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Case report

A rare manifestation of neuro-ophthalmic sarcoidosis: A case report

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ABSTRACT

Purpose: Anterior uveitis is the most common ocular manifestation of sarcoidosis. Ocular involvement affects approximately 30–60% of patients with systemic sarcoidosis; however, optic disc edema is a rare event. We report a patient who presented with a rare case of sarcoidosis with neuro-ophthalmic manifestations.

Case report: A 22-year-old man was referred to our clinic with the primary complaint of a visual field defect over the temporal side of his right eye of 2 months duration. He did not have a history of systemic disease. At the first ophthalmic examination, the visual acuity, intraocular pressure, and slit lamp examination were normal. The fundus examination revealed bilateral optic disc edema. He was initially suspected of having a choroidal lesion between the disc and fovea of the right eye. To evaluate the possible lesion, the patient underwent brain magnetic resonance imaging (MRI), chest radiography, and chest computed tomography (CT). There were no abnormalities on the brain MRI, but the chest radiographs and CT images revealed bilateral mediastinal and hilar lymphadenomegaly. Histopathologic evaluation of an ultrasound-guided lymph node biopsy confirmed the diagnosis of sarcoidosis.

Conclusion: Neuro-ophthalmic manifestations of sarcoidosis are rare but may be the only presenting sign of an otherwise occult disease. A high clinical suspicion for sarcoidosis and its inclusion as a differential diagnosis are key to establishing the diagnosis and proper treatment.

1. Introduction

Sarcoidosis is a granulomatous disorder of unknown etiology with multisystemic and ocular manifestations.[1] It occurs worldwide, but it is predominant in certain ethnic and racial groups; it is uncommon in people of Chinese descent.[2] Major organs affected include the lungs, skin, eyes, liver, and lymph nodes. Ocular manifestations have been reported in 25–89.9% of sarcoidosis patients; however, posterior segment disease without anterior segment involvement is unusual.[3] We report a rare case of sarcoidosis with posterior segment involvement as the only ocular manifestation in a Taiwanese man.

2. Case Report

In May 2012, a 22-year-old man presented to our clinic with a 2-month history of a visual field (VF) defect over the temporal side of his right eye. He did not have a history of systemic disease. At the first ophthalmic examination, the best corrected visual acuity (BCVA) of each eye was 20/20. Both pupils were 6 mm, round, and reactive to light without a relative afferent pupillary defect. The intraocular pressure was 11 mmHg in the right eye and 8 mm Hg in the left eye. There was no anterior uveitis or conjunctival granulomas in either eye. Funduscopic examination revealed bilateral swelling of the optic discs, a grayish-white mass in the superotemporal peripapillary region between the disc and fovea, and hard exudates around the fovea in the right eye (Fig. 1). Fluorescein angiography (FA) revealed optic disc staining in both eyes (Fig. 2). Automated static perimetry revealed a substantially enlarged blind spot of the right eye, which was compatible with the clinical symptom and fundus examination (Fig. 3).

The complete blood cell count and the serum biochemical profile were unremarkable, and a blood culture for bacterial and fungal pathogens was negative. Acid-fast stain and tuberculosis sputum culture were also negative. The serology test results were negative for human leukocyte antigen B27, antinuclear antibody, rheumatoid factor, reactive plasma reagin, human immunodeficiency virus antibodies, and toxoplasmosis antibodies. Immunoglobulin M antibody levels for cytomegalovirus herpes simplex virus, and varicella-zoster virus were normal. Magnetic resonance

Conflicts of interest: None.

