## Sir, Choroidal neovascular membrane complicating traumatic choroidal rupture managed by intravitreal bevacizumab

We report a case of subfoveal choroidal neovascular membrane complicating traumatic choroidal rupture treated with intravitreal bevacizumab (Avastin). We are not aware of a similar, previous report.

#### Case report

A 30-year-old woman presented with a 3-week decrease in vision in OD. She had a history of blunt trauma to OD, 4 months back. Best-corrected visual acuity was counting finger 1 m OD and 6/6 OS. Fundus evaluation in OD showed juxtafoveal crescentic vertically oriented choroidal rupture with adjoining subretinal haemorrhage involving the fovea. Fluorescein angiography showed choroidal neovascular membrane (CNV) complicating choroidal rupture (Figure 1a). CNV complex with intraretinal oedema was seen on optical coherence tomography (OCT; Figure 2a). Central retinal thickness (CRT) was  $420 \,\mu$ m. Patient was advised a photodynamic therapy and an intravitreal Avastin. Financial constraints made her opt for Avastin. It was administered after obtaining a written informed consent.

Patient received intravitreal Avastin 1.25 mg/0.05 ml. Because of the persistence of retinal oedema on OCT, at 6 weeks, repeat injection was given.

At 3-month post treatment, visual acuity had improved to 6/36. Fluorescein angiography documented angiographic closure of CNV (Figure 1b). CRT had reduced by 173  $\mu$ m (Figure 2b). At 6 months, the findings were maintained.

#### Comments

Patients are at risk for the development of CNV months or years after their initial injury, because of damage to the Bruch's membrane.<sup>1</sup> Secretan *et al*,<sup>2</sup> retrospectively reviewed 79 eyes of 79 patients diagnosed with indirect choroidal rupture. Sixteen (20%) of the eyes developed CNV.

Laser photocoagulation, submacular surgeries, and photodynamic therapy alone or with intravitreal Avastin has been used for management of CNV in blunt and penetrating traumas.<sup>3–5</sup> Majority of the post-traumatic membranes are subfoveal, thus ruling out laser



Figure 1 (a) Pre-treatment angiogram shows staining of the choroidal rupture and pronounced leakage due to choroidal neovascular membrane. (b) A 6-month post-treatment angiogram shows the staining of choroidal rupture and scarred choroidal neovascular membrane.



Figure 2 (a) Pre-treatment optical coherence tomography shows CNV complex with intraretinal oedema. (b) A 6-month posttreatment optical coherence tomography shows resolution of the intraretinal fluid with a normal looking foveal contour.

photocoagulation as a treatment option. The result of submacular surgeries for choroidal neovascular membranes has been disappointing.<sup>3</sup>

In our patient, the CNV responded well over a 6-month period to the two injections of Avastin. The result suggests the use of intravitreal Avastin as monotherapy and merits further investigation for CNV complicating traumatic choroidal rupture.

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#### Sir,

### Retinal pathology in the fellow eye of patients presenting with wet age-related macular degeneration in the index eye

Preliminary guidance from NICE recommended that Lucentis (ranibizumab) should only be used for second eyes, that is, when the visual acuity in the fellow eye is worse than 6/12.<sup>1</sup> Age-related macular degeneration (AMD) is the commonest cause of blindness in the western world in the over-50 group, with anti-VEGFs showing benefit in the slowing or prevention of visual loss.<sup>2,3</sup>

We recently established the proportion of patients presenting with pathology and visual impairment, deemed as a visual acuity worse than 6/12, in the fellow eye.

A retrospective case note review of 166 patients with wet AMD was performed. Parameters recorded include diagnosis in the fellow eye and visual acuity at presentation. Of those with bilateral wet AMD, the index eye was determined as the most recently referred eye.

Of the 166 patients, 99 (60%) were female and 67 (40%) male. Of these, 45 (27%) had no abnormality in the fellow

eye at presentation. Therefore, 121 patients had fellow eye pathology. Of those with pathology, the majority (86/121, 71%) had dry AMD, and 26 patients (21%) had wet AMD. The remaining nine patients had amblyopia (4/121), myopic degeneration (4/121) or previous rhegmatogenous retinal detachment (1/121).

Fifty-six (34%) patients presented with a visual acuity worse than 6/12 in the fellow eye. The commonest condition associated with visual impairment was dry AMD (29/56, 48.3% of all impairment), comprising 34% of all cases of dry AMD. Wet AMD was the second commonest (19/56, 34%), comprising 73% of all cases of wet AMD.

Although the majority of patients had fellow eye pathology, a relatively small proportion presented with an associated visual impairment. The preliminary recommendations from NICE would have excluded over 60% of treatable lesions, that is, those with wet AMD and visual impairment in index eye, but no visual impairment in the fellow eye. Importantly, of the patients ineligible for treatment, 15% (16/110) developed CNV in the fellow eye while under the care of the macular clinic. We welcome the NICE final appraisal document, which recommends treatment for all treatable lesions with acuities worse than 6/12, regardless of fellow eye visual acuity.

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### Sir,

# Intravitreal ranibizumab for choroidal neovascularisation in serpiginous choroiditis

Serpiginous choroiditis is a rare idiopathic inflammatory disease affecting the retinal pigment epithelium, choriocapillaris, and inner choroids.<sup>1</sup> It is a progressive, insidious disease, usually bilateral and asymmetric. And when secondary choroidal neovascularisation (CNV) develops, visual loss is more prominent and prognosis is poor.<sup>2</sup> We report a case of CNV secondary to serpiginous choroiditis in which