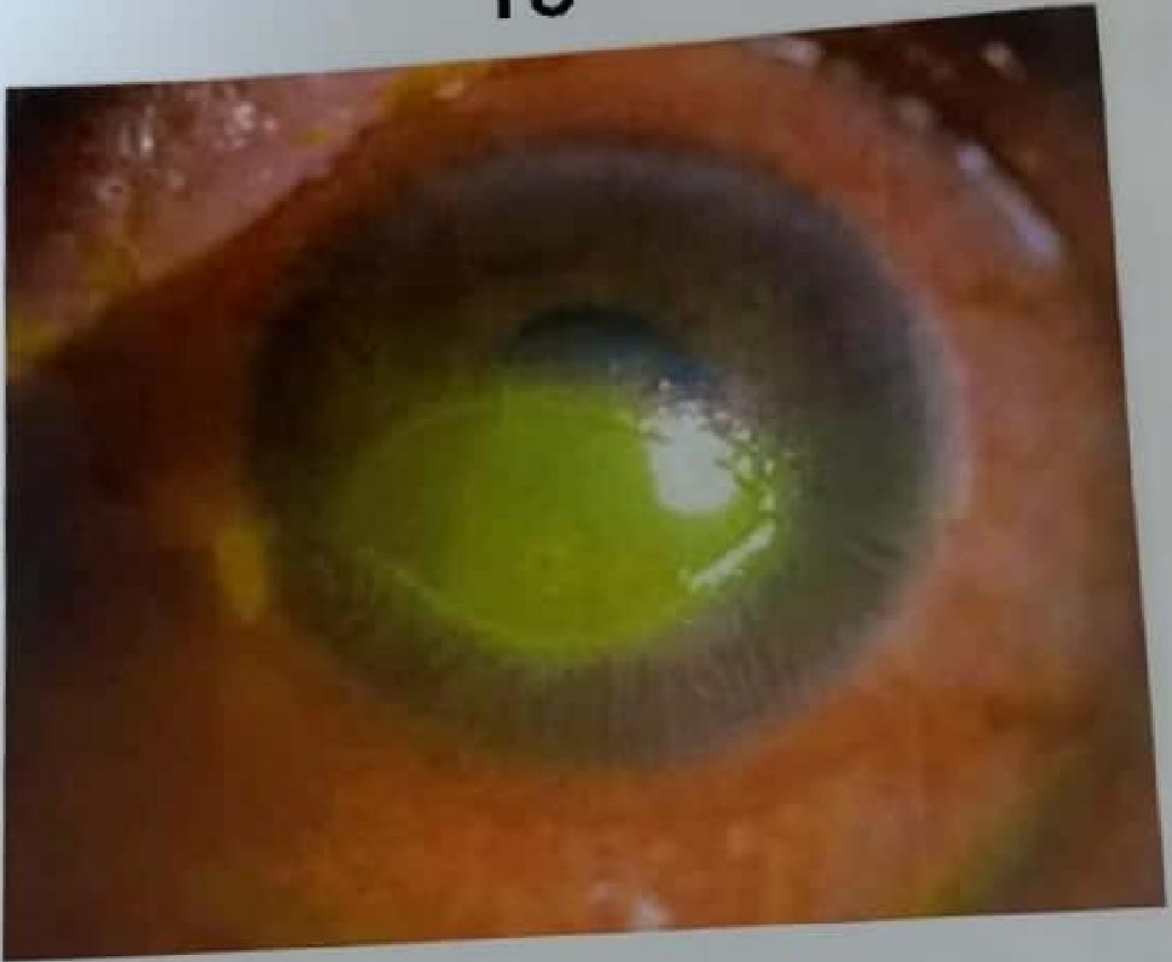
A 60 years old male had sudden painless loss of vision in his right eye. There is H/O diabetes, hypertension and hyperlipidemia for 20 years. His fundus picture is shown above

- What are important findings in this fundus photograph? 2
- What is most probable diagnosis? 1
- Enumerate important steps in the emergency management of this condition 2

(12)

- ① ✓ Cherry Red spot, ✓ Pale retina, ✓ Cattle Tracking, ✓ Atrophic changes
✓ Narrow vessels
- ② CRAO (Central retinal Artery Occlusion)
- ③ - Reduction of IOP by Acetazolamide, Parital
- Ocular Massage.
- Sub-lingual Iso-sorbide nitrate
- High oxygen
- Methyl prednisolone IV
- YAG-laser embolotherapy.

