

# Ophthalmology SAQ

By: 430 Ophthalmology  
team

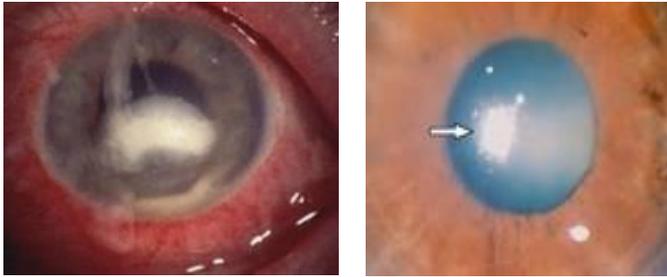
## Acute visual loss

Done By: Sara Mohammed AlShehri.

Revised by: Rawabi Saleh AlGhamdi

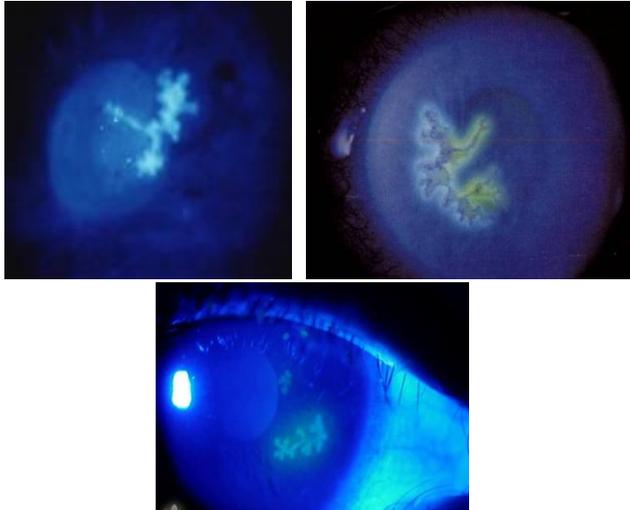
❖ Note: please refer to the original lecture given by the doctor





**A. What is your diagnosis?**

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



**A. What is your diagnosis?**

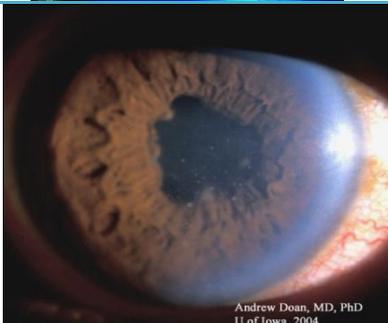
- ✓ Herpes simplex Keratitis (dendritic ulcer) caused by HSV.

**B. What is the treatment?**

- ✓ Antiviral (Acyclovir)
- ✓ NEVER GIVE STEROIDS

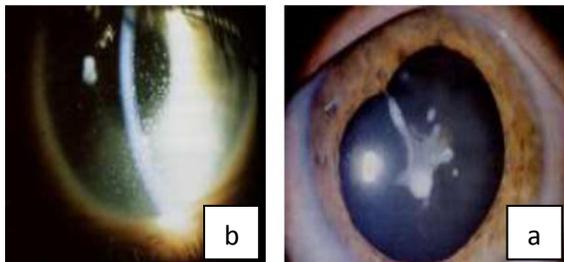
**C. What is the name of the stain that was used?**

- ✓ Fluorescein dye.



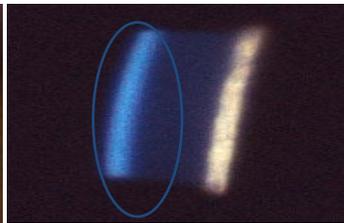
**A. What is your diagnosis?**

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

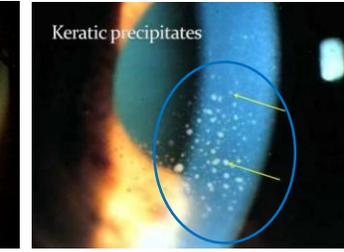
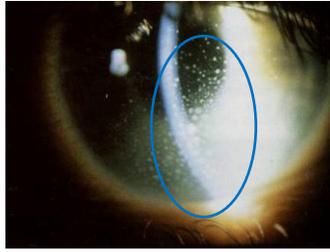


**A. What are the findings in these pictures?**

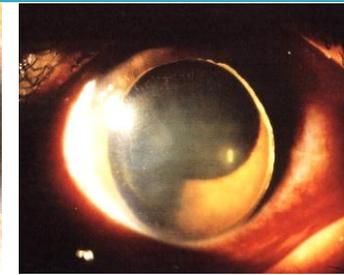
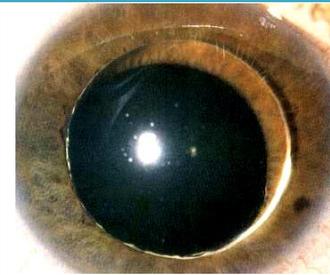
- a. Posterior synechia
- b. Keratic precipitates



