SAS Journal of Medicine
Abbreviated Key Title: SAS J Med
ISSN 2454-5112
Journal homepage: https://saspublishers.com

OPEN ACCESS

Ophtalmology

Sarcoid Optic Neuropathy Revealing Systemic Sarcoidosis: A Case Report

Meriem Aachak[1,2]*, Youness Mokhchani[2]

[1]Department of Ophtalmology, Mohammed VI Military Hospital, Dakhla-Morocco
[2]Faculty of Medicine and Pharmacy, Mohammed V University, Rabat, 10000, Morocco

DOI: https://doi.org/10.36347/sasjm.2026.v12i11.008 | **Received:** 07.09.2026 | **Accepted:** 02.11.2026 | **Published:** 07.11.2026

***Corresponding author:** Meriem Aachak
Department of Ophtalmology, Mohammed VI Military Hospital, Dakhla-Morocco

Abstract **Case Report**

We present the case of a 47-year-old woman with high myopia who presented with sudden visual loss in the left eye [1]. Ophthalmological examination found grade III papilledema with flame-shaped hemorrhages and visual acuity of 1/20 [2]. The etiological workup revealed elevated angiotensin-converting enzyme, hilar lymphadenopathy, and a bronchial biopsy showing noncaseating epithelioid and giant-cell granulomas [3]. The diagnosis of ocular sarcoidosis was made. After bolus Solumedrol, the course was marked by rapid clinical improvement.

Keywords: Optic Neuropathy, Sarcoidosis, Papilledema, Corticosteroid Therapy.

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Ocular involvement in sarcoidosis is relatively common, but isolated involvement of the optic nerve is rare and exceptionally the presenting manifestation of the disease [1]. Sarcoid optic neuropathy is part of neurosarcoidosis and accounts for 5–15% of all neurological manifestations [2]. It is considered a diagnostic and therapeutic emergency because of the risk of irreversible optic atrophy in the absence of treatment [3]. The diagnosis of sarcoidosis is suggested by chest radiography or computed tomography, but only the finding of a noncaseating granuloma on tissue biopsy confirms it [4]. We report the case of a patient with isolated unilateral papilledema revealing sarcoidosis [5].

CASE REPORT

A 47-year-old female patient with high myopia and no notable medical history presented with sudden visual loss in the left eye.

Ophthalmological examination of the left eye found corrected visual acuity of 1/20. Examination of the ocular adnexa and anterior segment was normal, and intraocular pressure was normal. Fundus examination found grade III papilledema with flame-shaped hemorrhages (Figure 1a). Ophthalmological examination of the right eye was unremarkable (Figure 1b). Angiography of the left eye showed isolated papilledema without associated periphlebitis (Fig. 2).

Emergency workup was requested. It revealed elevated angiotensin-converting enzyme, a negative tuberculin skin test, hilar lymphadenopathy on chest radiography, and findings suggestive of sarcoidosis on chest computed tomography. Bronchial biopsy showed noncaseating epithelioid and giant-cell granulomas. The diagnosis of ocular sarcoidosis was made.

The patient was started on bolus Solumedrol 1 g/day for 3 days, then switched to oral therapy. The course was marked by good clinical improvement on day 6 of treatment: visual acuity increased to 6/10, papilledema regressed, and hemorrhages decreased (Fig. 3).

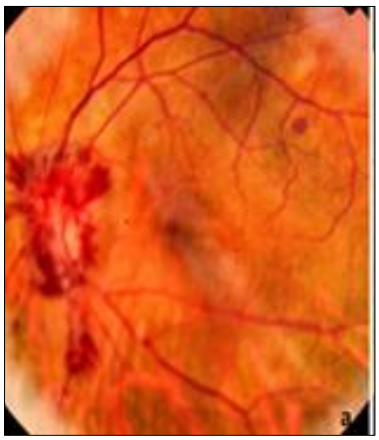


Fig. 1a: The left fundus shows stage III papilledema, with flame-shaped hemorrhages.



Fig. 1b: Ophthalmological examination of the right eye is unremarkable.