13



Cr2

bacterial corneal ulcer

This patient has H/O trauma to cornea of his left eye

- a. What is your diagnosis? 1
- b. What is the name of stain used for corneal staining? 1
- c. How will you manage this case? 3

(13)

① Bacterial corneal ulcer

② Fluorescein 2% stain

③ Control of infection

Relief of pain

Treatment of desmoxide

Treatment of perforated corneal ulcer.

Treatment of non-healing corneal ulcer.

(14)



R12

panretinal photocoagulation

This 55 years old female known diabetic for last 15 years was treated for his retinal problem.

- What is this ^{condition} treatment known as? 1
- Name the retinal condition that led to this treatment? 1
- What other treatment modalities are available for this retinal disorder? 1
- What is pathogenesis of this condition? 2

(14)

- ① PDR (Proliferative Diabetic Retinopathy)
- ② Retinal hypoxia.
- ③ Medical \Rightarrow Intravitreal anti-VEGF (Bevacizumab)
Intravitreal steroids.

laser \Rightarrow focal
 \Rightarrow Grid pattern
 \Rightarrow PRP

Surgical \Rightarrow Pars plana vitrectomy

- ④ Path \Rightarrow ~~Microangiopathy~~ microangiopathy affecting capillaries

\downarrow
Microvascular occlusion w/ microaneurysms

\downarrow
Ischemia of retina

\downarrow
Retinal hypoxia

15



retinitis pigmentosa

A twenty year old boy presents with history of night blindness since early childhood. His fundus picture is shown above:

- a. What are three classical findings in this photograph? 2
- b. What is probable diagnosis? 1
- c. What is inheritance pattern of this disease? 2

(15)

① Waxy optic disc
attenuated vessels

Pigmentary bone corpuscles.

② Retinitis pigmentosa-

③ X-linked

Autosomal Dominant

Autosomal Recessive

Isolated pattern

16



Ct2

cataract

This patient gives H/O gradual loss of vision in his Right eye for last 1 year

- a. What is your diagnosis? 1
- b. How will you evaluate this patient for surgery? 2
- c. What surgical options are available for this particular patient? 1
- d. Enumerate per operative complications that can occur during eye surgery of this patient. 1

(16)

① Cataract

② ① History

② Ocular examination

③ Visual function assessment

④ Systemic examination

⑤ Lab investigation

⑥ Biometry

③ Surgery \Rightarrow As before written

④ Complication PER operative \Rightarrow

⊙ Hemorrhage (Vitreous)

⊙ Hyphaema

⊙ Vitreous loss

⊙ Rupture of post. capsule

⊙ Nucleus drop into vitreous.



Ld4

ectropion

This old man presented in eye OPD with complaints of frequent watering from his eyes?

- a. What is your diagnosis? 1
- b. What is the underlying pathophysiology? 2
- c. Name any two surgical options you would use? 2

(17)

① Ectropion

② ↑ horizontal laxity of lower eye lid due to

⊙ trauma ⊙ burn ⊙ ~~increased~~ ~~orbital~~ ~~apertures~~

③ Surgical operation →

(18)

18



Conj1

pterygium

This picture shows soft tissue growth encroaching upon the cornea of a patient for last 2 years.

- a. What is your diagnosis? 1
- b. What is pathogenesis of this condition? 1
- c. What complication can occur if it remains untreated? 1
- d. Give treatment options available for this patient? 2

(18)

① Pterygium

- ②
- ① Degenerative and hyperplastic condition of conjunctiva.
 - ① Sub-conjunctival tissue undergo elastic degeneration
 - ① Proliferative Proliferate as vascularized granulation tissue under epithelium which encroaches cornea.
- ③ Deterioration of vision.