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



Keratic precipitates



#### A. What is your diagnosis?

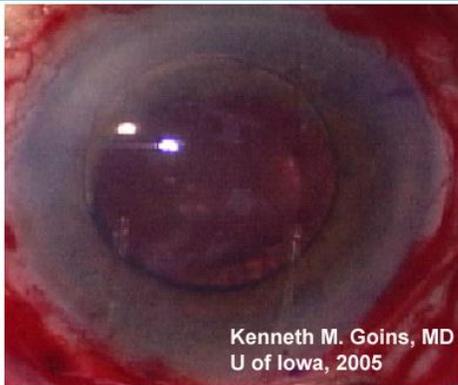
- ✓ Anterior uveitis (Iritis) → you can see the flare on the slit lamp examination

\*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?

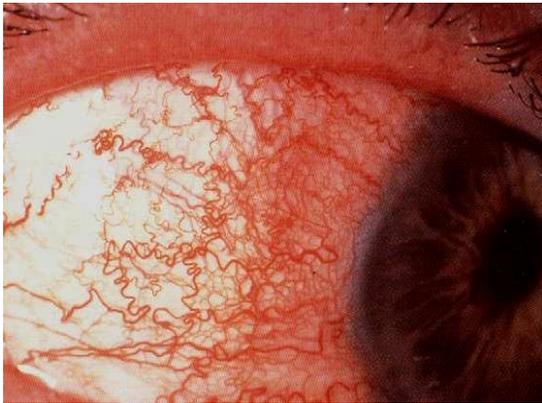
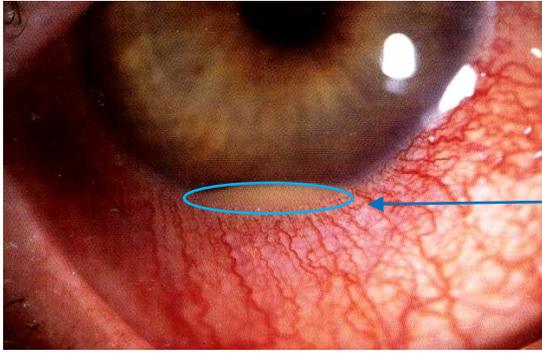
- ✓ Anterior Dislocated Lens



Kenneth M. Goins, MD  
U of Iowa, 2005

#### A. What is your diagnosis?

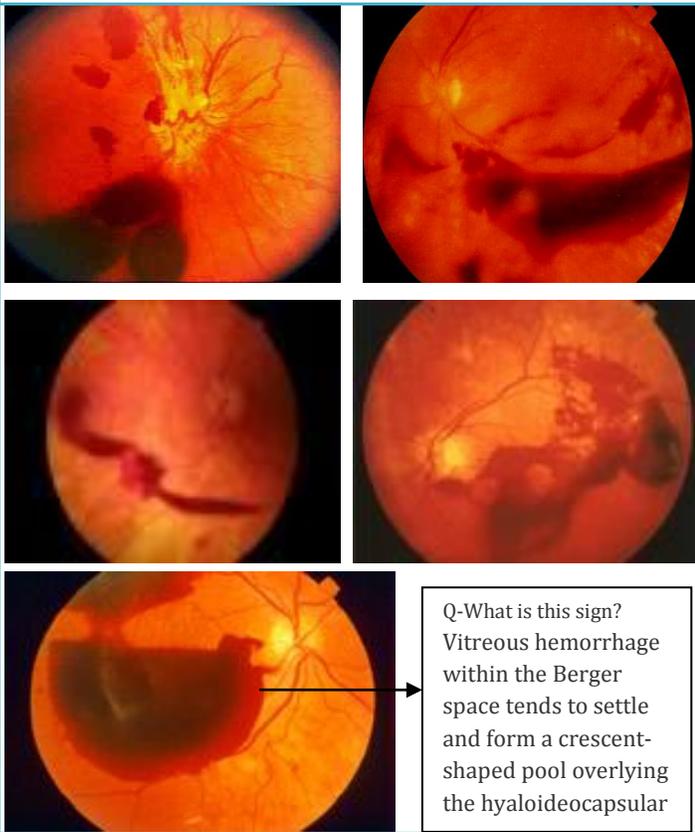
- ✓ Corneal edema after cataract surgery ( Pseudophakic Bullous Keratopathy)