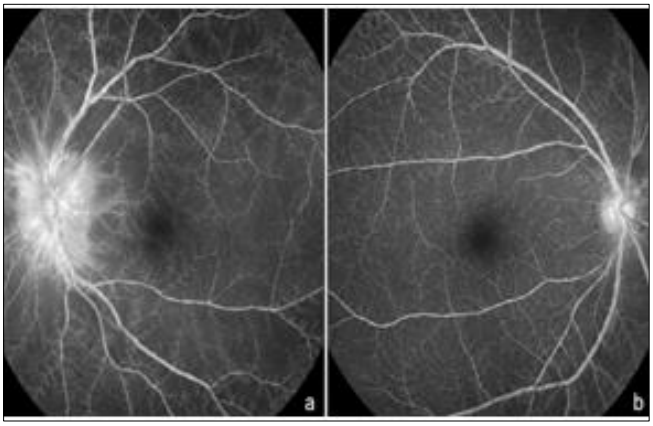


Fig. 2: Angiography of the left eye shows isolated optic disc edema, with no associated periphlebitis.

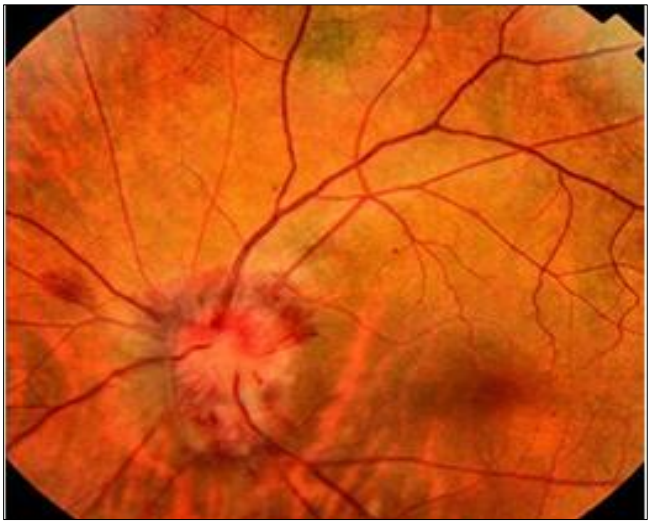


Fig. 3: Fundus examination on day 6 of treatment: regression of optic disc edema and hemorrhages

DISCUSSION

Sarcoid optic neuropathy is part of neurosarcoidosis [1]. Direct involvement of the optic nerve may affect the papilla or the retrobulbar portion [2]. At the optic nerve head, sarcoid granuloma manifests as a yellowish, polylobulated swelling of the optic disc, sometimes surrounded by serous retinal detachment [2]. Associated vascular abnormalities are often observed: optociliary shunts, venous occlusion pattern, and peripapillary choroidal neovascularization [3].

Visual acuity and visual field may remain preserved longer in some forms [3]. Elevated cerebrospinal fluid pressure may then be diagnosed during lumbar puncture [4]. The diagnosis of sarcoidosis is suggested by chest radiography or computed tomography, but only the finding of a noncaseating granuloma on tissue biopsy confirms it, as was the case in our patient [4].

Treatment is based on high-dose corticosteroid therapy continued for several months [5]. Some subjects become corticosteroid-dependent or corticosteroid-resistant and require more aggressive treatments: immunosuppressants, chloroquine [5]. In the absence of treatment, the course usually leads to optic atrophy, although some publications have reported spontaneous remission [5].

CONCLUSION

Neurosarcoidosis is a rare condition that should be considered in any optic neuropathy, especially since it may regress dramatically with corticosteroid therapy [1]. Visual prognosis is generally favorable when the diagnosis is early and treatment appropriate [3]. Regression of signs is rapid with oral corticosteroid therapy, which should be maintained for several months [4].

REFERENCES

1. Baughman RP, Lower EE, Kaufman AH. Ocular sarcoidosis. Semin Respir Crit Care Med. 2010;31(4):452-462.
2. Kidd DP. Neurosarcoidosis: clinical manifestations, investigation and treatment. Pract Neurol. 2020;20(3):199-212.
3. Frohman LP, Guirgis M, Turbin RE, Bielory L. Sarcoidosis of the anterior visual pathway: 24 new cases. J Neuroophthalmol. 2003;23(3):190-197.
4. Iannuzzi MC, Rybicki BA, Teirstein AS. Sarcoidosis. N Engl J Med. 2007;357(21):2153-2165.
5. Zajicek JP, Scolding NJ, Foster O, et al. Central nervous system sarcoidosis—diagnosis and management. QJM. 1999;92(2):103-117.