④ Non-surgical ⇒ Artificial tears
Topical steroids
Sunglasses

Surgical ⇒ ① Simple excision
① Simple conjunctival flap excision.
① Amniotic membrane graft.

19



Ld 1

chalazion

This young boy presented in eye OPD with upper lid swelling well away from lid margin.

- a. What is your diagnosis? 1
- b. What other treatment options are available apart from surgical option? 2
- c. What type of incision would you prefer and why? 2

(19)

- ① Chalozien
 - ② Same as before
 - ③ "
-



T1

**A mother brought her child with leucocoria
(white opacity) in Right eye**

- a. What is the differential diagnosis of leucocoria? 2
- b. What is the most common malignancy affecting children before the age of three years? 1
- c. How will you manage this patient? 2

21



Dev

right esotropia

- What are your findings?
- What is its pathogenesis?
- How you will treat this case

(21)

① Right esotropia.

②



CT1

endophthalmitis

The patient had his cataract surgery done 3 days back came to Eye Emergency with severe pain & loss of vision in the operated eye.

- a. What more signs will you look for in this patient? 1
- b. What is your diagnosis? 1
- c. Name 2 microorganisms responsible for the disease 1
- d. How will you manage this patient? 2

(22)

① Hypopyon → Chemosis, ciliary congestion

② Post operative endophthalmitis.

③ Staph. aureus

H. influenza

④ Management ⇒ Intra vitreal steroid

" A/Bs

~~Surgery~~ Subtenon A/B injection.

Cycloplegics

Surgical ⇒ Pars Plana Vitrectomy

23



keratoconus(munson sign)

A 26 year old boy presents with decreased vision and frequent change of spectacles. On ophthalmic examination he has got irregular astigmatism:

- a. What sign is being shown in this picture? 1
- b. What is most likely diagnosis? 1
- c. What are other important signs of this disease? 2
- d. What is the treatment of late stage of this disease? 1

(23)

- ① Munson sign
 - ② Keratoconus
 - ③ Oil Droplet reflex, scissors reflex
Keyser fleischer ring
Vogt's line.
 - ④ Treatment ⇒ Collagen cross linking (CXL)
⇒ Keratoplasty
⇒ Deep Anterior lamellar Keratoplasty (DALK)
-

24



vernal keratoconjunctivitis

- What is your diagnosis? |
- What is its Pathogenesis? |
- What measures you will advise patient to take care? (1.5)
- Enumerate drugs used to treat this condition. (1.5)

(24)

① VKC / Spring Catarrh

② Type I and II Hypersensitivity

IgE mediated.

- Foreign Allergen binds with Antigen and induce formation of IgE
- Antigen react w/ bind IgE on mast cell
- Degranulation of mast cells
- Mediator produced causing inflammation.

③ Measures: Avoid Allergen at every cost

• Avoid dust mites, grain etc.

④ Drugs → Sodium cromoglycate (mast cell stabilizer)

Topical: Anti-histamine

MCS + Anti-histamine

Topical cyclosporin

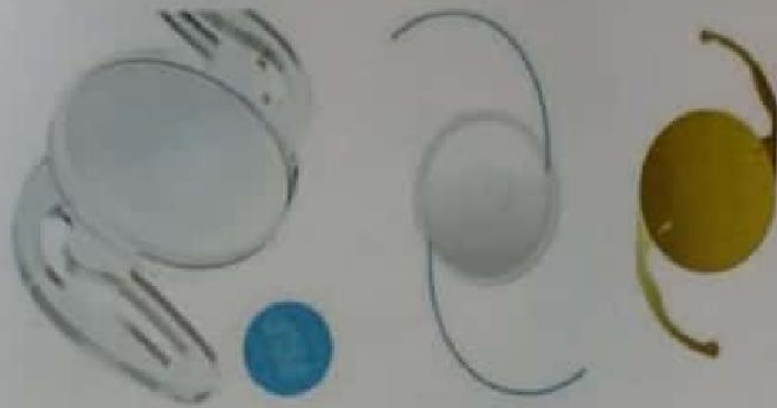
Acetyl cysteine

NSAIDs

Oral → Immunosuppressive agents

→ Anti-histamine

25



Ct3

IOL

A patient has been advised cataract surgery with Intra Ocular Lens Implant (IOL)