- 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?**

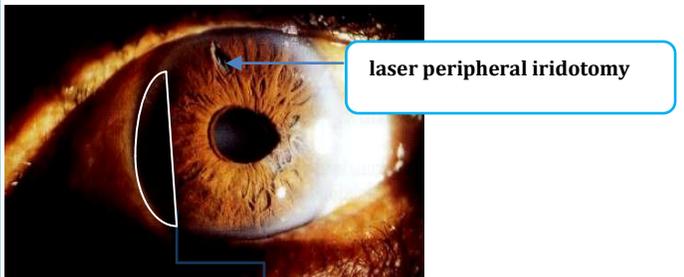
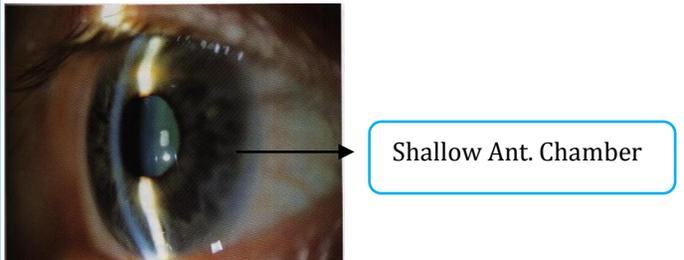
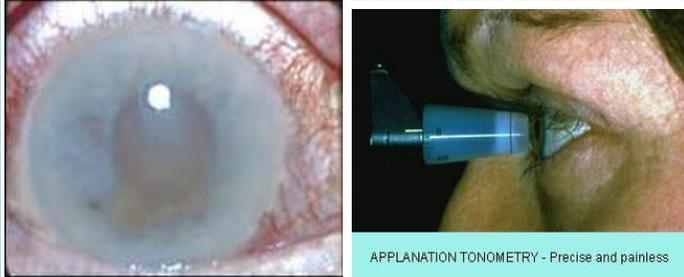
- ✓ **B-scan**

**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).



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?**

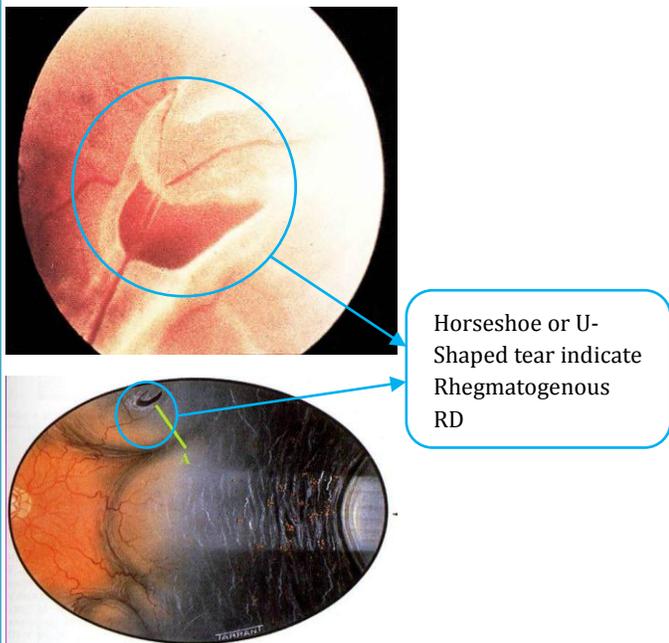
✓ Acute angle closure glaucoma

**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 )

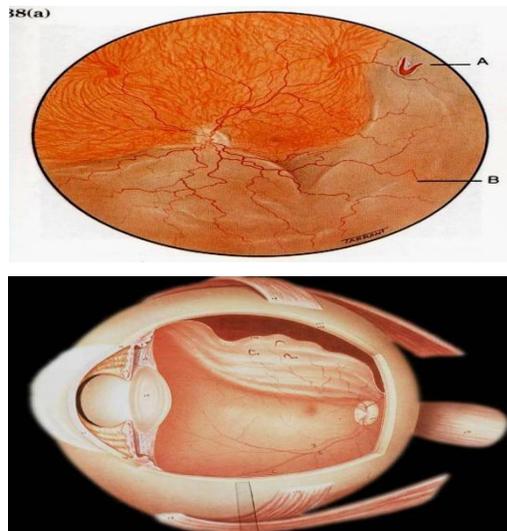
**C. What is the treatment?**

✓ Laser YAG peripheral iridotomy (LPI)



