

# Ocular Tuberculosis associated with neurorretinitis: Case Report

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**Purpose:** Describe and discuss retinal alterations caused by Mycobacterium tuberculosis and its rare extrapulmonary features.

**Methods:** The literature for previous reports of Ocular Tuberculosis was reviewed. An analysis of retinal images was performed to support anatomical conclusions associated with infectious ocular diseases.

**Results:** Case report from an adult with active lesion due to ocular tuberculosis and its differential diagnosis through the case.

## CASE REPORT

Female, 37 yo, presenting with low visual acuity in the right eye for 8 days, associated with conjunctival hyperemia and ocular pain. Nothing on his past medical history nor ocular diseases.

BCVA: OD: <20/400; OS: 20/25

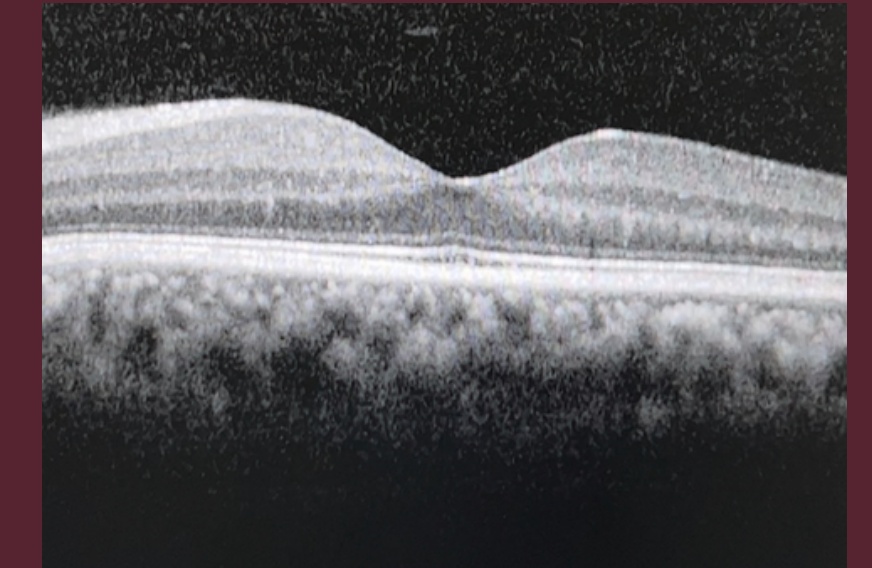
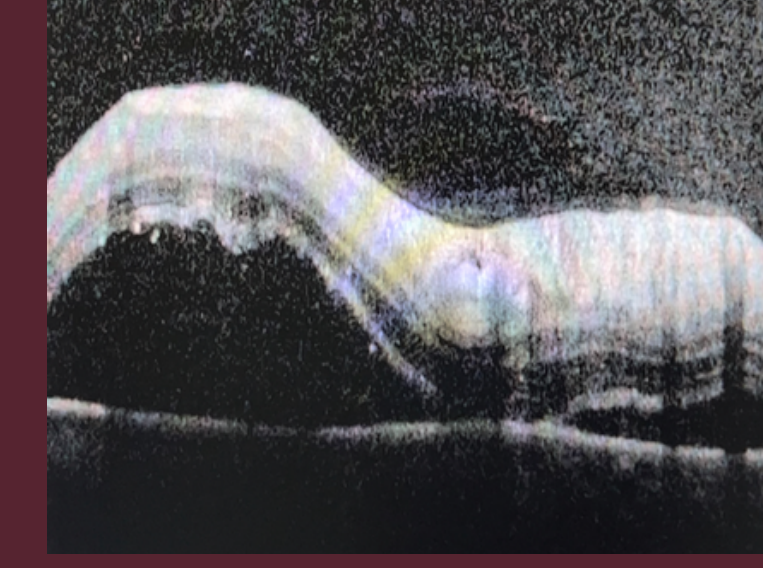
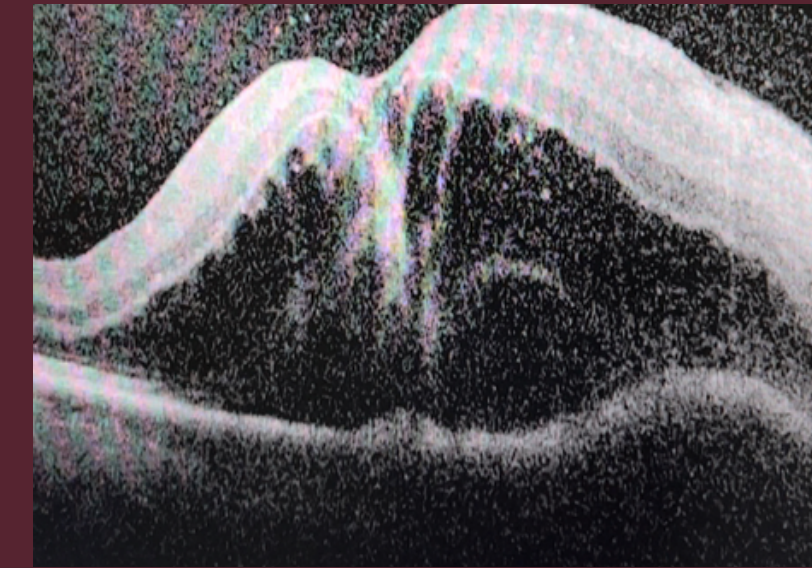
Biomicroscopy: OD: keratic precipitates, anterior chamber cells 2+/4+, normal pupillary reflex.

