

TO REPORT A CASE OF UNILATERAL PAPPILLITIS IN A YOUNG FEMALE**VIPUL SIDHARTH*, REENA KUMARI, DINESH KUMAR BHAGAT**

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ABSTRACT**Objective:** The purpose of the study is to report a case of unilateral papillitis in a young female.**Methods:** A 13-year-old girl presented in our outpatient department with sudden, painful, and progressive diminution of vision in the left eye for the past 7 days. The best-corrected visual acuity in R/E was 6/6 and in L/E was FC 5 m. On slit-lamp examination of the anterior segment, RAPD was present in L/E and rest findings were within normal limits. Fundus examination of R/E was within normal limits and of L/E – blurred disc margin, elevated disc, hyperemic disc, flame-shaped hemorrhages along superior arcuate vessels, retinal vessels were tortuous and foveal reflex was present. The case was evaluated with optical coherence tomography, Goldmann applanation tonometer, and color vision test (Ishihara test). Ocular movements were at full range.**Results:** Retinal imaging of L/E showed blurred disc margin, elevated disc, hyperemic disc, flame-shaped hemorrhages, tortuous retinal vessels, and foveal reflex present and of R/E, CD ratio – 0.3, retinal vessels – normal, and foveal reflex – present. Intraocular pressure on Goldmann applanation tonometer was 16 mmHg in R/E and 18 mmHg in L/E. A color vision test showed severely impaired color vision in her L/E.**Conclusion:** Papillitis refers to the involvement of the optic disc in inflammatory and demyelinating disorders of the optic nerve. The patient was counseled regarding the nature of lesion and rare incidence of complications such as postneuritic optic atrophy leading to complete blindness in case of a recurrent attack of papillitis. Optic neuritis treatment trial was started and significant improvement in visual acuity and fundus findings were seen.**Keywords:** Papillitis, Fundus examination, Color vision test, Optic neuritis treatment trial.© 2024 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ajpcr.2024v17i8.51975>. Journal homepage: <https://innovareacademics.in/journals/index.php/ajpcr>**INTRODUCTION**

Papillitis refers to the involvement of the optic disc in inflammatory and demyelinating disorders of the optic nerve. Classical triad – visual loss (usually unilateral) [1], periocular pain [2], and dyschromatopsia [3].

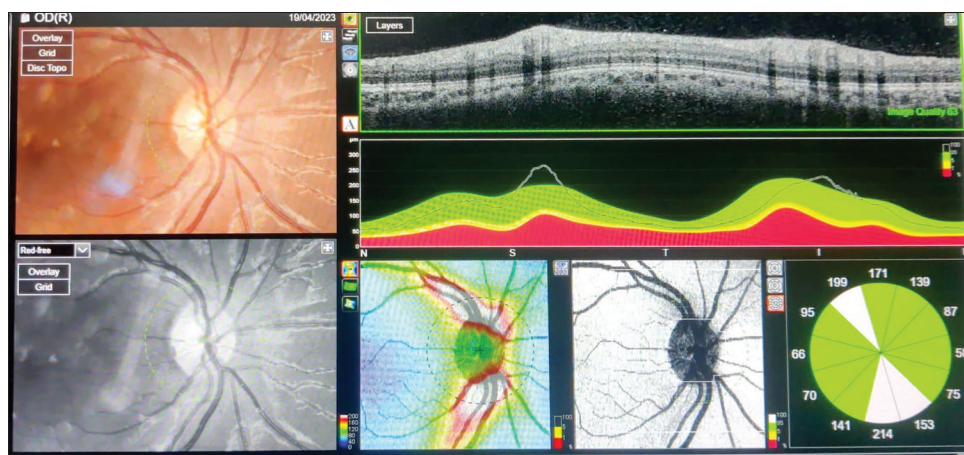
CASE REPORT

A 13-year-old female came to the outpatient department with complaints of diminution of vision in her left eye for the past 7 days, which was sudden, painful (on movements), and progressive in nature. It was not associated with any swelling or redness of the eyes. The best-corrected visual acuity

in R/E was 6/6 and in L/E was FC 5 m. On slit-lamp examination of the anterior segment, RAPD was present in L/E and rest findings were within normal limits. Fundus examination of R/E was within normal limits and of L/E – blurred disc margin, elevated disc, hyperemic disc, flame-shaped hemorrhages along superior arcuate vessels, retinal vessels were tortuous and foveal reflex was present. The case was evaluated with optical coherence tomography (OCT), Goldmann applanation tonometer, and color vision test (Ishihara test). Ocular movements were at full range.