**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)**

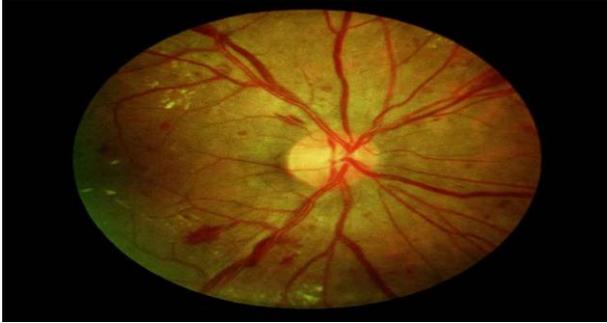


**A. What is the diagnosis?**

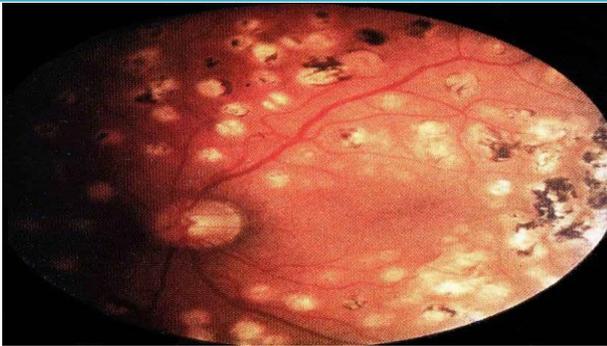
- ✓ **Rhegmatogenous Retinal Detachment (RD)**

**B. What is the treatment?**

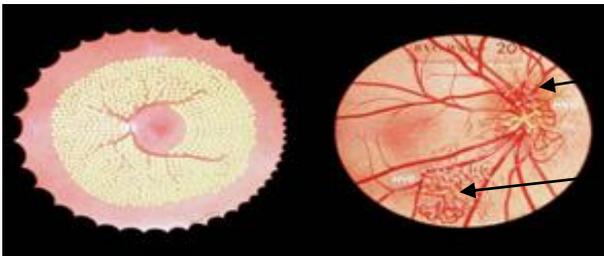
**Emergency surgery to 1-drain the fluids under the retina.  
2-close the hole: either by internal fixation (AFX=air fluid exchange) or external fixation (sclera buckle) then do laser or cryotherapy .**



**A. What is the diagnosis?**  
 ✓ **Proliferative diabetic retinopathy.**



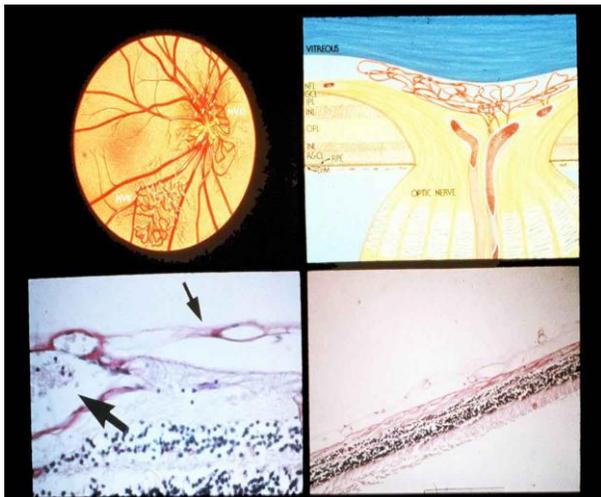
**A. What is the diagnosis?**  
 ✓ **Image of funds showing scatter laser surgery for diabetic retinopathy**

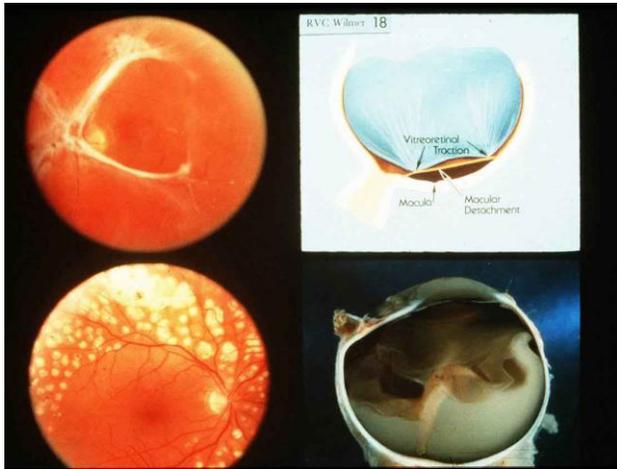


**diabetic retinopathy :**

(NVD)= neovascularization near , in the disc.

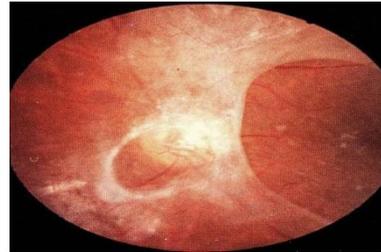
(NVE)= neovascularization else where .



