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The anatomical and functional benefit of bevacizumab in the treatment of macular edema associated with Purtscher-like retinopathy

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Sir,
**The anatomical and functional benefit of bevacizumab
in the treatment of macular edema associated with
Purtscher-like retinopathy**

We read the article by Miguel *et al*¹ regarding Purtscher's and Purtscher-like retinopathies with great interest. As the authors well describe, 'Purtscher-like retinopathy' is diagnosed in patients with fundus findings similar to Purtscher's retinopathy, without a history of trauma but

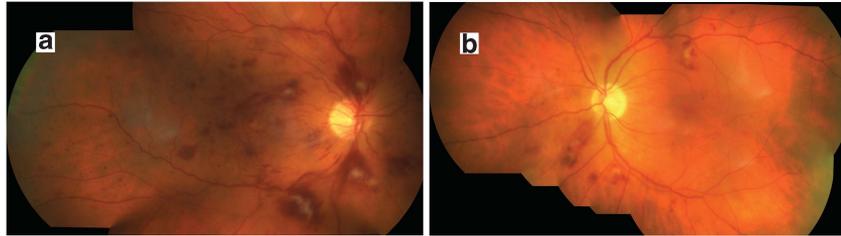


Figure 1 Dilated fundus examination at presentation. (a) Mosaic color fundus photo OD demonstrating multiple cotton wool spots, superficial retinal hemorrhages surrounding the optic nerve, macular edema, and scattered intraretinal hemorrhages. (b) Mosaic color fundus photo OS demonstrating similar but milder retinal pathology.

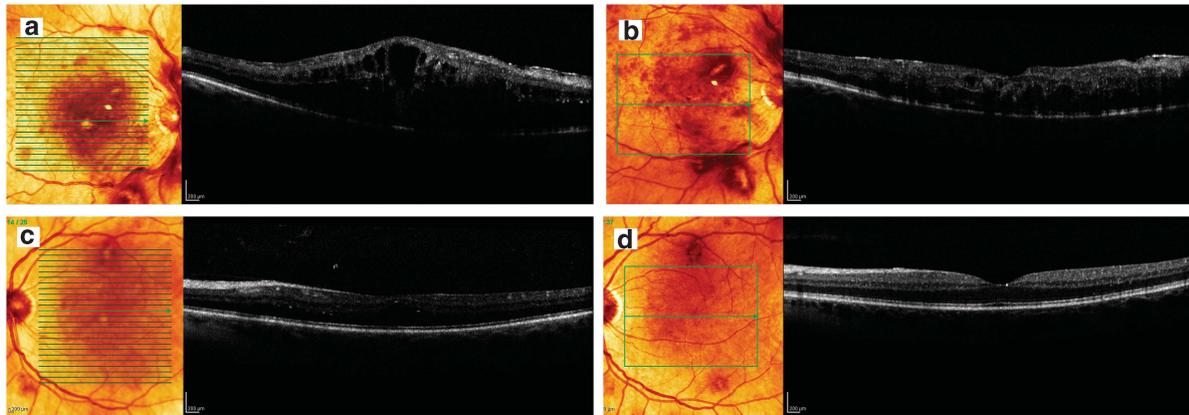


Figure 2 Heidelberg high-definition OCT images at presentation and 3-month follow-up. (a) OD at presentation demonstrating severe macular edema. (b) OD at 3-month follow-up with significantly improved macular edema after treatment with intravitreal bevacizumab. (c) OS at presentation with milder macular edema. (d) OS at 3-month follow-up with resolved macular edema.

with known systemic associations.¹ Current proposed mechanisms for the underlying pathogenesis include leukocyte aggregation by activated complement factor 5 (C5a).² As noted by the authors' systematic review, there is currently no established treatment for Purtscher-like retinopathy, although the literature consists of several case reports of treatment with corticosteroids, without certainty as to effect on the clinical course.¹ Herein, we report for the first time a case of Purtscher-like retinopathy treated successfully with intravitreal bevacizumab injection.

Case report

A 51-year-old man presented to the Retina Service at the University of Louisville with sudden nontraumatic loss of vision OD. The patient's medical history included hepatitis C, with chronic pancreatitis and cirrhosis. Best-corrected visual acuity (BCVA) was finger counting OD and 20/30 OS. Fundoscopy revealed cotton wool spots and intraretinal hemorrhages surrounding normal optic discs bilaterally (Figure 1). Optical coherence tomography (OCT) showed macular edema more severe on the right eye (Figure 2). Complete blood count with differential, kidney function tests, CRP, cryoglobulin, and amylase were normal. Serum C5a was elevated at 12.9 ng/ml (normal range 4.7–9.5 ng/ml).

The patient received an intravitreal injection of bevacizumab (1.25 mg/0.05 ml) (Genentech, South San Francisco, CA, USA) OU for the treatment of macular

edema. At 3-month follow-up BCVA OD improved to 20/160 with resolution of macular edema in both eyes (Figure 2).

Comment

Purtscher-like retinopathy is an uncommon disease associated with various conditions.³ Treatment with corticosteroids has been proposed, but its effectiveness is still controversial.¹ This is the first case to describe the beneficial anatomical and functional effects of intravitreal bevacizumab for the management of macular edema associated with Purtscher-like retinopathy. We suggest this treatment be considered in similar cases.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

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