

Ophthalmology SAQ

By: 430 Ophthalmology team

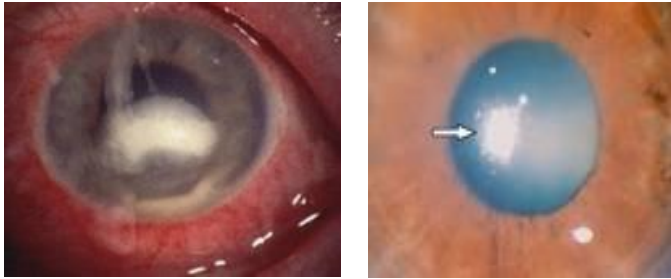
Acute visual loss

Done By: Sara Mohammed AlShehri.

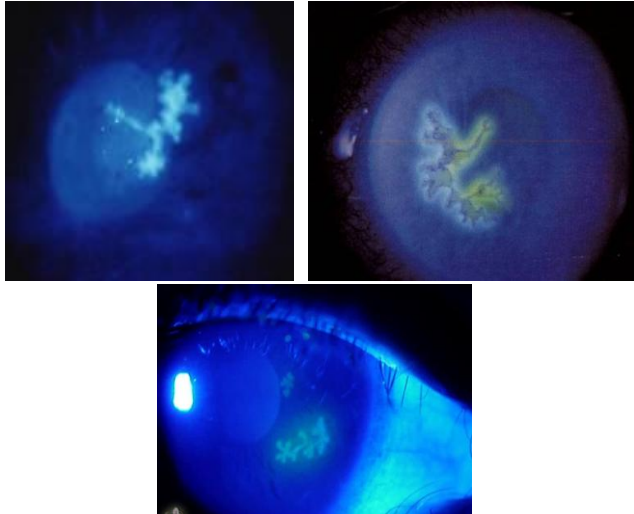
Revised by: Rawabi Saleh AlGhamdi

❖ Note: please refer to the original lecture given by the doctor



**A. What is your diagnosis?**

- ✓ Corneal opacity-(loss of its transparency). Most likely due to bacterial Keratitis.

**A. What is your diagnosis?**

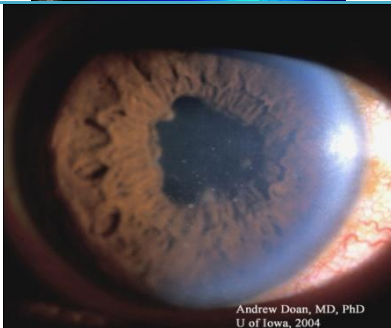
- ✓ Herpes simplex Keratitis (dendritic ulcer) caused by HSV.

B. What is the treatment?

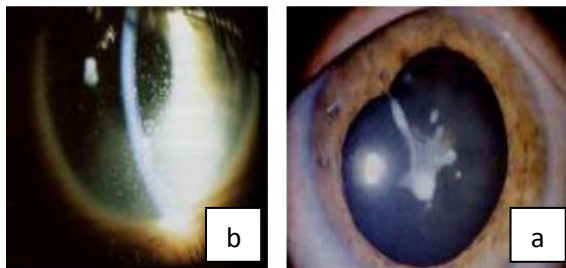
- ✓ Antiviral (Acyclovir)
- ✓ NEVER GIVE STEROIDS

C. What is the name of the stain that was used?

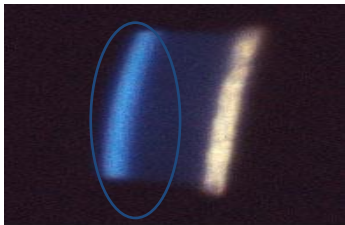
- ✓ Fluorescein dye.

**A. What is your diagnosis?**

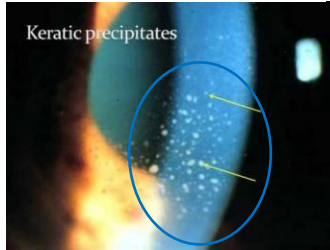
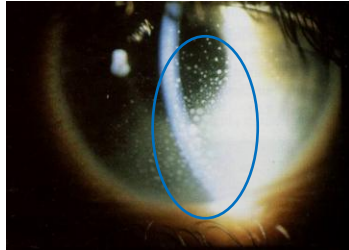
- ✓ Posterior synechia (irregular pupil) due to uveitis.