Laboratory investigations revealed

- Magnetic resonance imaging (MRI) brain with orbit (contrast) – Normal

**Fig. 1: Optical coherence tomography of R/E of day 1 revealed well-defined disc margins, CDR – 0.3, vessels – normal, FR – present**

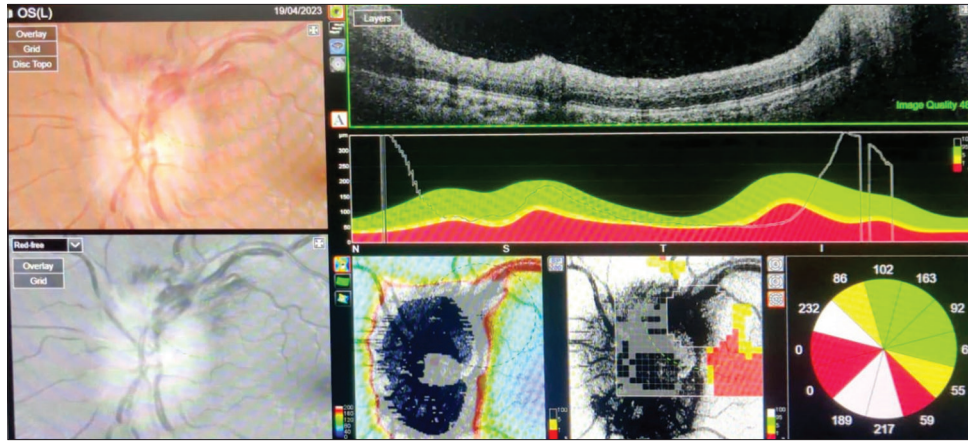


Fig. 2: Optical coherence tomography of L/E of day 1 revealed blurring of disc margins, edematous disc, obliterated CDR, splinter hemorrhage superotemporal quadrant of the disc, central retinal vein dilated and tortuous, FR- present, increased thickness of RNFL

