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Sir,
Management of band keratopathy with excimer phototherapeutic keratectomy

We read with interest the article by Stewart *et al* on 'Management of band keratopathy with excimer phototherapeutic keratectomy' [March 2003; **17**(2): 233–237]. The authors reviewed the results of phototherapeutic keratectomy (PTK) performed on eyes with calcific band keratopathy (CBK) and concluded that PTK was an effective procedure for the management of

CBK both for visual rehabilitation as well as ocular surface improvement.

We have recently published a study that looked at the effectiveness of EDTA chelation in CBK.¹ In the 65 eyes of 54 patients that we have followed after EDTA chelation, we found significant visual improvement of two or more lines in up to half of the eyes that were treated, as well as symptomatic relief in 98% of the patients. Stewart *et al* reported an improvement in visual acuity in 55% of the treated eyes as well as symptomatic improvement in 83% of their patients. Our results correlate well with those presented by Stewart *et al* using excimer PTK; however, without the disadvantage of causing significant myopic shift as well as the added costs and unavailability of the excimer laser, especially in rural areas and in developing countries. As the authors have suggested it in their article, future prospective studies are needed to compare both treatment modalities.

Until then, we do believe that EDTA chelation is a simple, inexpensive, and effective treatment for CBK and we recommend it as a first-line treatment for CBK.

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Sir,
Use of OCT to demonstrate persistent subretinal fluid after clinically successful retinal detachment repair

The appropriate management of persistent shallow retinal detachment in individuals who have already

undergone surgery presents a difficult challenge for vitreo-retinal surgeons with no evidence base to guide practice. Herein, we present an interventional case report with serial optical coherence tomography (OCT) imaging and discuss potential therapeutic options.

Case report

A 78-year-old phakic Caucasian male with no past ophthalmic or medical history was referred with a retinal detachment of 1 week duration. On examination, visual acuities were counting fingers right and 6/6 left. Anterior segments and intraocular pressures were normal. Mixed lenticular opacities were present with posterior vitreous detachments and a right moderately bullous but indentable, macula-off, rhegmatogenous retinal detachment supero-temporally with a single break at 11 o'clock.

An initial nondraining cryobuckle procedure conducted under general anaesthesia the following day failed and a three-port pars plana vitrectomy with internal drainage and C_3F_8 gas was performed 3 weeks after the onset of initial symptoms. At day 1 postoperatively, visual acuity was counting fingers and the retina was flat over the indent with minimal subretinal fluid. At 1-month, the patient reported blurred right vision and visual acuities were 6/12 corrected right and 6/5 left. The retina was clinically attached on binocular indirect ophthalmoscopy and the treated break appeared closed. However, subclinical persistent subretinal fluid with shallow detachment of the retina was identified (Figure 1) using the OCT 3 scanner (Zeiss Humphrey Instruments, USA). The patient was managed conservatively and at 18-month follow-up visual acuity was 6/12 right with 'puddles' of persistent but slowly absorbing posterior pole subretinal fluid on serial OCT in different planes (Figures 2a, b).

Comment

The advent of OCT has permitted detailed visualisation of retinal anatomy and the response to medical or surgical intervention. Postoperative OCT is a particularly helpful and novel adjunct in explaining incomplete visual acuity recovery after apparent successful buckling retinal reattachment surgery, where subfoveal fluid accumulation not visible clinically or on fluorescein angiography may be identified.^{1,2}

The phenomenon of delayed subretinal fluid absorption causing shallow detachment presents a difficult management issue to vitreoretinal surgeons. Desatnik *et al*³ report a 5-year retrospective series following pneumatic retinopexy with occurrence in 4.3% of cases and time to complete absorption ranging from 10

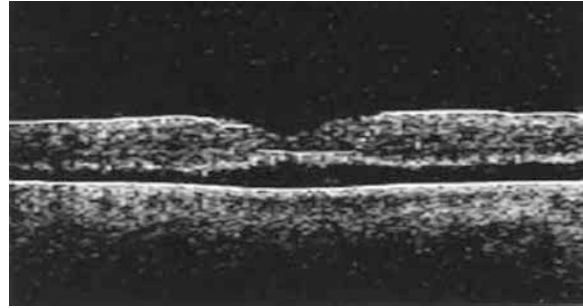


Figure 1 OCT demonstrating submacular fluid not detectable clinically.

