

Figure 2 Slit-lamp and confocal images of the inflamed bleb before the initiation of the combined antibiotic and steroid treatment showing (a) thin, ischaemic loculated bleb with increased conjunctival and episcleral injection. (b) Few epithelial cells (arrows) with areas of cell loss (*). (c) Diffuse stromal hyperreflectivity corresponding to oedema. (d) Ill-defined hyporeflective stromal cystic spaces (*) with presumed inflammatory cells (arrows). Images taken 3 months after the treatment showing (e) thin, quiet, and hypovascular bleb. (f) The absence of presumed inflammatory cells (arrows) and the increased number and size of stromal cystic spaces (*).

are similar to histological findings seen in blebitis.³ It seems the inflammatory response did not adversely affect bleb filtration 3 months later, where the intraocular pressure was controlled and the aqueous-filled cystic spaces were still present and the steroid was then discontinued.

In conclusion, RCM is effective in identifying microscopic changes associated with bleb inflammation, such as cellular infiltration. It may aid clinicians in evaluating blebitis under long-term steroid use and thus bleb failure in subclinical stages.

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Disclosure

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Sir,
Tobacco–alcohol amblyopia: can OCT predict the visual prognosis?

We report a case of tobacco–alcohol amblyopia (TAA) and correlate the improvement in visual function with

changes in the thickness of peripapillary retinal nerve fibre layer (RNFL) measured by optical coherence tomography (OCT).

Case report

A 68-year-old man presented with bilateral reduced vision. He smoked a pipe and drank alcohol regularly for 30 years. The best-corrected visual acuities were 6/36 OD and 3/60 OS. Colour vision using the pseudoisochromatic plates was 3 of 17 in both eyes. Both optic discs showed pallor of the temporal neuroretinal rim. Static perimetry showed centrocaecal scotoma in the right eye and central scotoma extending to the periphery in the left eye. Serum vitamin B12 level was 187 $\mu\text{g}/\text{l}$ (normal: 197–866 $\mu\text{g}/\text{l}$). Flash visual evoked response (VER) was reduced (Figure 1a) and OCT showed increased RNFL thickness in both eyes apart from thinning in the temporal quadrant (Figure 1b).

The patient ceased smoking; stopped drinking ethanol, and was prescribed hydroxocobalamin supplements.

One year later, visual acuity improved to 6/9 OD and 6/12 OS. Flash VER was no longer delayed and pattern responses were present in both eyes with four cycles per degree checks (Figure 2a). The increased peripapillary RNFL thickness had normalised with persistent thinning temporally (Figure 2b).

Comment

The preferential thinning of temporal peripapillary RNFL in our patient is similar to that reported in three cases of ethambutol-induced optic neuropathy.¹ TAA belongs to the larger class of toxic/nutritional optic neuropathies in which the primary insult is to the mitochondria that disrupts the process of oxidative phosphorylation resulting in axonal loss, preferentially in the fast-firing, parvocellular neurons within the papillomacular bundle.^{1–4} Increased RNFL thickness has been reported in TAA and may occur because of axonal swelling and intraretinal fluid accumulation in the acute phase of visual loss.^{4,5} Normalisation of RNFL thickness

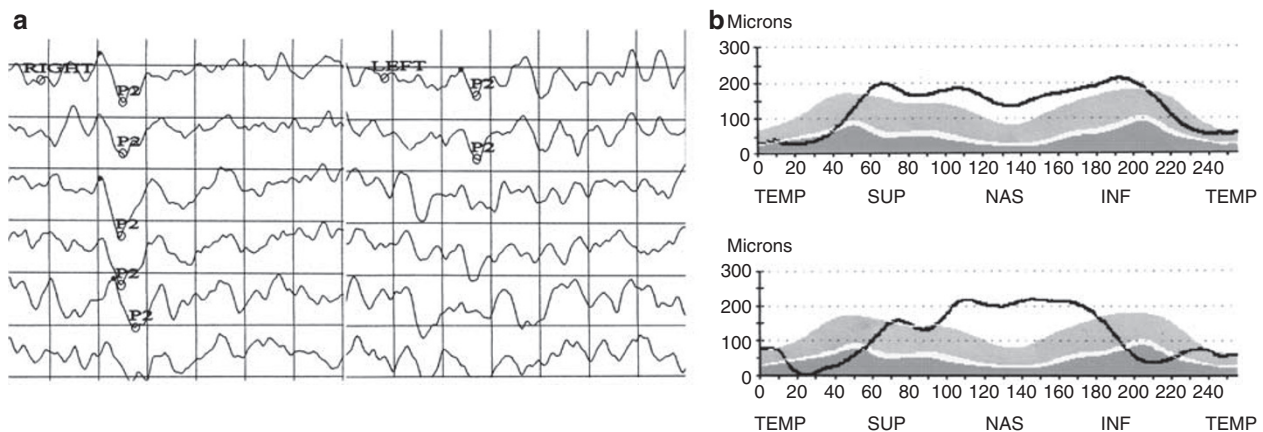


Figure 1 At initial presentation the flash VER (a) showed a delayed, reduced, and negative waveform, and OCT (b) showed marked increase in RNFL thickness (solid arrows) apart from thinning in the temporal quadrant (hollow arrows).

