

**CASE REPORT - IMPORTANCE OF OPHTHALMOLOGICAL EXAMINATION IN A
STROKE PATIENT****Dr. Saurabh Jain^{1*}, Dr. Gaurav Sharma², Dr. Asmita Mittal³, Dr. Aparna Daroch⁴ and Dr. Aman Gupta⁵**¹Junior Resident, Room no 209 Vivekananda Hostel Dr RPGMC Tanda, Kangra, Himachal Pradesh, India.²Professor and Head Department of Ophthalmology, Dr Rajendra Prasad Government Medical College, Tanda, (Himachal Pradesh), India.^{3,4,5}Junior Resident, Department of Ophthalmology, Dr Rajendra Prasad Government Medical College, Tanda, (Himachal Pradesh), India.***Corresponding Author: Dr. Saurabh Jain**

Junior Resident, Room no 209 Vivekananda Hostel Dr RPGMC Tanda, Kangra, Himachal Pradesh, India.

Article Received on 27/11/2024

Article Revised on 17/12/2024

Article Accepted on 07/01/2025

INTRODUCTION

A rare but potentially fatal disorder known as Ocular Ischemic Syndrome (OIS) is linked to severe carotid artery occlusive disease that results in ocular hypoperfusion. Visual loss, temporary visual loss, and ischemic ocular pain are the main symptoms. OIS frequently affects the elderly, with males being more afflicted than women since these individuals have greater rates of atherosclerosis and carotid artery disease.^{[1][2][3]} OIS has significant systemic ramifications since ipsilateral ocular signs and symptoms may indicate a brain infarction if the common (CCA) or internal (ICA) carotid arteries are diseased.^[4]

CASE REPORT

A 40 year old male came to us with intermittent blurring of vision. He had history of stroke 1 year back.

ON EXAMINATION

- 1) Visual Acuity near to normal in both eyes.
- 2) Pupillary reaction normal in both eyes.
- 3) Visual fields (30-2)- Right homonymous hemianopia.
- 4) Fundus examination- Mid peripheral dot blot hemorrhages in left eye.
- 5) MRI brain :- Large hypodense area involving left parietal lobe and temporal lobe.

A diagnosis of ocular ischaemic syndrome was made. Patient was investigated and carotid doppler was done. Doppler showed non opacified left CCA and left ICA with formation of left ECA collaterals.

Hence the patient was referred to Cardiologist in view of Carotid artery occlusion.

DISCUSSION

A history of transient visual loss is present in approximately 10–15% of patients with OIS. This is most frequently caused by transient embolization of the CRA or its branches. OIS has important systemic implications, as disease of the common (CCA) or internal (ICA) carotid arteries may cause ipsilateral ocular signs and symptoms that in turn could herald a

cerebral infarction.^[4] Patients with OIS may initially exhibit constitutional symptoms rather than ocular ones since OIS is an ocular manifestation of systemic disease. Just six out of 42 OIS patients in a review stated that their first complaint was ocular problems. Additionally, because other concerns may be more noticeable, individuals may ignore their eye discomfort. 37 out of 42 patients with OIS who were evaluated in non-ophthalmology clinics at first reported having some degree of ocular symptoms, according to the same study. To prevent misdiagnosis, OIS symptoms necessitate a comprehensive history and meticulous investigation.^[5] In our case, the diagnosis of OIS and further investigations lead to the discovery of a grave etiology – Carotid artery occlusion. In this case also, the patient reported ocular symptoms very late in the course of disease.

CONCLUSION

Patients may overlook their ocular symptoms due to the prominence of other complaints. Thus it shows that ocular examination forms an essential component of stroke patients' all-around medical examination. The eyes act as a window to the body. Ocular examination in systemic diseases leads to additional discoveries and may even change the course of management.