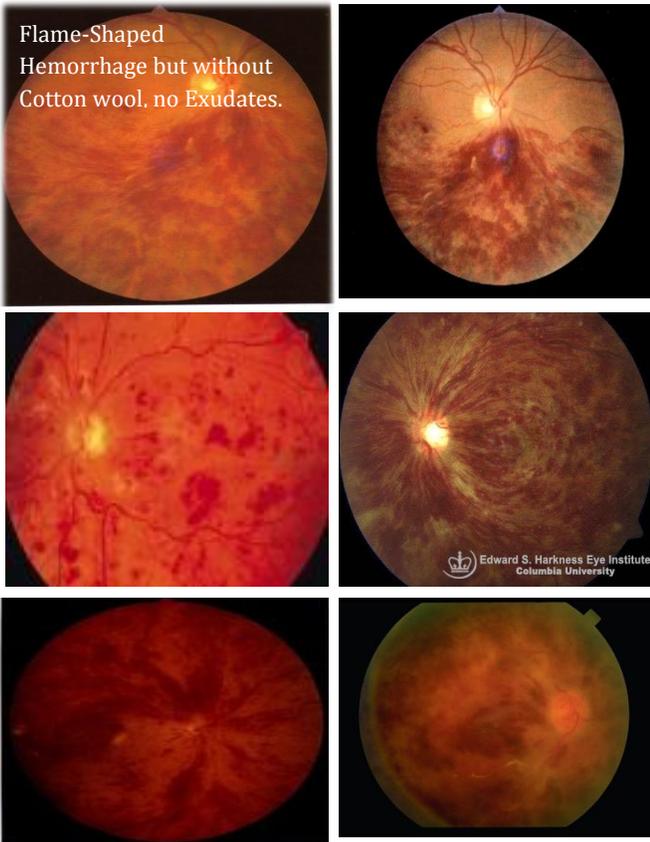


**A. What is the diagnosis?**

- ✓ 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.

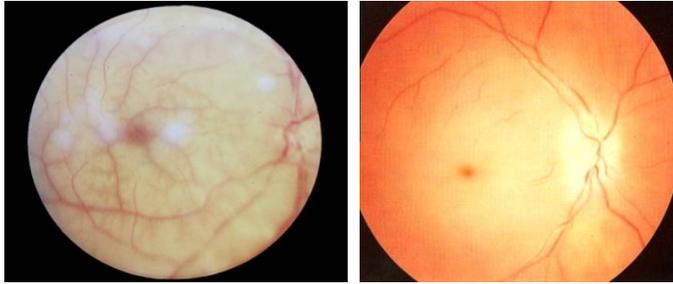
**C. How does he/she present?**

- ✓ 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

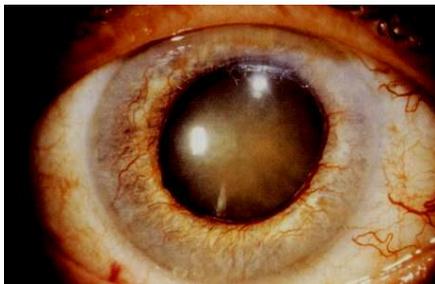
Chari-red spot. Ischemia of the inner 2/3 of the retina

(White/Yellow color). But the Fovea is preserved (Supplied by the choroidal artery)



**A. What is the diagnosis?**

✓ **Branch Retinal Artery Occlusion**

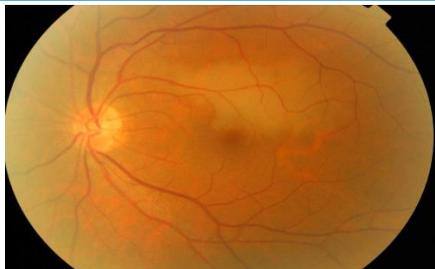


**A. What is the diagnosis?**

✓ **Rubeosis iridis. (new vessels in the iris)**

✓ **Complicated by neovascular glaucoma.**

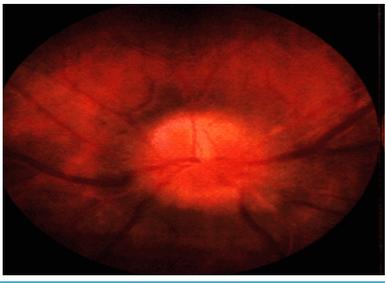
✓ **Tx: by Treating Retina Ischemia pan retinal photocoagulation (PRP)**



➤ **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>
		
		
		