

**BRIEF DISCUSSION ON CENTRAL RETINAL ARTERY OCCLUSION &
CENTRAL RETINAL VEIN OCCLUSION**

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ABSTRACT:

This paper describes about Central Retinal Artery Occlusion, its clinical features and its treatment.

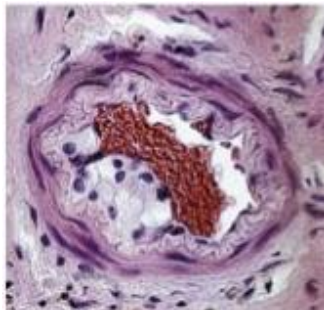
INTRODUCTION

CENTRAL RETINAL ARTERY OCCLUSION is a vascular disorder of the Retina. This artery occlusion mainly occurs due to Heart disorder. Sometimes Central Retinal Artery is occluded due to Emboli and sometimes due to thrombus. The meaning of an Emboli is – “Some particles are coming from the other organ (usually heart) and it creates the block in Retina”.

RETINAL EMBOLI



The meaning of the Thrombus is – “Here block area and origin of the particles are same”. In case of Central Retinal Artery Occlusion, either partial or entire Retina is involved.



Reasons of CENTRAL RETINAL ARTERY OCCLUSION:

- ✚ Heart disorder
- ✚ Arthritis
- ✚ Hypertension

- ✚ Arteriosclerosis (Attenuation of the artery)

Clinical Features:

- ✚ Sudden painless loss of vision
- ✚ Vision loss occurs for a temporary period of time (Amaurosis Fugax)
- ✚ Cherry red spot is seen in 25 % of cases due to choroidal vessels which are seen through macular area



TREATMENT:

- ✚ Treatment should be given within 45 minutes to 1 hour of the occurrence of disease, otherwise patient may go blind.
- ✚ Immediate digital massage is needed.
- ✚ Intravenous Acetazolamide injection is needed.
- ✚ 5% CO₂ and 95 % O₂ mixture is needed for inhalation.

✚ For vasodilation, Retrobulbar injection (Citicoline) is essential.

CENTRAL RETINAL VEIN OCCLUSION

CENTRAL RETINAL VEIN OCCLUSION is a vascular disorder of the Retina. It mainly occurs due to systemic Hypertension and most of the time it is associated with rise in Intra ocular pressure (Primary Open Angle Glaucoma) and Diabetes is also be a risk factor.

TYPES OF CENTRAL RETINAL VEIN OCCLUSION:

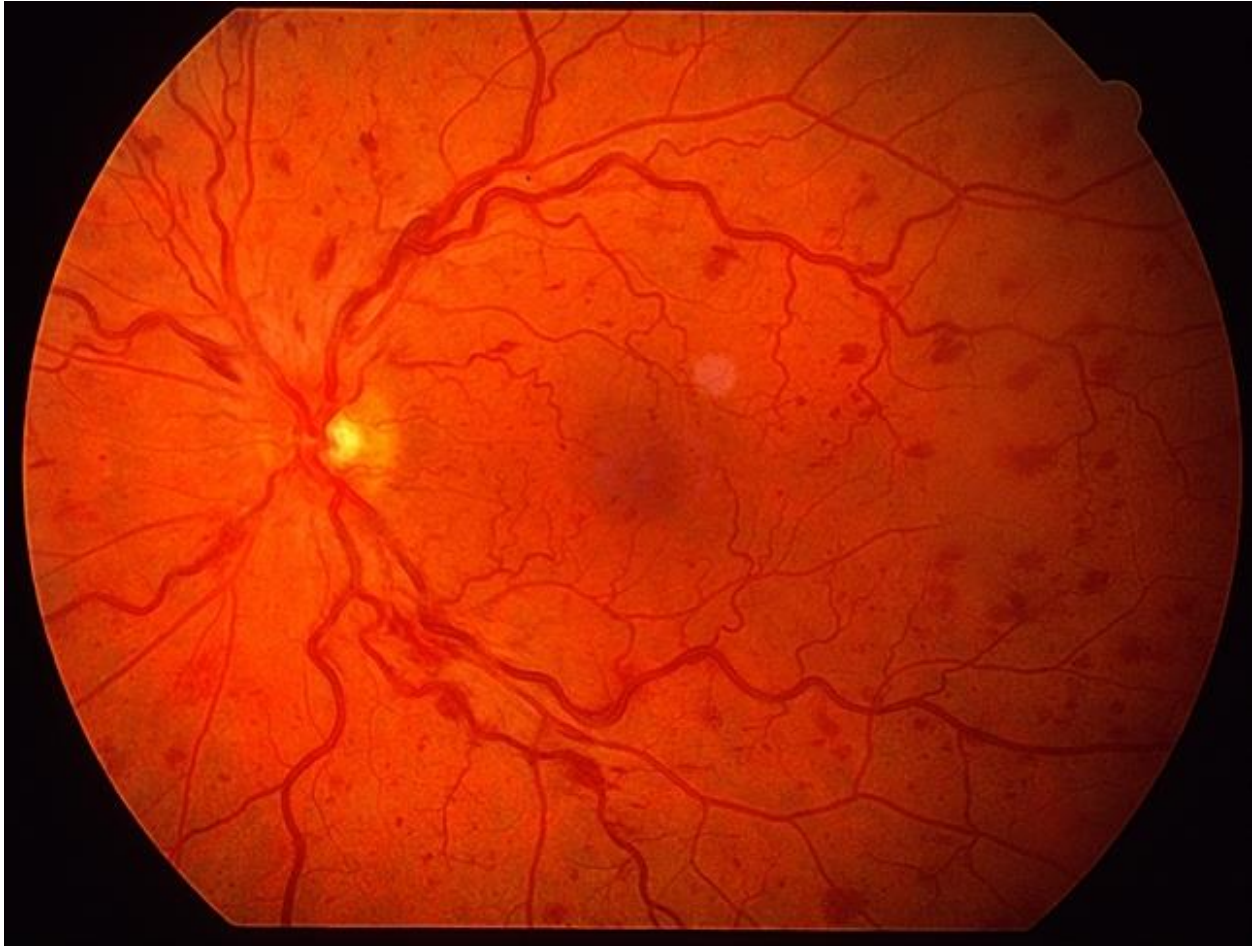
- A) Non-Ischemic CENTRAL RETINAL VEIN OCCLUSION
- B) Ischemic CENTRAL RETINAL VEIN OCCLUSION

Non-Ischemic CENTRAL RETINAL VEIN OCCLUSION is most common (75%) and it is less dangerous.

Ischemic CENTRAL RETINAL VEIN OCCLUSION is less common (25%) and it is dangerous.

