

Hypotony Maculopathy Secondary to Traumatic Cyclodialysis Cleft

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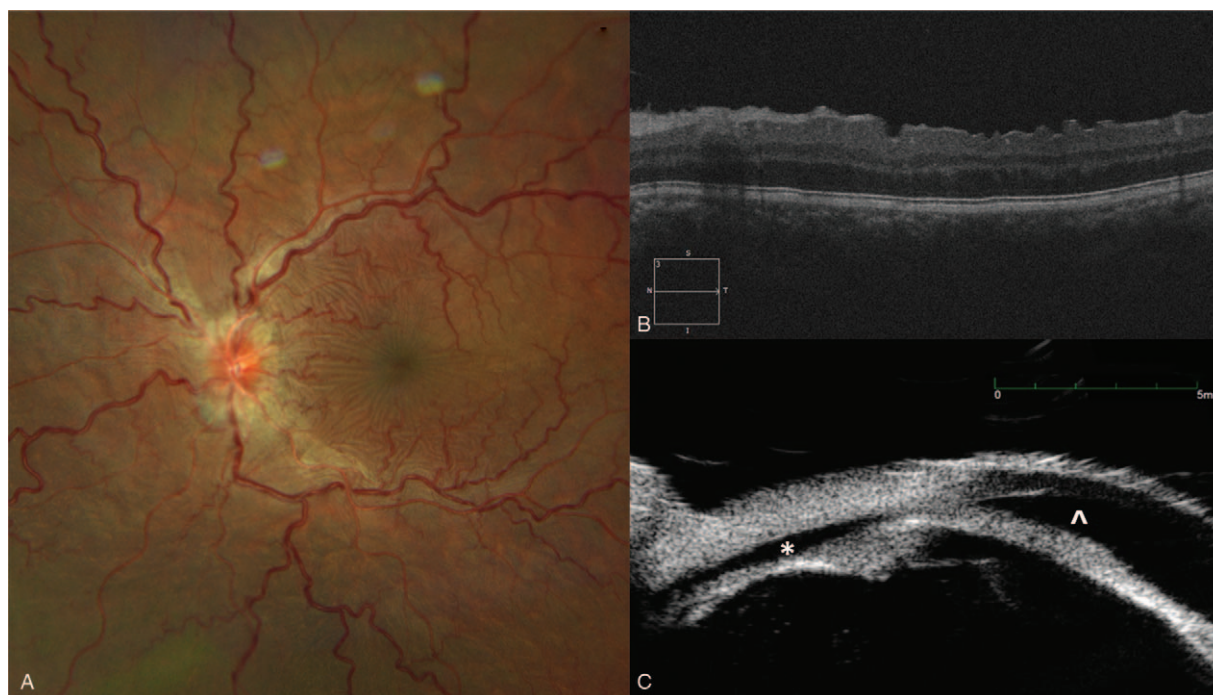


FIGURE 1. A, Color fundus photo of the left eye demonstrating marked optic nerve head swelling, vascular tortuosity, and chorioretinal folds. B, Optical coherence tomography through the macula of the left eye demonstrating retinal folds from hypotony maculopathy. C, Ultrasound biomicroscopy demonstrating a cyclodialysis cleft (*) with the anterior chamber marked for orientation (^).

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A 22-year-old male presented with deteriorated left best-corrected visual acuity (BCVA) (20/60) and relative hypotony (right 16 mm Hg/left 7 mm Hg), 2 weeks after left eye blunt trauma. On examination, optic nerve head swelling, vascular tortuosity and chorioretinal folds were seen, consistent with hypotony maculopathy (Fig. 1A-B).¹ A cyclodialysis cleft was

suspected and sought on gonioscopy but was not seen. Ultrasound biomicroscopy, however, identified an almost circumferential cyclodialysis cleft (Fig. 1C). Multiple modalities to close the cleft were trialed over a 5-month period including cycloplegia, 2 cyclodiode laser sessions and anterior chamber viscoelastic injection.² Despite this, the cyclodialysis cleft, relative hypotony and hypotony maculopathy persisted. Six months post-injury, BCVA was 20/40. The patient was untroubled by this acuity and opted for conservative management.

Cyclodialysis clefts are rare following blunt trauma.² When present, they may cause hypotony due to increased aqueous filtration.² Persistent hypotony may result in the clinical picture of hypotony maculopathy, including chorioretinal wrinkling from scleral collapse, and optic nerve head swelling from reduced axoplasmic flow secondary to anterior bowing from the lamina cribosa.¹ Often, the cleft is not evident on gonioscopy as in our case, and imaging with ultrasound biomicroscopy or anterior segment optical coherence tomography is needed to confirm the diagnosis and extent of the cleft.²

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The patient consented to publication of the case and associated photographs in writing.

The authors have no conflicts of interest to declare.

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