**A. What are the findings in these pictures?**

- a. Posterior synechia
- b. Keratic precipitates



Aqueous flare as seen by beam of light through anterior chamber; blue line on left is cornea, yellow line on right is iris, in between is anterior chamber

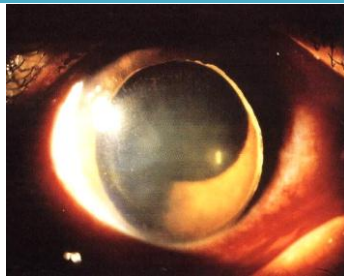
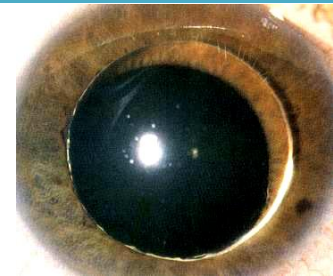


A. What is your diagnosis?

- ✓ Anterior uveitis (Iritis) → you can see the *flare* on the slit lamp examination

*Flare is protein in the [anterior chamber](#) from leakage from inflamed blood vessels in the [iris](#). Flare is measured on a scale from 1 to 4, with 4 being the most severe. Flare gives the aqueous a particulate, or smoky, appearance as can be observed in the photograph.

- ✓ Slit lamp Examination Showing Keratic precipitates on the corneal endothelium. (Sign of anterior uveitis).
- ✓ In uveitis we will see in the Ant. Chamber:
 1. Cells.
 2. Flare.
 3. Keratic precipitate.



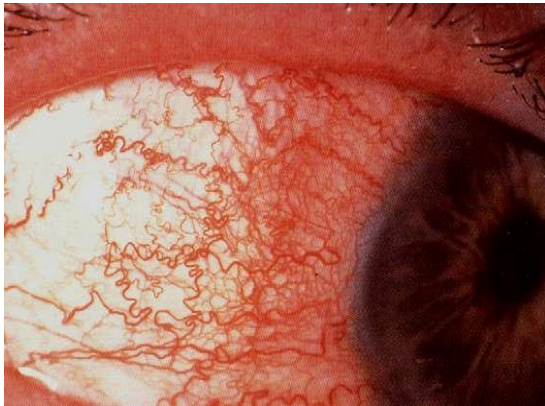
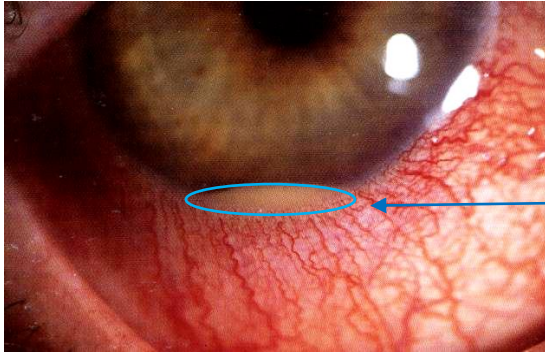
A. What is your diagnosis?

- ✓ Anterior Dislocated Lens



A. What is your diagnosis?

- ✓ Corneal edema after cataract surgery (Pseudophakic Bullous Keratopathy)

**A. What is your diagnosis?**

- ✓ Anterior uveitis (Iritis)

B. Describe what you are seeing in this picture?

- ✓ Injection around the limbus.
- ✓ A HYPOION (Pus or cells in the inferior Ant. Chamber) which require treatment.

C. What are the DDX for this case?

- ✓ Anterior Uveitis (Iritis)
- ✓ Keratitis.
- ✓ Acute Angle closure Glaucoma.

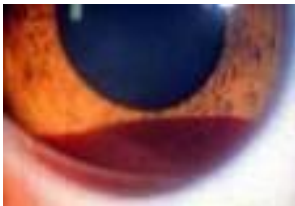
D. What are the symptoms of iritis?

- ✓ Ocular Pain, photophobia, blurred vision, Redness eye .

E. What is the management?

- ✓ If anterior uveitis: Topical Steroids.
- ✓ If posterior uveitis: Systemic Steroids.