In case of Non-Ischemic CENTRAL RETINAL VEIN OCCLUSION

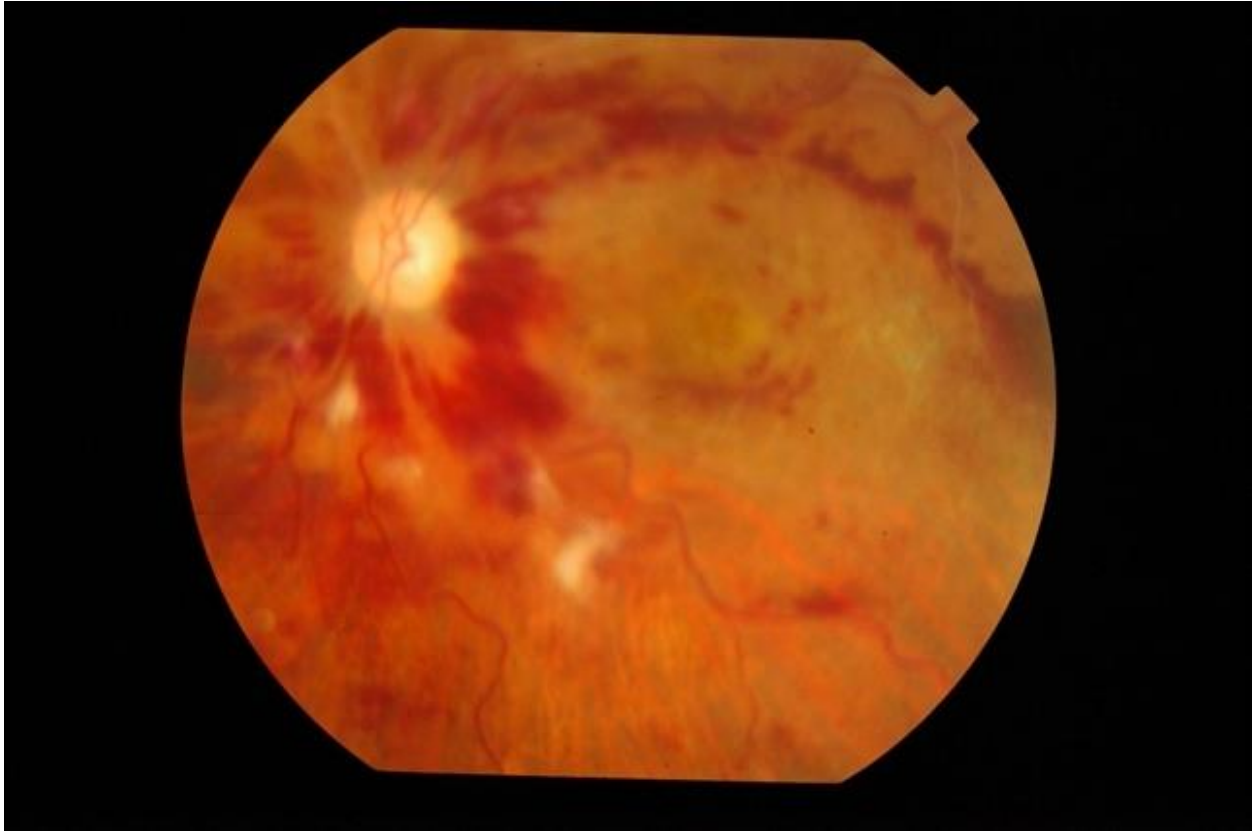
- ✚ Slight RAPD is seen.
- ✚ Mild macular edema can be or cannot be present. In four quadrant of the macula, blood spots are seen. It is called blot and dot hemorrhage.
- ✚ Mild vascular tortuosity is found
- ✚ Cotton wool spots are usually absent
- ✚ But prognosis is good for 50 % of cases of CENTRAL RETINAL VEIN OCCLUSION, complete visual acuity will be returned within normal limit.
- ✚ If visual acuity is permanently deteriorated, then it mainly occurs due to macular edema and it creates Amblyopia.



In case of Ischemic CRAO

- ✚ Marked RAPD (RELATIVE AFFERENT PUPPIARY DEFECT) is present.
- ✚ Visual Acuity is considerably deteriorated and it is permanent.
- ✚ Blunder and thunder appearance on the macular area.
- ✚ Tomato appearance on the macular area.
- ✚ Marked vessel tortuosity or dilatation is seen.
- ✚ Cotton wool spots are present.
- ✚ Macular edema is present and it is permanent.
- ✚ 50 % of cases of Ischemic CENTRAL RETINAL VEIN OCCLUSION are converted into Glaucoma and it is known as 90 days glaucoma. It occurs due to presence of blood vessels on Iris.

- ✚ Prognosis is poor for Ischemic CENTRAL RETINAL VEIN OCCLUSION
- ✚ Patient should be followed frequently and should be note on Rubeosis Iridis. PRP should be advised to protect Rubeosis Iridis.



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