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Sir,

High-definition spectral domain OCT of a subretinal nematode

Diffuse unilateral subacute neuroretinitis (DUSN) is an inflammatory syndrome caused by subretinal nematode

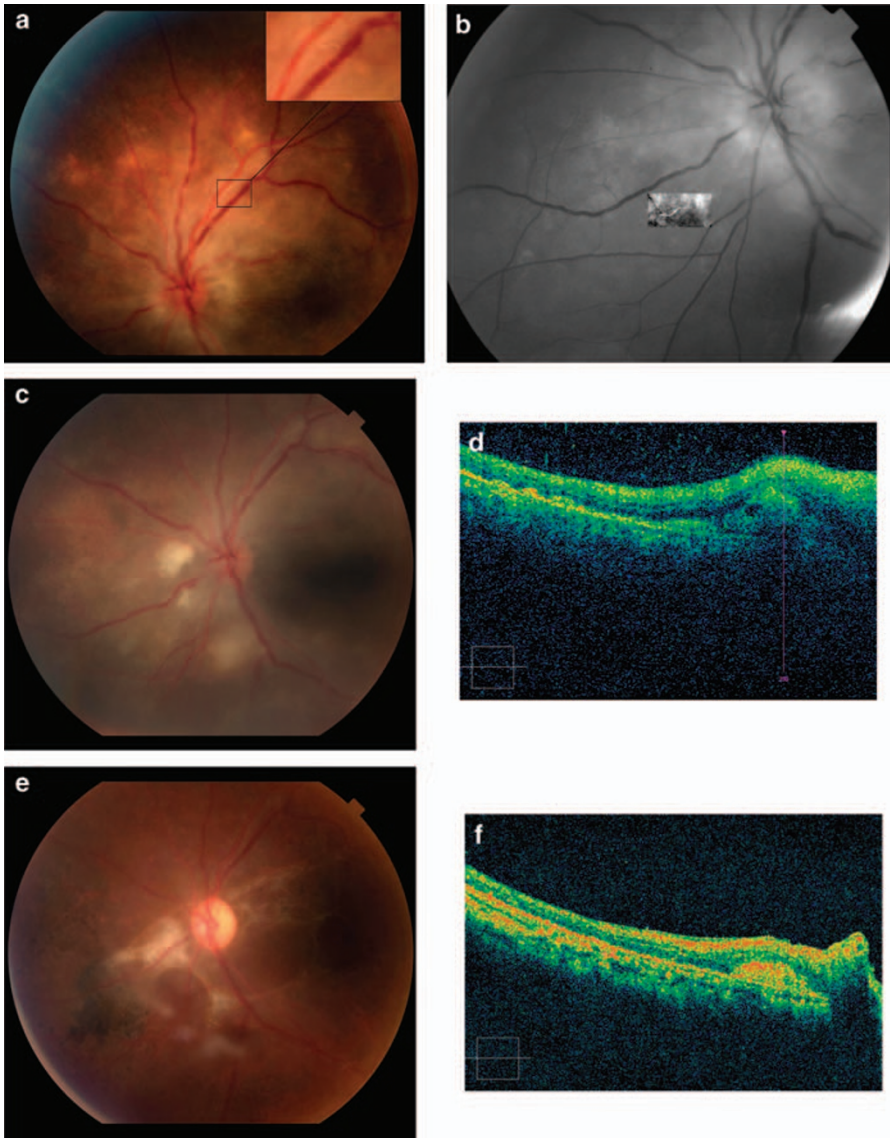

Figure 1 (For caption please refer next page).

infestation. Early stages show unilateral vitritis, papillitis, and recurrent grey-white retinal lesions. The later stages have diffuse pigment epithelium degeneration, optic atrophy, vascular attenuation and vision loss.[1,2] DUSN presents as a diagnostic dilemma and leads to severe visual loss.

We present the first report of the high-definition spectral domain OCT (HD-OCT) features of an eye with DUSN and the use of this imaging modality to possibly localize the worm and follow it after laser treatment.

Case report

We saw a 45-year-old Haitian woman with a 1week history of severe vision loss in the left eye. Her best-corrected visual acuities were 20/30 right eye (RE) and Hand motions left eye (LE). Examination of the RE was unremarkable. Anterior segment evaluation of the LE was unremarkable, posterior segment examination showed vitritis, optic nerve oedema, midperipheral pigmentary degeneration, macular oedema, and a motile 2000 μ subretinal worm above the superior arcade (Figure 1a). The worm migrated to the inferior arcade (Figure 1b) over the next half hour. Argon laser photocoagulation of the worm was done (365 spots, 200–400 mW, 200–500 μ, 0.15 s). At 1 week post-laser the worm could not be identified; however, intense focal inflammation was seen at the site of the laser (Figure 1c). HD-OCT (Cirrus HD-OCT, Carl Zeiss Meditech Inc., Jena, Germany) of this area revealed a round hypoechogenic structure under the inflammation conforming to the size and shape of the worm. This was surrounded by a hyperechogenic inflammatory response (Figure 1d). Serial HD-OCT evaluations of these structures were carried out at weeks 8 and 12. At 12 weeks ocular inflammation in the patient resolved, the retina showed classic subretinal fibrosis (Figure 1e) and HD-OCT showed a hyperechogenic scar and the absence of a round hypoechogenic structure (Figure 1f).

Comment

The nematode in our patient was large and rapidly motile so we believe that it likely was *Baylisascaris procyonis*.[3,4] We show that HD-OCT can potentially visualize the nematode even through hazy vitreoretinal inflammation. This report shows that HD-OCT offers a valuable noninvasive technique to image eyes with DUSN.

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Sir,

Spontaneous regression of a retinal fold a year after scleral buckling and intravitreal injection of gas

Posterior retinal folds have been rarely reported after the use of intravitreal gas combined with scleral buckling.[1,2] We report a case where a symptomatic retinal fold developed after scleral buckling and intravitreal gas injection and spontaneously regressed a year later.

Case report

A 43-year-old woman, presented with a superotemporal bullous retinal detachment (RD) sparing the macula, with a U-tear at 1 o'clock hours. Best-corrected visual acuity (BCVA) was 20/20. The patient underwent uncomplicated scleral buckling (SB) procedure during which preplacement of scleral sutures, drainage of subretinal fluid (SRF), and placement and tightening of a circumferential solid (276) silicone tire extending from 12 to 3 h were carried out; additionally, as the eye was still hypotonous, 1 ml of air was injected intravitreally. In the first postoperative day, the retina was attached; however, a retinal fold extending from the area of the buckle towards the posterior pole, involving the superior arcade and distorting the macular area (Figure 1a and b) was noted. The patient complained for disturbing metamorphopsia and VA could not improve more than 20/80. After a discussion on underlining

Figure 1 (a) Colour fundus photograph showing nematode superior to disk crossing the superior retinal vein. (b) Redfree photograph showing the worm moved to the inferonasal retina. (c) Colour fundus photograph 1 week post-laser showing white inflammation nasal to disk. (d) HD-OCT cross-section at 1 week post-laser through the area of inflammation showing the round hypoechogenic presumed worm body surrounded by inflammation. (e) Colour fundus photograph at 12 weeks post-laser showing hyperpigmented area consistent with area of photocoagulation inferonasal to disk and white area of fibrosis. Subretinal fibrosis tracks are also visible in the macula. (f) HD-OCT cross-section at 12 weeks post-laser showing hyperechogenic subretinal scar.