

A COMPLICATED CASE OF OCULAR TUBERCULOSIS





This patient's pulmonary tuberculosis led to decreased vision 7 years later.

BY JHON EDUARDO ZANS, MD, AND DIEGO FLORES, MD

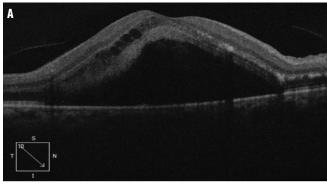
31-year-old woman presented with ocular tuberculosis with many clinical symptoms, including progressive central vision loss, blurry vision, headache, and weight loss that began 5 months earlier. Her condition was aggravated by meningoencephalitis and brain hemorrhage, which required surgery. After recovery, she experienced visual improvement but developed neurological sequelae, including homonymous hemianopsia in three quadrants, that continued for almost 1 year.

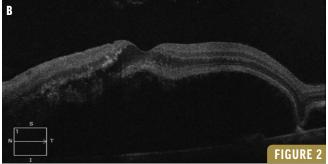
At presentation, her VA was 20/150 OD and 20/100 OS. Her medical history was significant for pulmonary tuberculosis 7 years prior with isoniazid resistance during lab analytics, a positive result for purified protein derivative (16 mm), and negative results for human immunodeficiency

virus and venereal disease research laboratory. Her chest X-ray indicated pulmonary tuberculosis.

Fundus imaging showed a clear media and optic nerve with poorly defined edges with peripapillary flame hemorrhages accompanied by cotton-like exudates in the right (Figure 1A) and left (Figure 1B) eye. Exudates observed at the macular level suggested neuroretinitis. In the posterior pole of the left eye, there was a choroidal granulomatous lesion of elevated appearance (Figure 1B), and in the periphery of each eye, grayish ovoid punctate lesions suggestive of multifocal choroiditis were observed.

Macular OCT showed an absence of vitreomacular interface lesions in the right (Figure 2A) and left (Figure 2B) eye. Hyperreflective and hyporeflective lesions in the intraretinal





tissue suggested exudates and cystoid macular edema, respectively, and extensive hyporeflectivity at the subretinal level was a sign of serous retinal detachment.

TREATMENT APPROACH

We initiated a multidisciplinary management approach with infectiology and neurology and recommended treating the patient with oral antibiotics in the hospital. We based our decision on the Collaborative Ocular Tuberculosis Study consensus.1

At the hospital, she received treatment with oral levofloxacin, rifampicin, ethambutol, and pyrazinamide, which continuted for 1 year. She underwent surgery for decompressive craniotomy due to subdural and subarachnoid hemorrhage. Her VA improved to 20/60 OD and 20/25 OS post-treatment. ■

1. Agrawal R, Ludi Z, Betzler BK, et al. The Collaborative Ocular Tuberculosis Study (COTS) calculator-a consensus-based decision tool for initiating antitubercular therapy in ocular tuberculosis. Eye (Lond). 2023;37(7):1416-1423.

DIEGO FLORES, MD

- Retina Senior Fellow, Clinica La Luz, Lima, Perú
- Financial disclosure: None

JHON EDUARDO ZANS, MD

- Chief of Retina Department, Z Vision Eye Center, Lima, Perú
- zvisionperu@gmail.com
- Financial disclosure: None

If you have images you would like to share, email Manish Nagpal, MS, FRCS, FASRS, at drmanishnagpal@yahoo.com.

Note: Photos should be 400 dpi or higher and at least 10 inches wide.