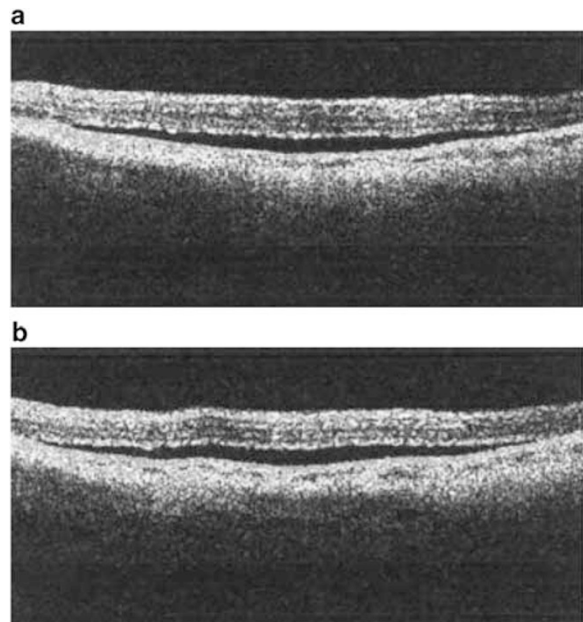


Figure 2 OCT in different planes 18 months later demonstrating persistent subretinal fluid.

to 26 months. Possible causes include choroidal vascular insufficiency, subretinal precipitates and elevated protein content or viscosity of subretinal fluid. Additionally, abnormal retinal pigment epithelium in myopic eyes may play a role although our patient was a mild hypermetrope (R +1.00/−0.75/90 and L +1.50/−1.00/80).

While persistent subretinal fluid has been seen following nondraining procedures (as discussed above), this appears to be the first report of the phenomenon after pars plana vitrectomy with internal drainage. That this is rare, or rarely demonstrated, is supported by Wolfensberger's very recent work where OCT confirmed a 100% foveal reattachment rate with no persisting subretinal fluid 1 month following successful pars

plana vitrectomy for macula-off retinal detachment in a series of 24 patients.⁴ Our patient underwent two procedures to repair his retinal detachment; initially an external approach with buckling, which proved unsuccessful and then pars plana vitrectomy with internal drainage, cryotherapy, and gas. Despite these interventions, he continued to have bothersome symptoms of decreased visual acuity and metamorphopsia. Additional treatment options in such circumstances may include grid argon laser to extramacular fluid collections and further surgery such as gas tamponade. However, serial OCT in our patient demonstrated decreasing subretinal fluid and so a conservative approach was taken.

In conclusion, OCT represents a novel addition to the ophthalmologist's armamentarium and serial images are helpful in the initial characterisation of shallow retinal detachment and in monitoring subsequent anatomical reattachment and the presence of subretinal fluid after surgical intervention. Importantly, it offers a new means of explaining poor visual outcome in the context of a clinically attached retina following technically successfully retinal detachment repair.

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Sir, HACEK endocarditis causing endogenous endophthalmitis and a metastatic abscess

A 78-year-old man, with aortic valve replacement, presented with deteriorating right vision, pyrexia, and weight loss following dental extraction. *Actinobacillus actinomycetemcomitans*, a slow growing, Gram negative 'HACEK' bacterium was grown from blood cultures and a concomitant, intertarsal abscess. Positive HACEK cultures from metastatic abscesses are previously unreported.

Case report

A 78-year-old Caucasian male presented with a 3-week history of a tender, inflamed right eye with deteriorating vision. Following premolar extraction a year earlier fever, night sweats, and weight loss were reported.

Previous medical history included IDDM and rheumatoid arthritis. Twelve years earlier, the patient had undergone an aortic valve replacement. Drug history included prednisolone and methotrexate for inflammatory arthritis. Furthermore, an erythematous, area of skin on the dorsum of the right foot was noted (Figure 1).

On examination, visual acuity was 'hand movements' only in the right eye and 6/9 in the left eye. Right anterior segment revealed injection, anterior chamber cells (3+), a 1 mm hypopyon, posterior synechiae with fibrin and lenticular nuclear sclerosis. There was a dense vitritis confirmed with ultrasound examination. The left eye was unremarkable. Normal urinalysis and chest X-ray were reported.

Blood cultures were obtained on admission and anterior tap and undiluted vitreous specimens were obtained for microbiological investigation. Intravitreal vancomycin (1 mg in 0.1 ml) and ceftazidime (2.0 mg in 0.1 ml) were administered.

The patient's presumed right, pedal cellulitis was treated with oral penicillin and flucloxacillin. Echocardiograms were negative. Antibiotics were stopped and on the 12th postoperative day, the cultured blood specimens revealed Gram negative coccobacilli consistent with HACEK (*Haemophilus* sp. (*parainfluenzae*, *aphrophilus*, *paraphrophilus*), *A. actinomycetemcomitans*, *Cardiobacterium hominis*, *Eikenella corrodens*, and *Kingella kingae*) infection. Treatment with intravenous gentamycin and amoxicillin was commenced. A week later, the right foot lesion was debrided to reveal an intertarsal abscess and pus