Bacillary Layer Detachment Secondary to Ocular Toxoplasmosis in Young Adult: Case Report

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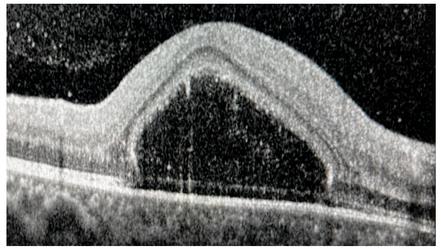
Purpose: Describe and discuss retinal alterations caused by Toxoplasma gondii and association with Bacillary Layer Detachment (BALAD)
Methods: The literature for previous reports of BALAD was reviewed. An analysis of retinal images was performed to support anatomical conclusions associated with infeccious ocular diseases
Results: Case report from a young adult with active lesion due to ocular toxoplasmosis and subretinal exudation with OCT imaging presenting split at the level of the photoreceptor inner segment myoid layer, creating a distinct intraretinal cavity

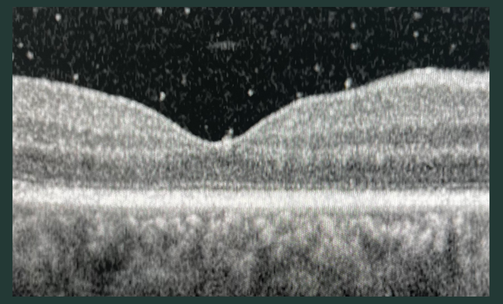
CASE REPORT

Male, 17 yo, presenting with low visual acuity in the right eye for 3 days, showing no hyperemia or pain. Nothing on his past medical history nor ocular diseases.
BCVA: OD: 20/80 OS: 20/20.
Biomicroscopy: OD: keratic precipitates, anterior chamber cells 2+/4+, normal pupillary reflex. OS: Unremarkable
IOP: 26/16mmHg
Fundoscopy: OD: Regular optic nerve, active lesion in the inferior temporal retina, associated with serous detachment and vitreitis 1+/4+. OS: Unremarkable



Macular OCT: Bacillary Layer Detachment (BALAD) associated and vitreitis

Treatment with Sulfamethoxazole and trimethoprim 800mg/160mg 12/12h + Prednisone 40mg 1x/day + Prednisolone 1% eye drops every 3h was started.
Follow up: Visual improvement and regression of the retinal serous detachment visualized in new OCT scan 2 weeks after initial treatment



DISCUSSION

The infection caused by Toxoplasma gondii is one of the main causes of retinocoroiditis in Brazil. It has great affinity for the retina neural tissue and ganglionar cells, leading to a break in the Bruch's membrane and choriocapillaris due to intensive inflammation. The main pathophysiological mechanism in BALAD genesis is comparable to exudative retinal detachment and involves breakdown of the RPE component of the outer blood–retina barrier (leaving the ELM component intact). Recently, in a case of macular toxoplasmosis chorioretinitis, it was introduced the term BAcillary LAyer Detachment" (BALAD) to describe the separation of the bacillary layer from the remaining retinal layers resulting from an intraphotoreceptor split immediately posterior to the ELM within the photoreceptor IS myoid layer, showing an acute decompensation of the outer retinal layers and RPE. BALAD is a new nomenclature, and retinologists must be aware of this recent finding in structural OCT.

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