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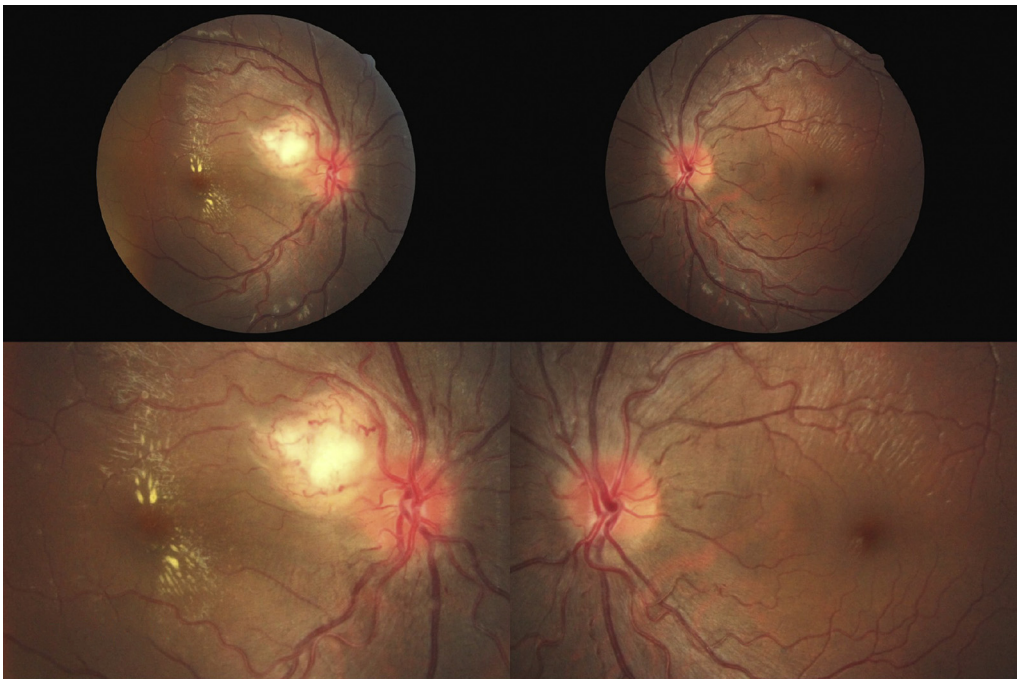

Fig. 1. Optic disc edema in both eyes and a choroid lesion between the disc and fovea in the right eye.

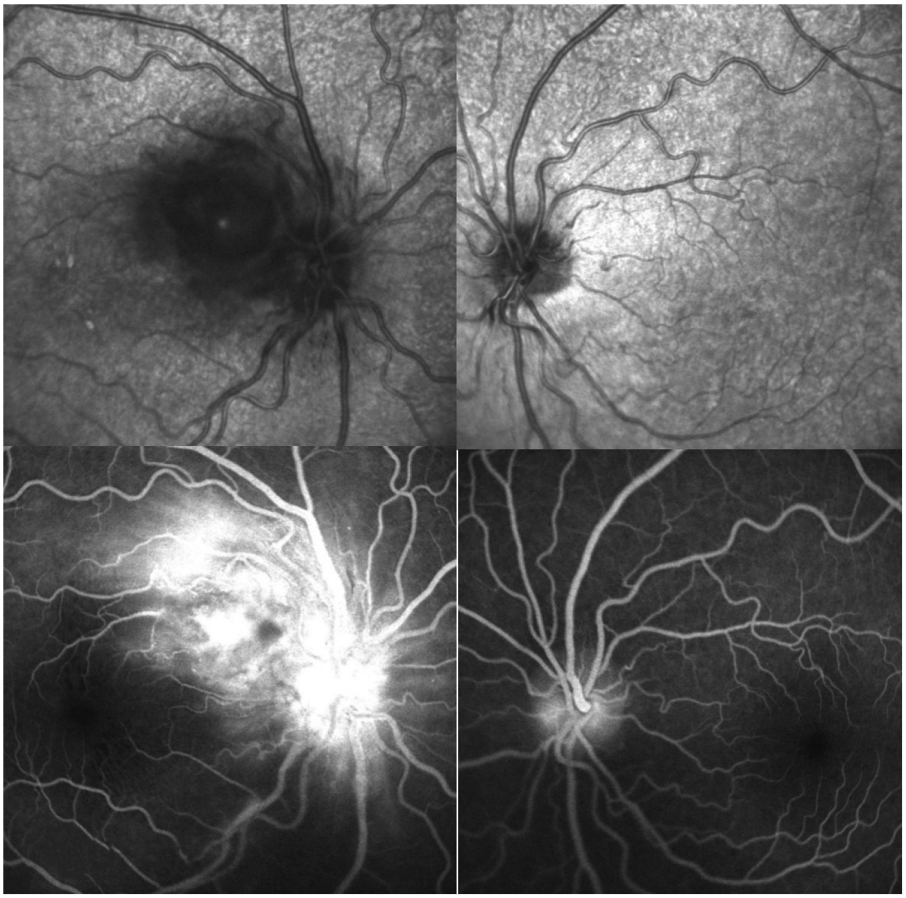

Fig. 2. Fluorescein angiography shows optic disc staining in both eyes.