- a. What are various types of IOL available? 2
- b. What are the different parts of IOL? 2
- c. Which is the best site to place the IOL? 1

→ Anti-glaucoma

(25)

- ① Foldable, rigid, toric, multifocal
- ② Hepatic, optic
- ③ Anterior part of posterior chamber

26



stye

- What is your diagnosis? (1)
- Enumerate treatment options. (2)
- What type of incision is given and why? Give two reasons. (2)

(26)

① Syle

② ① Topical Antibiotic

② Topical Steroid

③ Evacuation of pus

④ Warm compress

⑤ Treat associated blepharitis.

③ No incision is given, only lash is plucked for evacuation of pus.



cupping of optic disc
raised intraocular pressure
visual acuity dec

- What are your findings? 2
- What other investigations you will advise for diagnosis? (1.5)
- What are medical options to treat this condition? (1.5)

(27)

- ① \uparrow IOP, Optic disc changes, Visual acuity \downarrow
- ② Fundoscopy, Perimetry, Tonometry, Gonioscopy, OCT.
- ③ Medical \rightarrow
Surgical \rightarrow } from book
Laser \rightarrow



Ld5

marcus gun jaw winking ptosis

A mother brought child of 4 years of age with drooping of Right eyelid

- What is the typical sign visible in the picture above? 2
- How do you classify this disease? 1
- What are the surgical options available for treatment of this disease? 2

(28)

① Marcus gun jaw winking sign.

② congenital

Acquired → ① Neurogenic

Aponeurotic

Myogenic

Mechanical

③ surgical options same.



CR dendritic corneal ulcer

the corneal

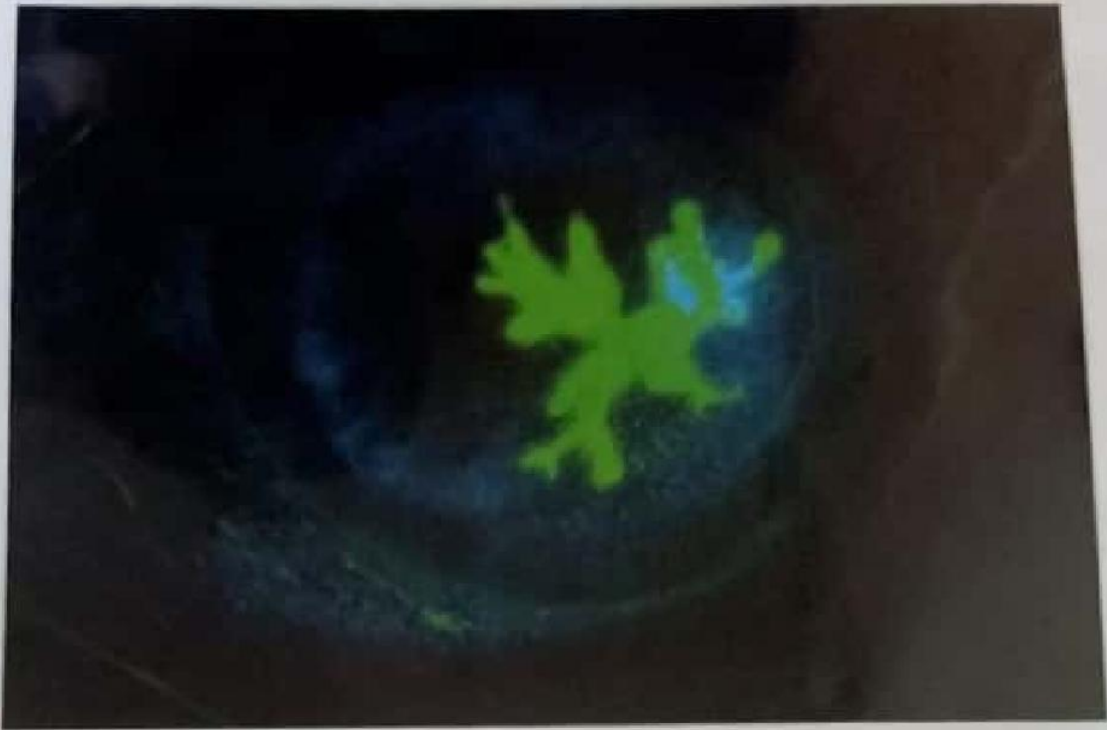
- What is Lesion? (1)
- What is most common cause of such findings? (1)
- What are different drugs used to treat this condition? (3)

