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Sir,

Surgical removal of massive macular hard exudate combined with intravitreal triamcinolone in diabetic maculopathy

Case report

A 65-year-old retired graphic designer who was non-insulin dependent diabetic was referred to the vitreoretinal team for consideration of surgical treatment for exudative diabetic maculopathy. He had previously had unsuccessful macular grid and focal Argon laser treatment at his referring unit. On presentation, his corrected visual acuities were right 3/60 < N48 and left 6/36 < N48. Anterior segments were normal. Fundoscopy revealed extensive intraretinal hard exudates at both posterior poles, more pronounced at the right macula as shown in Figure 1. Fluorescein angiogram revealed macular oedema in both the eyes.

The possibility of surgical intervention was discussed with the patient. He was keen despite a guarded prognosis and potential complications of surgery. With his informed consent, he underwent a standard right three port pars plana vitrectomy followed by a small partial thickness retinotomy made with a sharp pick just temporal to the massive macular hard exudate. The hard exudate was debulked using saline irrigation with a narrow gauge cannula and sub-retinal forceps through the retinotomy. After fluid-air exchange, 4 mg of intravitreal triamcinolone and 15% C_3F_8 gas, were injected. A face down posture was recommended for 1 week to allow time for the retinotomy site to heal.

At 2 months follow-up with refraction, his visual acuity was 6/60 N24 right. He stated that he had better depth perception, his vision was brighter and he could now watch the television at 3 m whereas previously he had to be within 1 m of the screen. His near vision had improved (<N48–N24). Fundoscopy showed a significant reduction in the size of the macular exudates (Figure 1c).

Visual outcome for the right eye remains satisfactory after 20 months at 6/60 N24 with subjectively increased depth perception and contrast sensitivity.

Comment

Diabetic maculopathy is an important cause of visual impairment. The current treatment for clinically significant macular oedema is focal or grid Argon laser photocoagulation to stabilise vision.¹ In advanced cases, laser treatment is ineffective. Massive deposition f macular hard exudates carries an increased risk of subretinal fibrosis.² With this in mind, other treatment modalities have been attempted. Yang³ performed vitrectomy, focal endolaser, and panretinal photocoagulation, and showed regression of both macular oedema and hard exudates. Intravitreal triamcinolone alone has been reported to reduce macula oedema and the amount of hard exudates.^{4,5} Takagi *et al*,⁶ Sakuraba *et al*,⁷ and Takaya *et al*⁸ have removed macular hard exudates surgically following vitrectomy. Despite good anatomical results, visual acuity improvement was not maintained long term with surgical removal alone because of atrophic or degenerative changes.⁸ A combined procedure of surgical debulking and intravitreal triamcinolone would theoretically simultaneously reduce both macular exudate and oedema in a shorter period of time thereby reducing the risk of subretinal fibrosis.

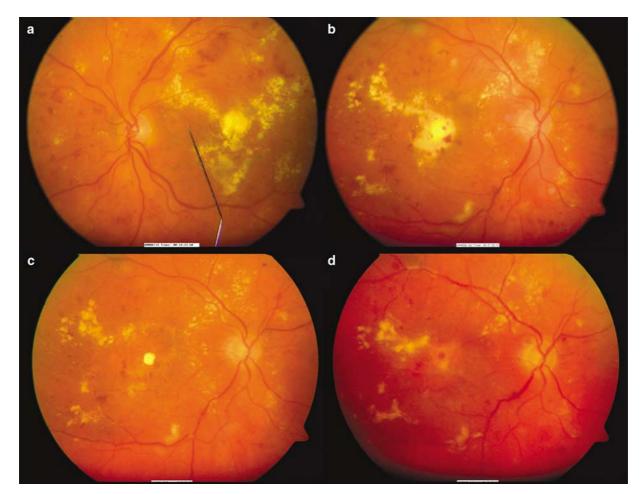


Figure 1 Fundal photographs: (a) left posterior pole preoperatively, (b) right posterior pole preoperatively with larger macular exudate, (c) right eye at 2 months postoperatively, and (d) right eye at 5 months.

Our patient was very keen for any surgical intervention to improve his vision despite a guarded prognosis and the potential risks of surgery. To our knowledge, this is the first published report of surgical removal of macular hard exudate combined with intravitreal triamcinolone. More experience is currently required to observe the long-term benefit of such intervention as well as its appropriate timing with respect to the disease process.

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Sir,

Metastatic renal cell carcinoma presenting as a chalazion

Metastatic renal cell carcinoma to the eye and orbit,^{1–3} although uncommon, has been previously reported. We report a case of a recurrent chalazion, which, following biopsy, proved to be a metastasis to the eyelid in a patient with no previous history of malignancy. This case illustrates and highlights the importance of biopsying recurrent chalazions.

Case report

A 51-year-old Caucasian gentleman was referred by his general practitioner (GP) with a 4-month history of a progressively increasing lesion on the right lower lid that did not respond to topical antibiotic therapy. There was no associated lid pain or discharge. There was no significant past medical or surgical history. He had smoked 30 cigarettes per day for 30 years. Examination in the ophthalmology department revealed a typical chalazion and, therefore, routine incision and curettage was performed with the release of granulomatous material. The patient was subsequently discharged.

Four months following the initial treatment, he was re-referred by his GP as the lesion had not decreased in size. On examination, an 8 mm (L) \times 5 mm (H) \times 3 mm (D) right lower lid lesion was seen to extend to the lid margin associated with mild vascularization of the overlying skin (Figure 1). As the lesion had not responded to the initial treatment, we decided to perform a biopsy.

Histology showed a clear-celled epithelial neoplasm in which nests and cords of bland appearing cells were set within a rich sinusoidal vascular network (Figure 2).

The immunohistochemical profile was very suggestive of a carcinoma of primary renal cell origin. Investigation for a primary neoplasm was recommended.

In light of the histology report, an urgent urology opinion was sought. On further questioning, the patient denied any weight loss, abdominal pain, or swelling. Abdominal examination was unremarkable with no tenderness or masses.

A computerized tomography scan of the abdomen showed an 8.7 cm heterogeneous enhancing necrotic tumour in the upper and interpolar region of the right kidney (Figure 3). In addition, there was also a 2.3 cm right adrenal mass abutting close to the wall of the inferior vena cava.

Following discussion of the management options with the patient, a right radical nephrectomy and adrenalectomy was performed. Histology confirmed a clear-cell renal cell carcinoma with no lymph node or local vascular involvement.

Following recovery from the nephrectomy, we performed an excision of the right lower lid lesion with primary lid closure.



Figure 1 Picture of right lower lid lesion.

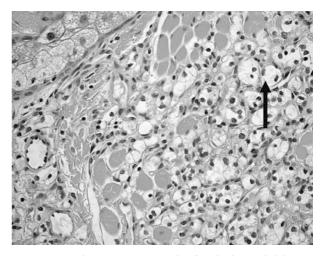


Figure 2 High-power micrograph of right lower lid biopsy showing clear cells (arrow) infiltrating skeletal muscle.