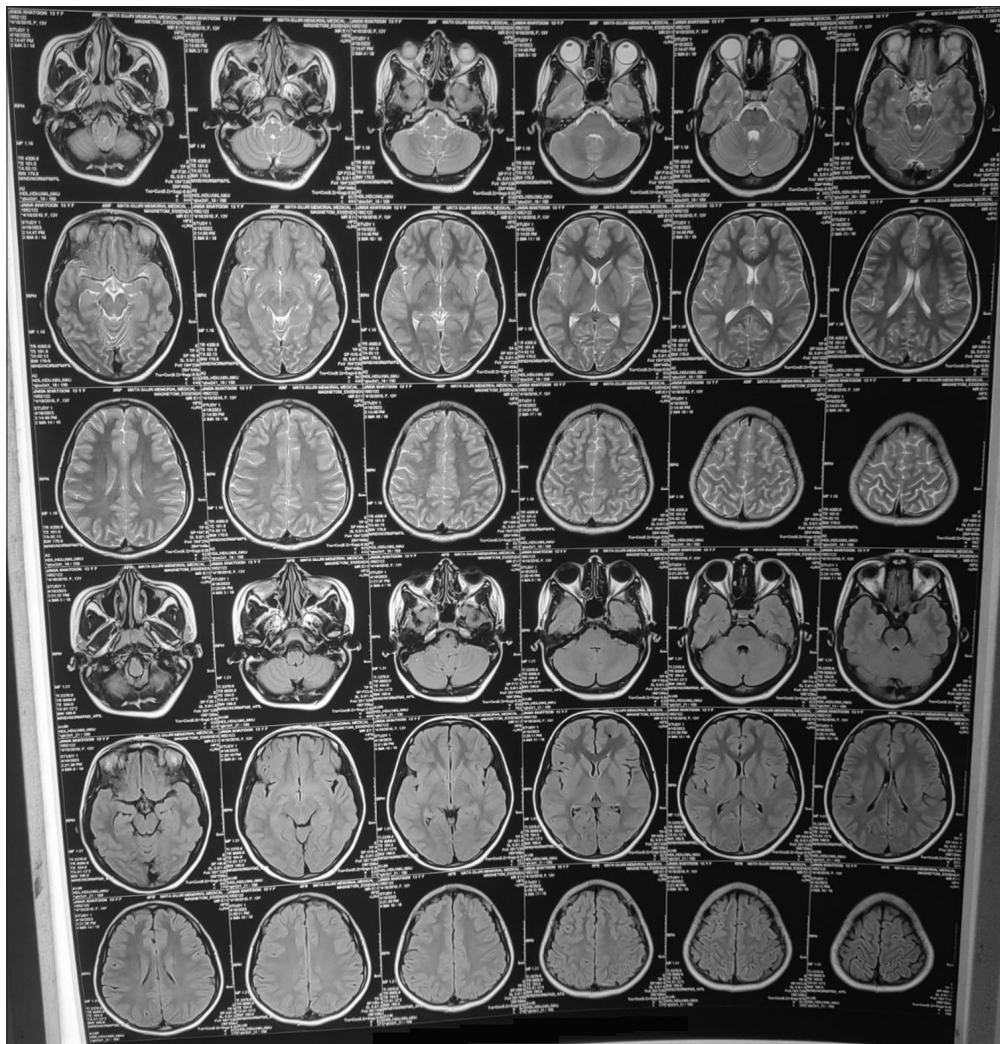


Fig. 3: Magnetic resonance imaging brain with orbit (contrast)

- RBS – 80 mg/dL
- Complete blood count, C-reactive protein, and lipid profile are within normal limit
- Color vision test – impaired.

Treatment given

- IV methylprednisolone 1 g/day for 3 days
- Followed by oral prednisolone 60 mg OD for 11 days
- Tablet pan – 40 1 tablet OD BBF for 11 days.

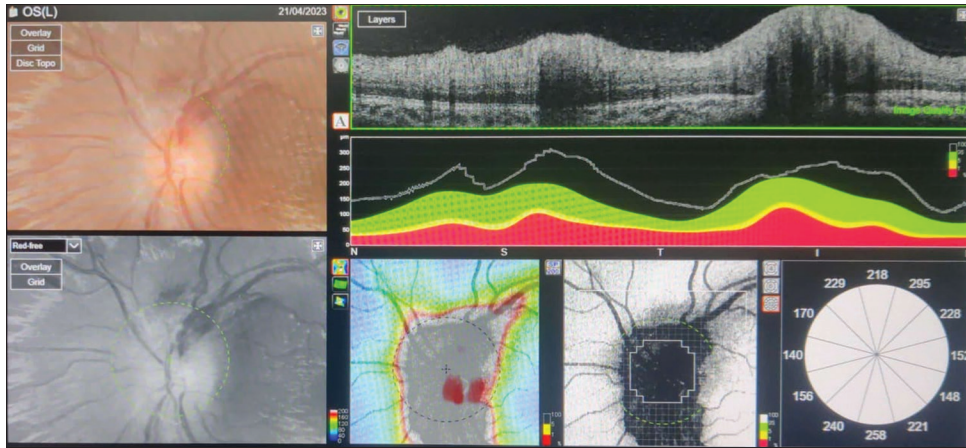


Fig. 4: L/E optical coherence tomography of day 3 revealed temporal disc margins seen, blurring of nasal disc margin, splinter hemorrhage superotemporal to disc, obliterated CDR, retinal vessels – normal, and FR – present