(29)

- ① Dendritic corneal ulcer.
- ② Herpes simplex type I and II
- ③ Acyclovir
Acycloguanosine
cycloplegic (1% Atropine drops).
Idox uridine

(20)

30



Cr1

dendritic corneal ulcer

A 45 years old male presented in the OPD with a lesion on his right cornea. Flouresein staining is +ve

- a. What is this typical lesion known as? 1
- b. What is your diagnosis? 1
- c. Name risk factors responsible for reactivation of the disease. 1
- d. How will you manage this patient? 2



(30)

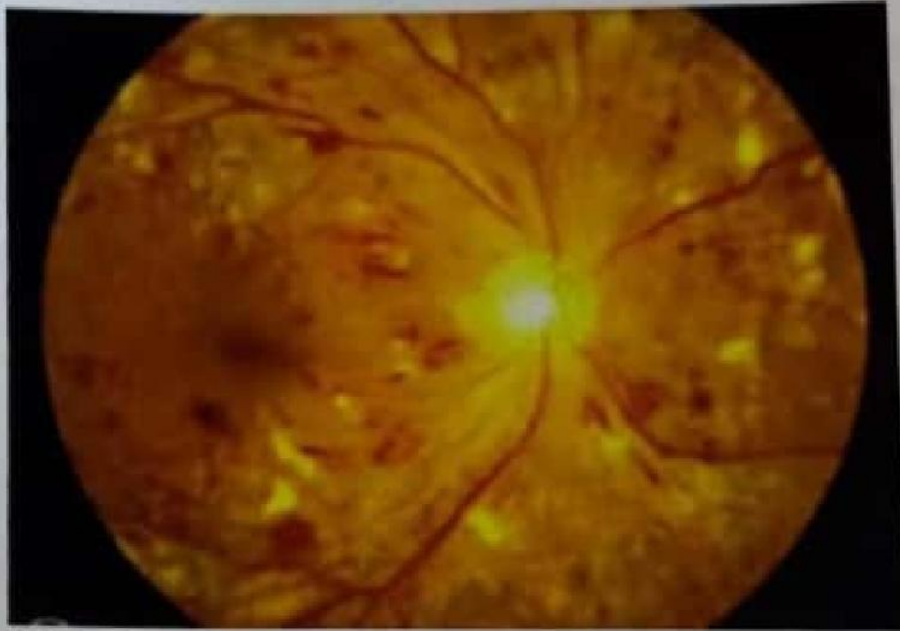
- ① Dendritic corneal ulcer
- ② Viral Keratitis
- ③ HSV type I and II
- ④ Acyclovir

Acycloguanosine

cycloplegic (1% Atropine drops)

Debridement

(31)



RL3

central retinal vein occlusion

with large macular edema (LME)

A 60 years old lady presented in the eye OPD with sudden painless loss of vision of his eye

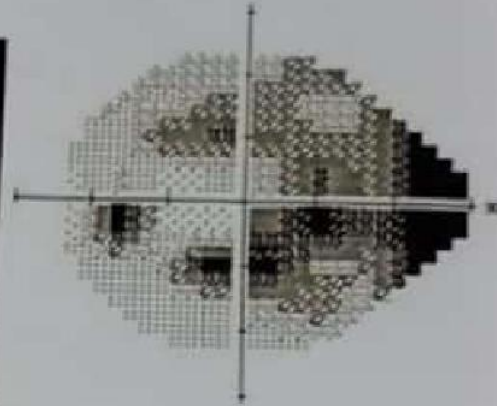
- a. What is your diagnosis? 1
- b. What is the most common factors/ systemic diseases responsible for this condition? 1
- c. Name two important complications of the disease. 1
- d. How will you manage this patient? 2

Debridement (31)

- ① central retinal vein occlusion.
- ② Diabetes / Hypertension / Age / Drugs / Smoking.
- ③ cystoid macular edema
Large vitreous hemorrhage
Blindness
Neovascular glaucoma.
- ④ control of factor Hypertension, Diabetes mellitus, smo
Anti-platelet Therapy
ocular Anti VEGF
Triamcinolone acetonid.