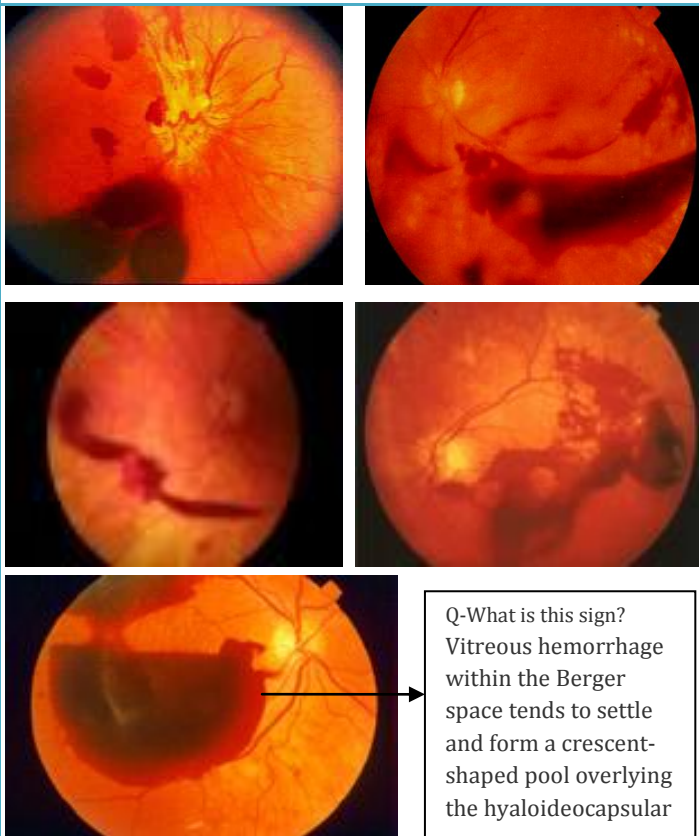
- ✓ Iritis & Iridocyclitis =Anterior Uveitis.

**➤ Patient came to the E.R with history of blunt trauma****A. What's your diagnosis?**

- ✓ Hyphema (anterior chamber hemorrhage)

B. What is your management?

- ✓ Bed rest to prevent rebleeding.
- ✓ Topical steroids & topical cycloplegics.
- ✓ Systemic antifibrinolytic agents

**A. What is the diagnosis?**

- ✓ **Vitreous Hemorrhage**

B. Name 3 causes for this condition?

- ✓ **Trauma**
- ✓ **Diabetic retinopathy of the proliferative type.**
- ✓ **Retinal detachment**

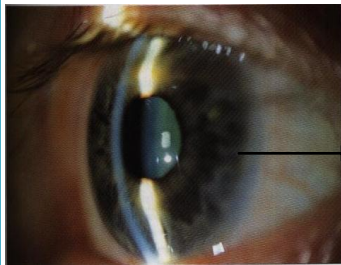
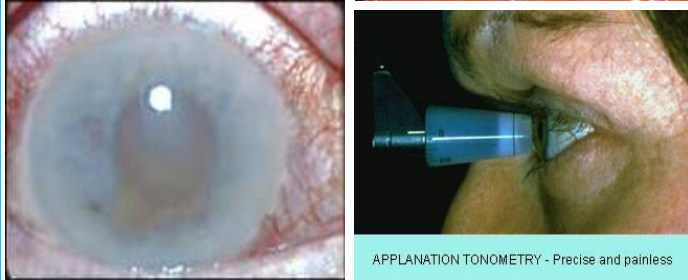
C. What type of investigation you want to order for this patient?

- ✓ **B-scan**

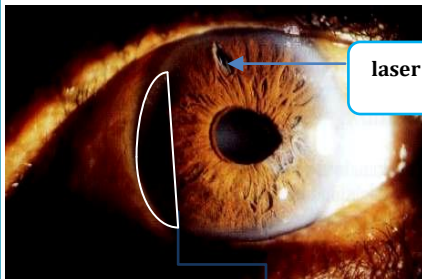
D. What is the treatment?

- ✓ The treatment method used depends on the cause of the hemorrhage.
- ✓ **Sometimes vitrectomy surgery is required to remove the blood, improve vision, and to address any underlying retinal disease.**

*In most cases, the patient is **advised to rest with the head elevated 30–45°**, to **put patches over the eyes** to limit movement prior to treatment in order to allow the blood to settle. And **to avoid medications** that cause blood thinning (**such as aspirin**).



Shallow Ant. Chamber



laser peripheral iridotomy

Note the ECLIPSE sign.

