Taiwan J Ophthalmol 2019;10:239-240

Rapid visual loss associated with fulminant idiopathic intracranial hypertension

An 18-year-old obese female with body mass index of 36 (1.6 m) presented with rapidly progressive visual loss over 3 days associated with holocranial dull headache for the past 3 weeks. She also had few episodes of vomiting within the past 1 week. There was no history of transient visual obscuration prior to this episode. Systemic history was insignificant. Ocular examination revealed a best-corrected visual acuity of 20/120 in the right eye and no light perception in the left eye. A relative afferent pupillary defect was also noted in the left eye. The anterior segment of both eyes was normal. Fundus [Figure 1] showed bilateral massive disc edema, peripapillary multiple flame-shaped hemorrhages, and tortuous retinal vessels. The patient was normotensive. Detailed systemic examination did not reveal any significant abnormality. Hematological investigations were unremarkable. Cerebrospinal fluid (CSF) studies were normal except high opening pressure (55 cm of H₂O). Magnetic resonance imaging (MRI) of the brain revealed normal brain parenchyma without any evidence of hydrocephalus or ventriculomegaly. However, horizontal tortuosity of the bilateral optic nerve, distended perineural sheath, and flattening of the posterior aspect of the globe were noted in MRI. Magnetic resonance venography did not show any venous sinus thrombosis. A diagnosis^[1-3] of fulminant idiopathic intracranial hypertension (IIH) was made. She underwent immediate therapeutic CSF drainage twice as a temporizing measure followed by urgent optic nerve sheath fenestration 4 days

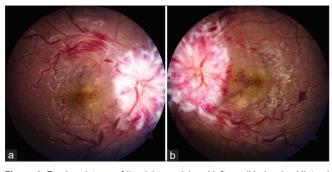


Figure 1: Fundus pictures of the right eye (a) and left eye (b) showing bilateral massive disc edema, peripapillary flame-shaped hemorrhages, and tortuous retinal vessels in a young obese female with fulminant idiopathic intracranial hypertension

after presentation. Despite the above interventions, her left eye vision could not be restored. IIH is a clinical disorder characterized mainly by raised intracranial pressure with unknown pathogenesis. Young reproductive age, female, and obesity are one of the several strong associations proposed for IIH. [4] Fulminant or malignant IIH represents the fulminant spectrum of this clinical disorder, necessitating prompt diagnosis and early aggressive management. [5] Sudden early-onset visual loss in such patients is probably attributable to axoplasmic stasis either due to direct mechanical compression or due to compromised perfusion of axons. [5]

Consent

Informed consent was obtained from the patient included in the study.

Financial support and sponsorship

Nil.

Conflicts of interest

The authors declare that there are no conflicts of interests of this paper.

Neeraj Saraswat, Ramanuj Samanta*, Gitanjli Sood, Sandhya Yadav, Ajai Agrawal

Department of Ophthalmology, All India Institute of Medical Sciences, Rishikesh, Uttarakhand, India

*Address for correspondence:

Dr. Ramanuj Samanta, Department of Ophthalmology, All India Institute of Medical Sciences, Rishikesh - 249 203, Uttarakhand, India. E-mail: ramanuj.samanta@gmail.com

> Submission: 14-02-2019 Accepted: 14-07-2019 Published: 23-08-2019

References

- Thambisetty M, Lavin PJ, Newman NJ, Biousse V. Fulminant idiopathic intracranial hypertension. Neurology 2007;68:229-32.
- Shaikh AG, Bates JH, Yeates SW, Katirji B, Devereaux MW. Fulminant idiopathic intracranial hypertension. JAMA Neurol 2013;70:937-8.
- 3. Mulroy E, Krishnan T, Best S, Anderson NE. Forgetting the

- fundoscope A case of fulminant idiopathic intracranial hypertension causing rapid visual loss. J Clin Neurosci 2018;50:108-10.
- Markey KA, Mollan SP, Jensen RH, Sinclair AJ. Understanding idiopathic intracranial hypertension: Mechanisms, management, and future directions. Lancet Neurol 2016;15:78-91.
- Mensah A, Milea D, Jensen R, Fledelius H. Persistent visual loss in malignant idiopathic intracranial hypertension. Acta Ophthalmol 2009;87:934-6.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	
	Website: www.e-tjo.org
	DOI: 10.4103/tjo.tjo_18_19

How to cite this article: Saraswat N, Samanta R, Sood G, Yadav S, Agrawal A. Rapid visual loss associated with fulminant idiopathic intracranial hypertension. Taiwan J Ophthalmol 2020;10:239-40. © 2019 Taiwan J Ophthalmol | Published by Wolters Kluwer - Medknow