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Giant Macular Hole as an Atypical Consequence of a Toxoplasmic Chorioretinitis

Toxoplasmosis is the most common cause of infectious retinitis in immunocompetent individuals. The seroprevalence of *Toxoplasma gondii* is different throughout the world. In the United States, it has been estimated to vary from 20% to 70%. Among this positive population, only 1% have meaningful chorioretinitis scars. Ocular toxoplasmosis is sometimes a benign and self-limiting lesion. It can also cause central or total visual loss. Legal blindness occurs in nearly one quarter of affected eyes.[1] It is caused either directly by involvement of the macula or optic nerve or indirectly by complications secondary to inflammation (macular edema, vitreous opacity, epiretinal membrane, and retinal detachment).[1-3]

Peripheral scars may cause visual field loss but generally do not impair central vision. Herein, we report a case of central visual loss secondary to a giant macular hole occurring several years after peripheral toxoplasmosis.

Report of a Case. A 26-year-old Brazilian woman was referred to our department for an acute decrease in her right-eye vision, persisting for 2 months, after several days of metamorphopsia. This right eye had suffered 7 years before from acquired ocular toxoplasmosis. At that time, she had complained of myodesopsia without visual loss. One month of clindamycin treatment had enabled complete healing of the lesion, without recurrence.

Her best-corrected visual acuity was 20/200 with –0.75 diopter (D) sphere OD and 20/20 with –3.00 D sphere OS. Slitlamp examination results were normal, but fundus examination revealed a full-thickness giant macular hole without operculum. Consistent with her history of toxoplasmosis, we also found an old chorioretinitis scar on the equatorial retina (**Figure 1**). Measured by optical coherence tomography, this wide macular hole was 2377 µm horizontally and 2052 µm ver-

Figure 1. Color fundus photograph of the right eye showing a giant macular hole with an old peripheral chorioretinitis scar.

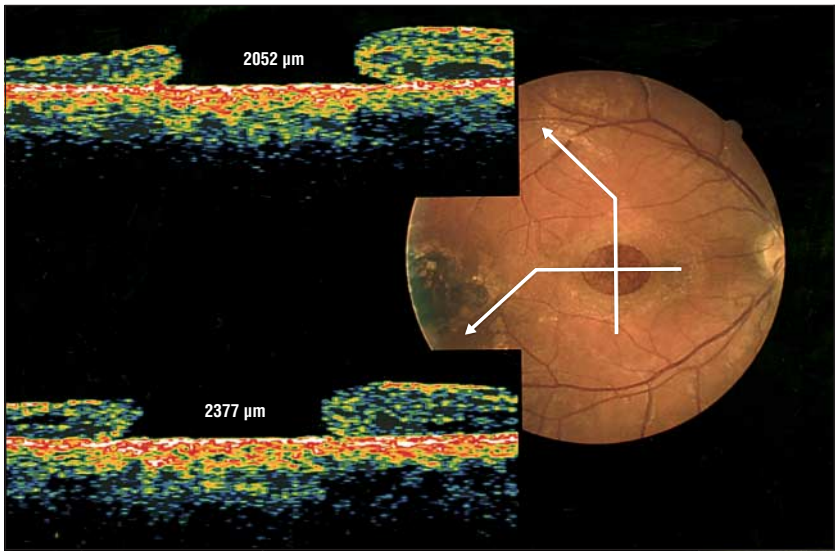

Figure 2. Optical coherence tomography images through the center of the macular hole showing swollen edges and measuring the horizontal and vertical sections at 2377 µm and 2052 µm, respectively.

Table. Studies Concerning Vitreoretinal Complications Consecutive to Ocular Toxoplasmoses

Source	Journal	Toxoplasmic Chorioretinitis, No.	Retinal Detachments, No.*	Retinal Detachments, %	Macular Hole, No.
Bosch-Driessen et al,[1] 2000	*Ophthalmology*	150	9	6	0†
Frau et al,[4] 1997	*J Fr Ophtalmol*	Several hundred	7	<5	1‡
Mets et al,[2] 1996	*Am J Ophthalmol*	94	9	10	0§
Friedmann et al,[3] 1969	*Arch Ophthalmol*	63	3	5	0

*The rate of retinal detachment varies between 5% and 10% whereas a macular hole was noted in only 1 patient.
†L. Bosch-Driessen, written communication, October 2003.
‡E. Frau, written communication, February 2004.
§M. Mets, written communication, November 2003.

tically (**Figure 2**). *Toxoplasma gondii* serologic testing was positive for IgG and negative for IgM. We did not consider any treatment, including vitrectomy, given the inactivity of the toxoplasmic focus and the very large size of this macular hole.

Comment. Overlying vitreitis is a frequent finding with toxoplasmic chorioretinitis. Therefore, it is not unexpected to observe in some cases vitreous traction leading to retinal detachment. This complication has been described by several studies (5%-10% of cases).[1-4] However, we could not find in the literature any described case of macular hole due to ocular toxoplasmosis (**Table**). A study of several hundred ocular toxoplasmosis cases observed a single case of a macular hole, but the case was not published (E. Frau, written communication, February 2004).[4] Despite the large number of patients with ocular toxoplasmosis, no other studies have reported on macular holes.[1-3]

In our case, absence of operculum suggests that tangential vitreous traction resulted in the centrifugal displacement of photoreceptors. Vision as good as 20/200 was probably the result of paracentral fixation.

In conclusion, vitreous traction resulting from peripheral ocular toxoplasmosis may lead to a macular hole, even after several years. Therefore, patients with a peripheral toxoplasmic scar should be advised that symptoms of impending macular holes require consultation early so that early intervention might prevent progression to severe loss of central vision.

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Solitary Choroidal Tuberculoma in an Immunocompetent Patient

We report a case of choroidal tuberculoma in an immunocompetent patient who was referred to us with the possible diagnosis of choroidal melanoma. Findings from routine investigations failed to identify systemic tuberculosis infection. Visual improvement and choroidal tuberculoma involution to a flat inactive scar can occur with proper and rapid diagnosis and treatment.

Report of a Case. A 24-year-old Guinean man living in Belgium for the last 6 months was referred to our hospital with a 10-day history of decreased vision in the left eye. He was of poor socioeconomic status and had no signifi-