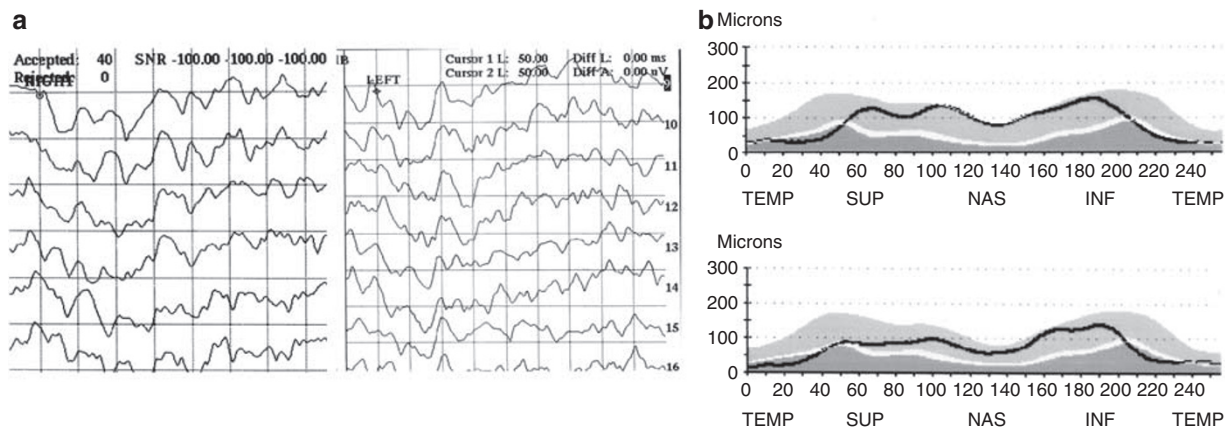


Figure 2 One year later, the VER (a) improved and was no longer delayed. OCT (b) showed resolution of RNFL thickness with persistent thinning temporally (hollow arrows).

following cessation of toxic insult and vitamin B12 supplementation correlated with improvement in visual function. The eye with the greatest increase in RNFL thickness showed the most improvement suggesting that axonal swelling precedes irreversible damage and optic atrophy. In patients with TAA, RNFL thickness measured by OCT may be useful to predict the visual prognosis.

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Sir, Imaging of a traumatic cyclodialysis cleft in a child using slit-lamp-adapted optical coherence tomography

A cyclodialysis cleft establishes a communication between the anterior chamber and the suprachoroidal space. Clefts typically occur after trauma or intraocular surgery and may be complicated by a shallow anterior chamber, hypotony, and maculopathy.¹ Slit-lamp-adapted optical coherence tomography (SL-OCT) is a light-based, non-invasive non-contact method of obtaining cross-sectional images of the anterior segment that provides rapid and objective information on the anterior segment dimensions and angle configuration.^{2,3} We used SL-OCT (1310-nm diode laser, optical axial image resolution <25 μm , and lateral resolution of 20–100 μm ; Heidelberg Engineering GmbH, Dossenheim, Germany) to detect a cyclodialysis cleft, and accompanying ciliochoroidal effusion after blunt trauma in an 8-year-old child.

Case report

An 8-year-old boy presented with blurred vision and hypotony 1 month after blunt trauma to the right eye. Best-corrected visual acuity was 20/200 and intraocular pressure was 1 mmHg. Slit-lamp biomicroscopy revealed striate keratopathy with moderate shallowing of the anterior chamber, without iridocorneal contact. The lens was clear and retinal folds were seen in the macula. Gonioscopy revealed an open angle with a possible cyclodialysis cleft nasally, but the view was limited by corneal folds and patient discomfort. SL-OCT imaging in different positions of gaze showed a cyclodialysis cleft at the 3-o'clock position (Figure 1) with a 360° choroidal effusion that was confirmed by ultrasound biomicroscopy (UBM; axial resolution 50 μm , model P40, Paradigm Medical Industries Inc, Salt Lake City, UT, USA). In both UBM and SL-OCT, there was no evidence of ciliary body detachment in other clock hour positions (eg, 6-o'clock position, Figure 2).

Comment

Cyclodialysis may be a sight-threatening condition requiring accurate identification and timely



Figure 1 (a) UBM image showing the cyclodialysis cleft at 3-o'clock position (arrow). (b) SL-OCT image showing the cyclodialysis cleft at the same position (arrow). (c) Well-defined cleft (arrow) using SL-OCT colour image function. AC = anterior chamber; CB = ciliary body; CE = choroidal effusion; S = sclera.