T1



POAG

A patient's eye with typical disc changes & visual field defect

- i. What is your diagnosis? 1
- j. What other important signs will you look for in this patient? 1
- k. What is pathogenesis of this disease? 1
- l. How will you manage this patient? 2

(32)

① POAG

② reduce visual acuity
cupping ~~disc~~ of optic disc.
Raised intraocular pressure.

③

⊙ Loss of Trabeculocyte

⊙ Deposition of extracellular matrix

④ ~~Pres~~ Medical ← Prostaglandin
Laser
Surgical. Beta blocker.

(33)



^{cm} vernal keratoconjunctivitis

- What is your diagnosis?
- What is its pathogenesis?
- What measures you will advise patient to take care?
- Enumerate drugs used to treat this condition.

Surgical.

(33)

- ① Vernal Keratoconjunctivitis.
- ② Pathogenesis:- Formation of IgE antibodies
IgE reaction on the surface of mast cell
Degranulation of mast cell releasing
mediators e.g. histamine, serotonin etc.
- ③ Avoid the exposure to allergen/hygiene/wash hands frequently.
- ④ Sodium cromoglycate
epinastine
Acetylcysteine
Topical cyclosporin.

34



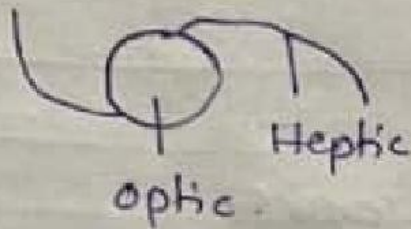
IOL

- What is your diagnosis?
- Enumerate its parts.
- Enumerate different types of material used for such type of thing.

(34)

① 10L

②



③ Material used

Foldable 10L made up of soft acrylic, hydrogel or silicon material.

(35)



De1

left eye esotropia

This child presented in the eye OPD with C/O deviation of her eyes since birth.

- e. What is your diagnosis? 1
- f. How do you classify this disease? 1
- g. What is pathogenesis of this disease? 1
- h. How will you manage this patient? 2

(35)

- ① Left eye esotropia
- ② congenital esotropia
Acquired esotropia
 - Accommodative refractive type
 - Accommodative non-refractive type
 - Mixed type.
- ③ Lateral rectus of left eye is weakened due to trauma or neurological lesion in VI nerve 6th.
- ④ Full correction of refractive error
Amblyopia therapy
Bifocal glass
Surgery
 - ↳ Recession
 - ↳ Resectionorthoptic exercise

36



Op1

papilloedema

A patient presented in emergency with headache, nausea, vomiting and blurring of vision and above fundus picture.

- a. What is your diagnosis? 1
- b. What is the differential diagnosis? 2
- c. What is its immediate treatment? 2

(36)

① Papilloedema.

② papillitis

Pseudo papilloedema caused by optic disc ^{drusen} ~~drusen~~

Hypermetropia
optic neuritis.

③ Treatment of underlying cause
control of raised IOP.

Diuretics

Repeated lumbar puncture

optic nerve sheath decompression.

37



9

buphthalmos

- What is your diagnosis? (1)
- How will you further investigate this condition? (2)
- What are surgical options to treat this condition? (2)

(37)

① Buphthalmos

② Tonometry
Gonioscopy
Funduscopy
Perimetry
Imaging technique
OCT
ultrasound biomicroscopy.

③ Goniotomy
Trabeculotomy
Trabeculectomy
Artificial Drainage shunt.
Laser → Diode laser cyclodablation.