(Sign of a shallow Ant. Chamber)

قوس ضوء على اليمين + قوس ظل على

A. Patient with acute visual loss and sever ocular pain , What is the diagnosis?

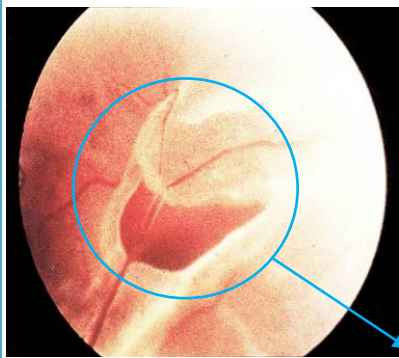
✓ Acute angle closure glaucoma

B. On examination , What are the common findings?

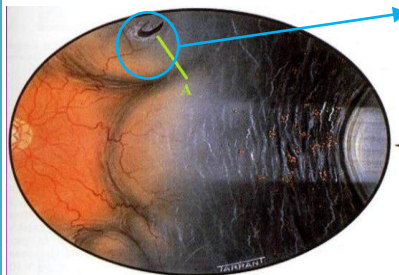
- ✓ Ciliary injection (redness of the eye)
- ✓ Pupil dilated and fixed.
- ✓ Corneal edema
- ✓ Increase intraocular presser (measured by: goldman applanation tonometry)

C. What is the treatment?

- ✓ Laser YAG peripheral iridotomy (LPI)

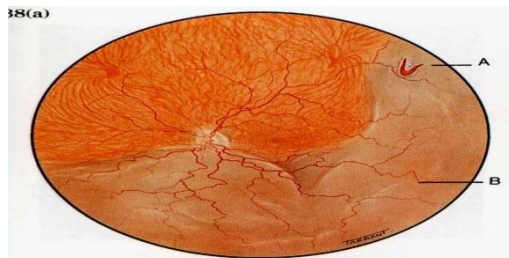


Horseshoe or U-Shaped tear indicate Rhegmatogenous RD



A. What is the diagnosis?

- ✓ **Rhegmatogenous Retinal Detachment (RD)**



A. What is the diagnosis?

- ✓ **Rhegmatogenous Retinal Detachment (RD)**

B. What are the risk factors for this condition?

- ✓ High myopia
- ✓ Trauma
- ✓ Previous retinal detachment in the other eye
- ✓ Family history
- ✓ lattice degeneration

C. Identify A?

- ✓ Horseshoe or U- Shaped tear the macula is still intact but may detach soon. (Emergency)



A. What is the diagnosis?

- ✓ **Rhegmatogenous Retinal Detachment (RD)**

B. What is the treatment?

Emergency surgery to 1-drain the fluids under the retina.
2-close the hole: either by internal fixation (AFX=air fluid exchange) or external fixation (sclera buckle) then do laser or cryotherapy .



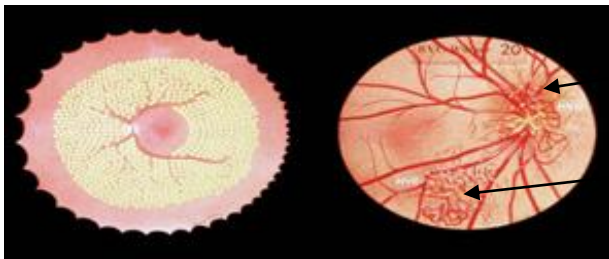
A. What is the diagnosis?

- ✓ Proliferative diabetic retinopathy.



A. What is the diagnosis?

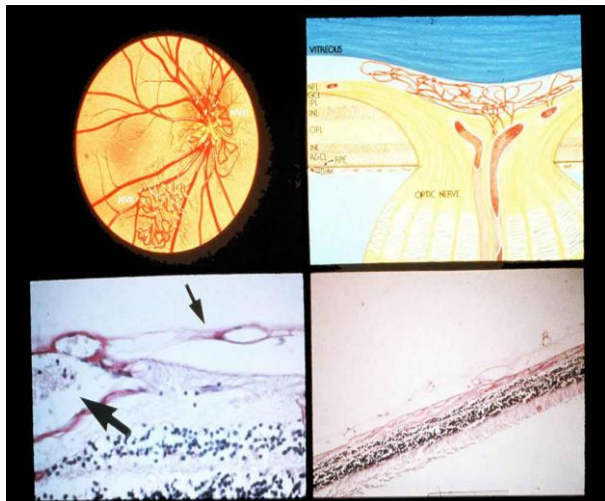
- ✓ Image of funds showing scatter laser surgery for diabetic retinopathy