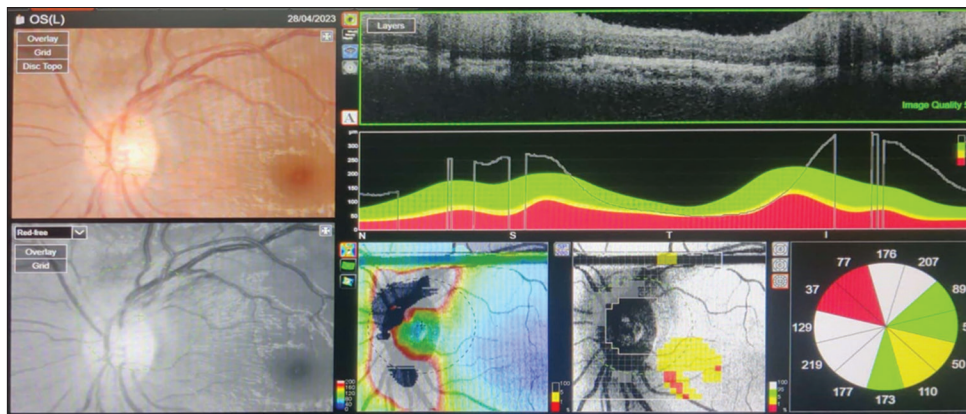


Fig. 5: L/E optical coherence tomography of day 10 revealed well-defined disc margins, no hemorrhages, retinal vessels – normal, FR – present

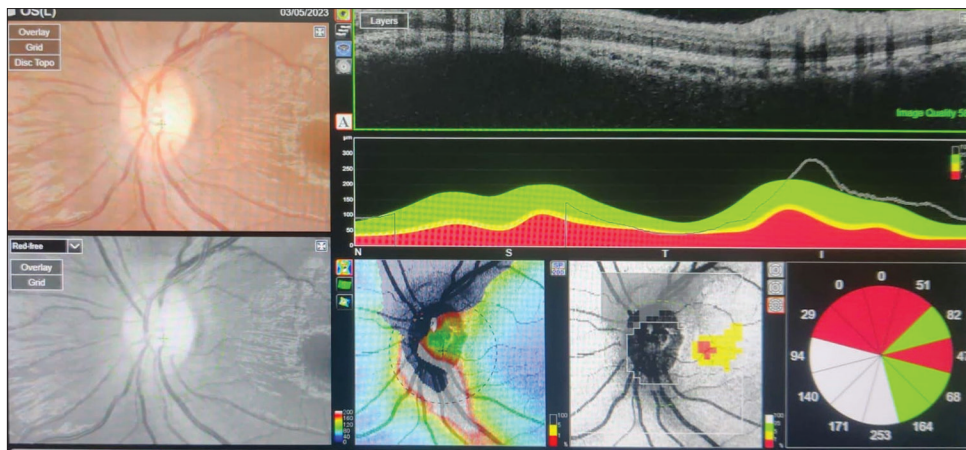


Fig. 6: L/E optical coherence tomography of day 14 revealed disc margins well-defined, no hemorrhages, vessels – normal, FR – present

Follow-up on 3rd day of treatment (after 3 doses of IV methylprednisolone)

Visual acuity – 6/60.

Follow-up on the 10th day of treatment

Visual acuity – 6/18.

Follow-up on 14th day of treatment

Visual acuity – 6/6p.

DISCUSSION

- The goals of many of the existing and emerging treatments including steroids and immuno-modulatory therapy are to reduce the number and severity of attacks and prevention of axonal loss and subsequent disability in both optic neuritis and multiple sclerosis [4]
- Those who received IV corticosteroids followed by oral corticosteroids had a temporarily reduced risk of developing a second demyelinating event consistent with multiple sclerosis [5]

- The optic neuritis study group found that 25% of optic neuritis with no lesions on brain MRI evolved into multiple sclerosis after an initial episode; therefore, a long follow-up by a neurologist is strongly recommended [5-7]
- Risk of recurrence – optic neuritis can occur as a monophasic or recurrent disease, either in the same or contralateral eye, especially in patients who develop multiple sclerosis thereafter [1,8]
- The optic neuritis treatment trial reported 28% and 35% of patients reoccurred optic neuritis within 5–10 years, respectively [1,8].

CONCLUSION

Papillitis is a vision-threatening condition, characterized by inflammation of the optic disc which often mimicked the features of papilledema; hence, these patients are often referred to the neurosurgeon to exclude any intracranial pathology. It is the most common type of optic neuritis in children but can also affect adults. Neuroimaging should be done to rule out any demyelinating lesion or any intracranial pathology.

CONFLICTS OF INTEREST

Nil.

FUNDING

No financial interest.

CONSENT

Written informed consent of the patient's guardian was taken.

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