OS: Unremarkable

IOP: 17/16mmHg

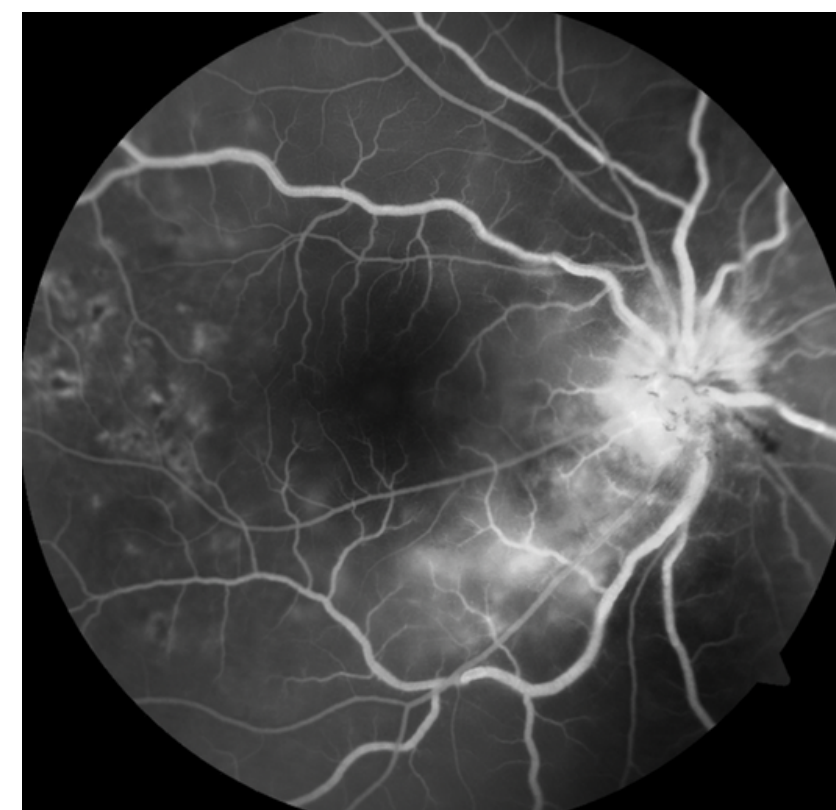
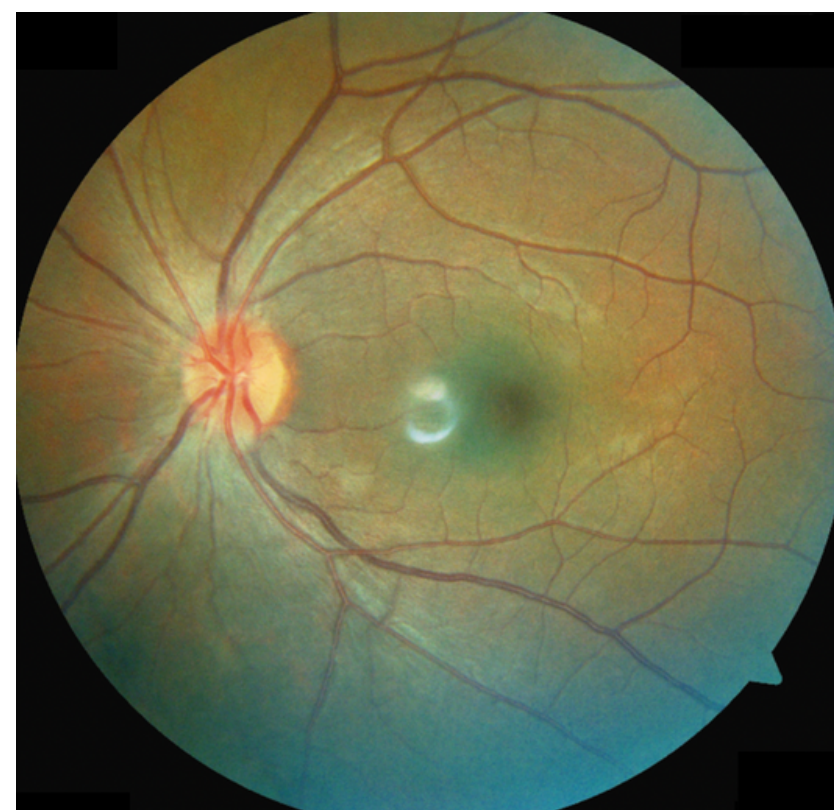
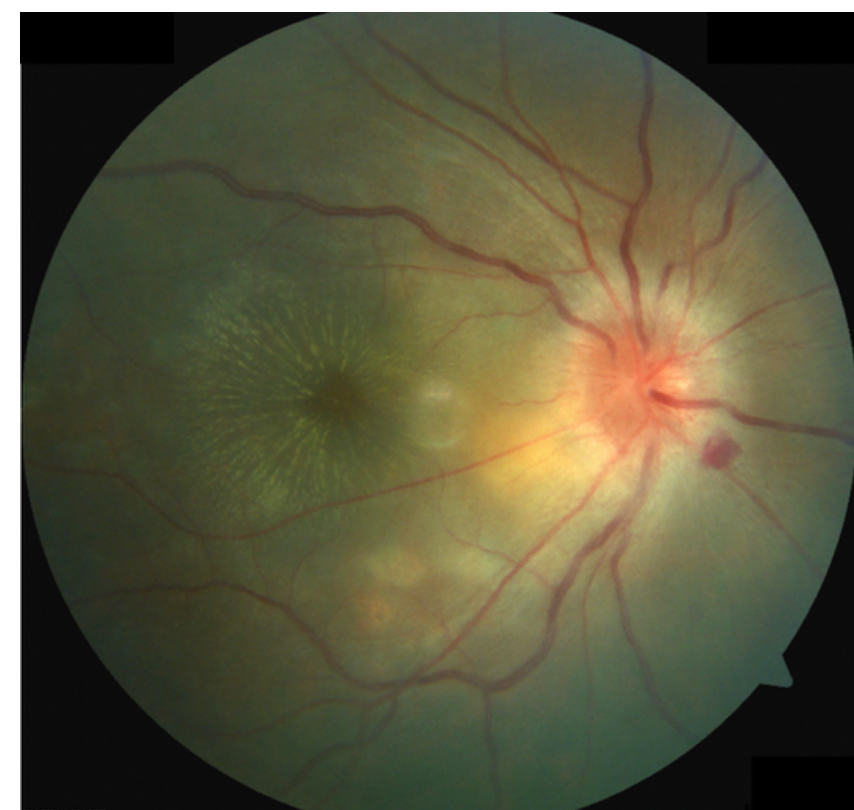
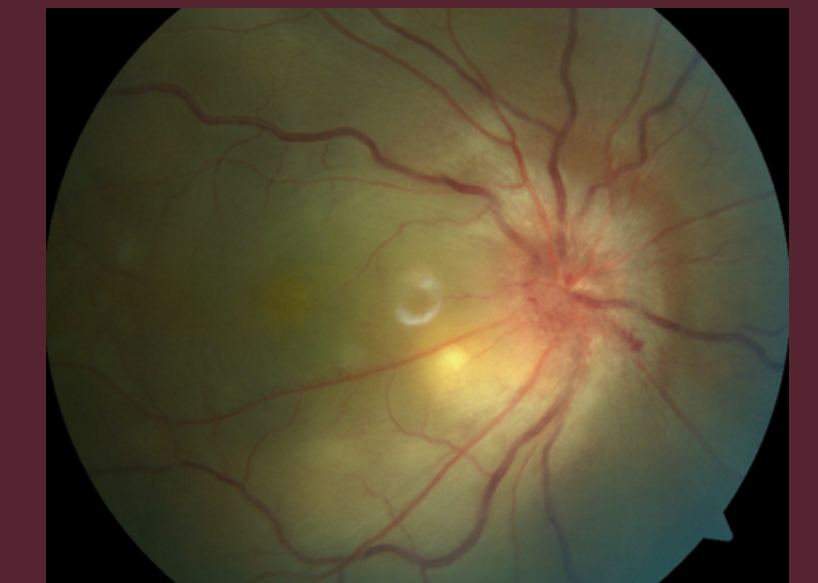
Fundoscopy: OD: Irregular optic nerve, papillary edema, macular star, serous detachment and vitreitis 1+/4+. OS: Superior and nasal irregular optic nerve

Hypothesis: Ocular Bartonellosis?



Treatment with Doxycyclin 12/12h + Prednisone 60mg 1x/day + Prednisolone 1% eye drops every 3h was started. Requested infectious diseases serologies, including TB tests and Xray

Follow up: IGRA test: + / other infectious diseases: negative. Suspended Doxycyclin and referred to primary care facility to start antituberculosis therapy. After 2 weeks with new treatment, referred visual acuity improvement (BCVA OD: 20/60)



## DISCUSSION

According to the World Health Organization, TB is one of the top ten causes of death worldwide and the leading cause of death from a single infectious agent, with one-third of the world's population infected with Mycobacterium tuberculosis, and therefore at risk of developing the disease. Ocular TB is a rare extrapulmonary form of the disease, not to be underestimated considering its potential impact on visual loss in patients diagnosed with the disease. Ocular TB still represents a major diagnostic and therapeutic challenge, due to its heterogeneous clinical manifestations, mixed ocular tissue involvement, lack of diagnostic criteria and gold standard tests, and lack of international agreement on the therapeutic approach.

## REFERENCES

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