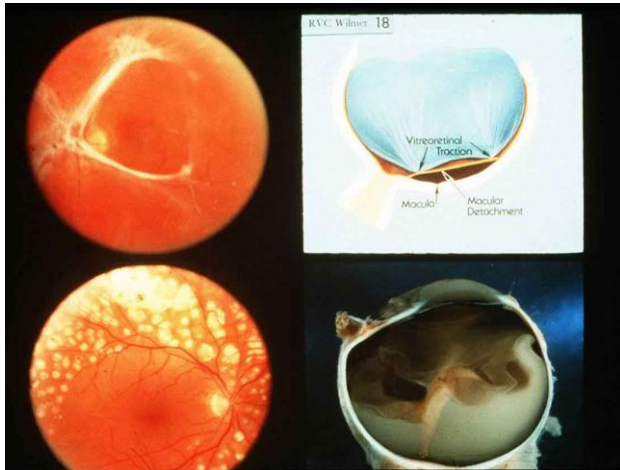


diabetic retinopathy :

(NVD)= neovascularization near , in the disc.

(NVE)= neovascularization else where .



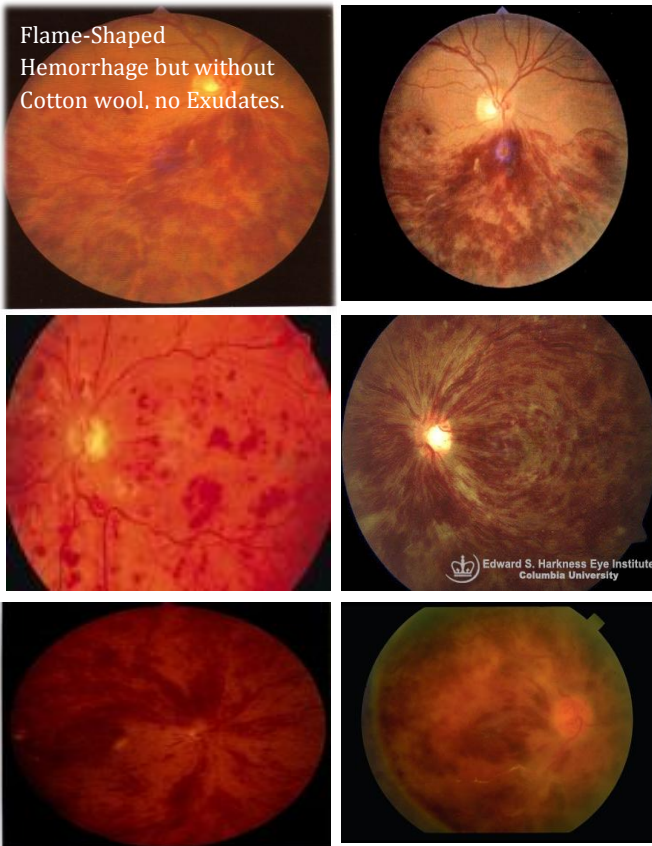


A. What is the diagnosis?

- ✓ Neovascularization of the disc (NVD) associated with extensive fibrovascular proliferation leading to Mild to extensive tractional retinal detachment



Flame-Shaped Hemorrhage but without Cotton wool, no Exudates.



A. What is the diagnosis?

- ✓ Central retinal vein obstruction (CRVO). Note the "blood and thunder" appearance caused by extensive hemorrhages.

B. Mention 2 predisposing factors?

- ✓ HTN, diabetes, atherosclerosis, clotting disorders, vasculitis.

C. How does he/she present?

- ✓ Painless sudden visual loss

D. What type of investigation you want to order for this patient?

- ✓ Fluorescein angiography
- **Complications:** the most serious is new vessels formation → Neovascular Glaucoma. So, If any new Vessels = P.R.P.





➤ **Pt with Hx of palpitation has sudden loss of vision.**

A. What is the diagnosis?

✓ **Central retinal artery occlusion**

Severe Loss of Vision, Poor Prognosis.

Segmentation of the Blood Vessels & Marked Edema with Chari-red spot. Ischemia of the inner 2/3 of the retina (White/Yellow color). But the Fovea is preserved (Supplied by the choroidal artery)



A. What is the diagnosis?

✓ **Branch Retinal Artery Occlusion**



A. What is the diagnosis?


- ✓ **Rubeosis iridis. (new vessels in the iris)**
- ✓ **Complicated by neovascular glaucoma.**
- ✓ **Tx: by Treating Retina Ischemia pan retinal photocoagulation (PRP)**



➤ **20-Year-old male with blurring of vision OS for 1 day.**

A. What is the diagnosis?

B. How you will manage this patient?

	<p>A. What is the diagnosis? ✓ Optic neuritis</p>
