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Vitreomacular traction associated with papillitis

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1. Case report

A 34-year-old woman presented with right eye blurry vision and discomfort one month after delivering her second child. Her right eye had a visual acuity of 20/20, a relative afferent pupillary defect, and no dyschromatopsia. Her exam revealed optic disc edema with no obvious vitritis (Fig. 1A). Macular optical coherence tomography (OCT) showed changes in the juxtapapillary retina (Fig. 2A). Fluorescein angiography demonstrated optic disc leakage. MRI showed minimal enhancement of the optic nerve head. After an infectious work-up returned negative, she was treated with oral corticosteroids. One month later, she reported new acute painless vision loss in her right eye with a visual acuity of 20/60. Examination demonstrated peripapillary exudation and a repeat MRI was unremarkable. Nonetheless, she was treated with intravenous corticosteroids followed by an oral taper regimen. At her post-hospitalization visit, her exam (Fig. 1B) and OCT macula (Fig. 2B) revealed

severe vitreomacular traction (VMT). After two weeks of observation, she noticed a dramatic improvement in her right eye vision shortly after participating in a recreational dance event. Repeat examination (Fig. 1C) and OCT imaging (Fig. 2C) showed significant interval improvement with separation of the posterior hyaloid face from the fovea. In follow-up one month later, her vision had returned to baseline.

2. Discussion

VMT has been described in the setting of posterior segment inflammation¹; however, this is the first report of VMT associated with papillitis. In previously published cases, VMT developed in quiescent eyes with a history of prior vitreous inflammation.^{2,3} Our patient never exhibited clinical vitritis. However, given the hyper-reflective material seen in the preretinal peripapillary space on OCT, we speculate that her VMT was induced by a sub-clinical localized vitritis associated with her



Fig. 1. Serial fundus photographs. Optic disc edema with hyperemia, vessel obscuration, flame-shaped hemorrhages, and cotton-wool spots (A). Peripapillary exudation with new retinal striations in the nasal macula and a blunted foveal reflex (B). Interval resolution of retinal striations (C).

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Fig. 2. Serial macular optical coherence tomography (OCT) images. Optic nerve edema with adjacent thickening of the superficial retina and disruption of the deeper layers (A). Retinal striations in the nasal macula on infrared imaging and thickening of the posterior hyaloid face (white arrow) associated with underlying optical shadowing and traction on the fovea with inner retinal wrinkling, intra- and sub-retinal fluid, and hyper-reflective debris in the pre-retinal space (star) and outer plexiform layer on OCT (B). Resolution of vitreomacular traction (C).

papillitis. Interestingly, a posterior vitreous detachment occurred within a relatively short time period. This spontaneous release was likely accelerated by physical activity and/or treatment of the inflammatory process.

3. Conclusions

VMT can be a mechanism of new or worsening vision loss in patients with papillitis.

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Authorship

All authors attest that they meet the current ICMJE criteria for authorship.

Declaration of competing interest

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