Pictures

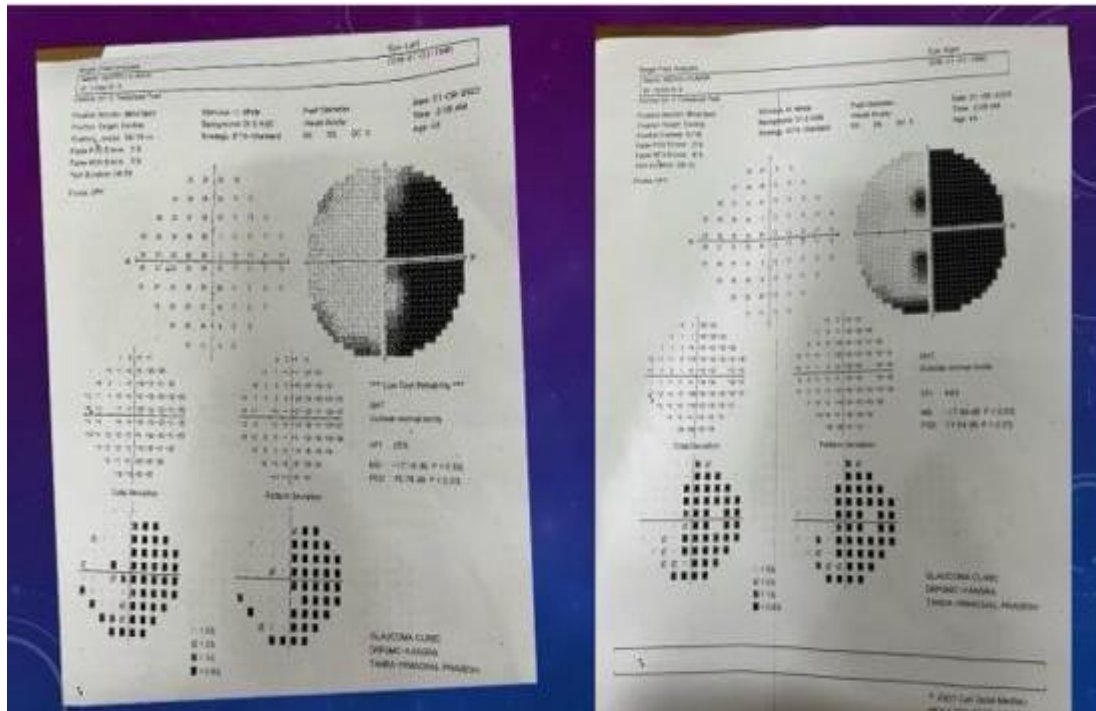
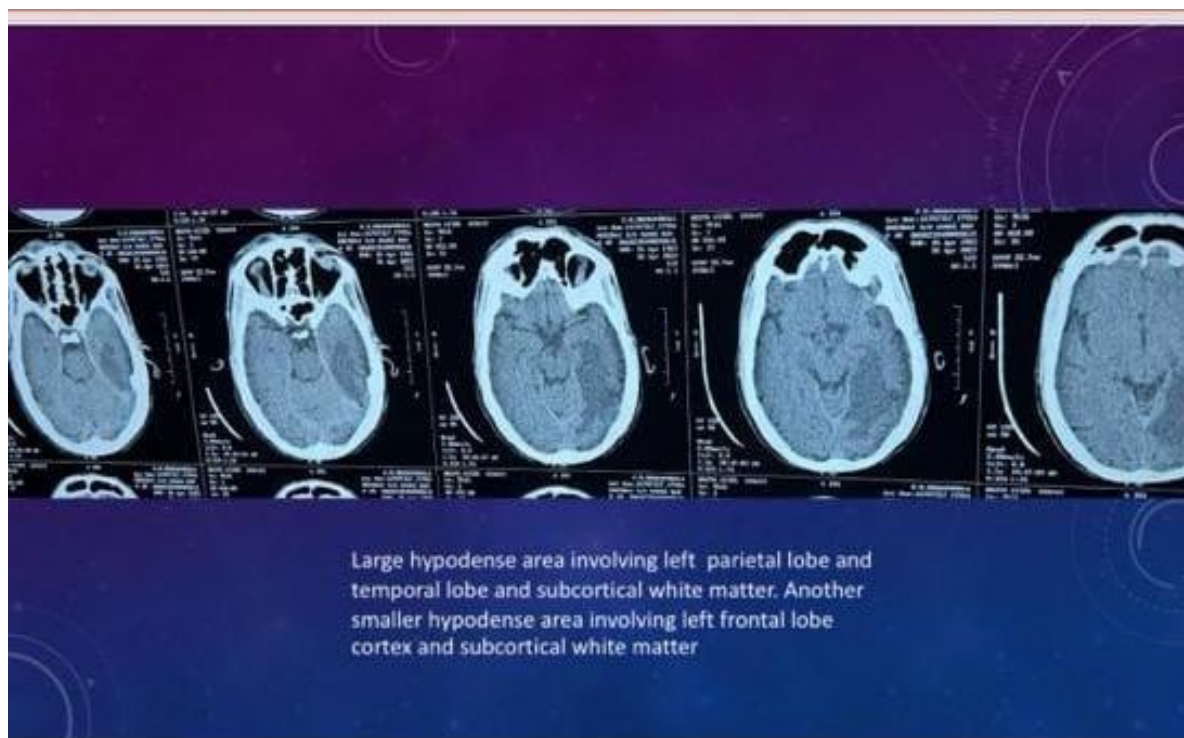


Figure 1) Visual fields (30-2)- Right homonymous hemianopia.



Figure 2) Fundus examination- Mid peripheral dot blot hemorrhages in left eye.



Large hypodense area involving left parietal lobe and temporal lobe and subcortical white matter. Another smaller hypodense area involving left frontal lobe cortex and subcortical white matter

Figure 3: MRI brain:- Large hypodense area involving left parietal lobe and temporal lobe.

REFERENCES

1. Gordon N. Ocular manifestations of internal carotid artery occlusion. *The British journal of ophthalmology*, May 1959; 43(5): 257-267.
2. Hedges TR, Jr. Ophthalmoscopic findings in internal carotid artery occlusion. *American journal of ophthalmology*, May 1963; 55: 1007-1012.
3. Bullock JD, Falter RT, Downing JE, Snyder HE. Ischemic ophthalmia secondary to an ophthalmic artery occlusion. *American journal of ophthalmology*, Sep 1972; 74(3): 486-493.
4. Biousse V. Carotid disease and the eye. *Current opinion in ophthalmology*, Dec 1997; 8(6): 16-26.
5. Luo J, Yan Z, Jia Y, Luo R. Clinical analysis of 42 cases of ocular ischemic syndrome. *J Ophthalmol*, 2018; 2018: 2606147. Published 2018 Mar 11. doi:10.1155/2018/2606147.