

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

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 6/12.¹ 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.^{2,3}

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.¹ 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.² We report a case of CNV secondary to serpiginous choroiditis in which

intravitreal ranibizumab showed a significant therapeutic effect.

Case report

A 44-year-old woman presented with decreased visual acuity and metamorphopsia in her left eye for 1 month.

At the initial visit, her best-corrected visual acuity (BCVA) was 20/50 in the right eye and 20/40 in the left eye. Fundus examination showed peripapillary chorioretinal atrophy in both eyes and a geographic scar in the right eye and subretinal fluid with subretinal haemorrhage in the left eye (Figure 1a). Fluorescein angiography (FA) showed leakage in the left eye,

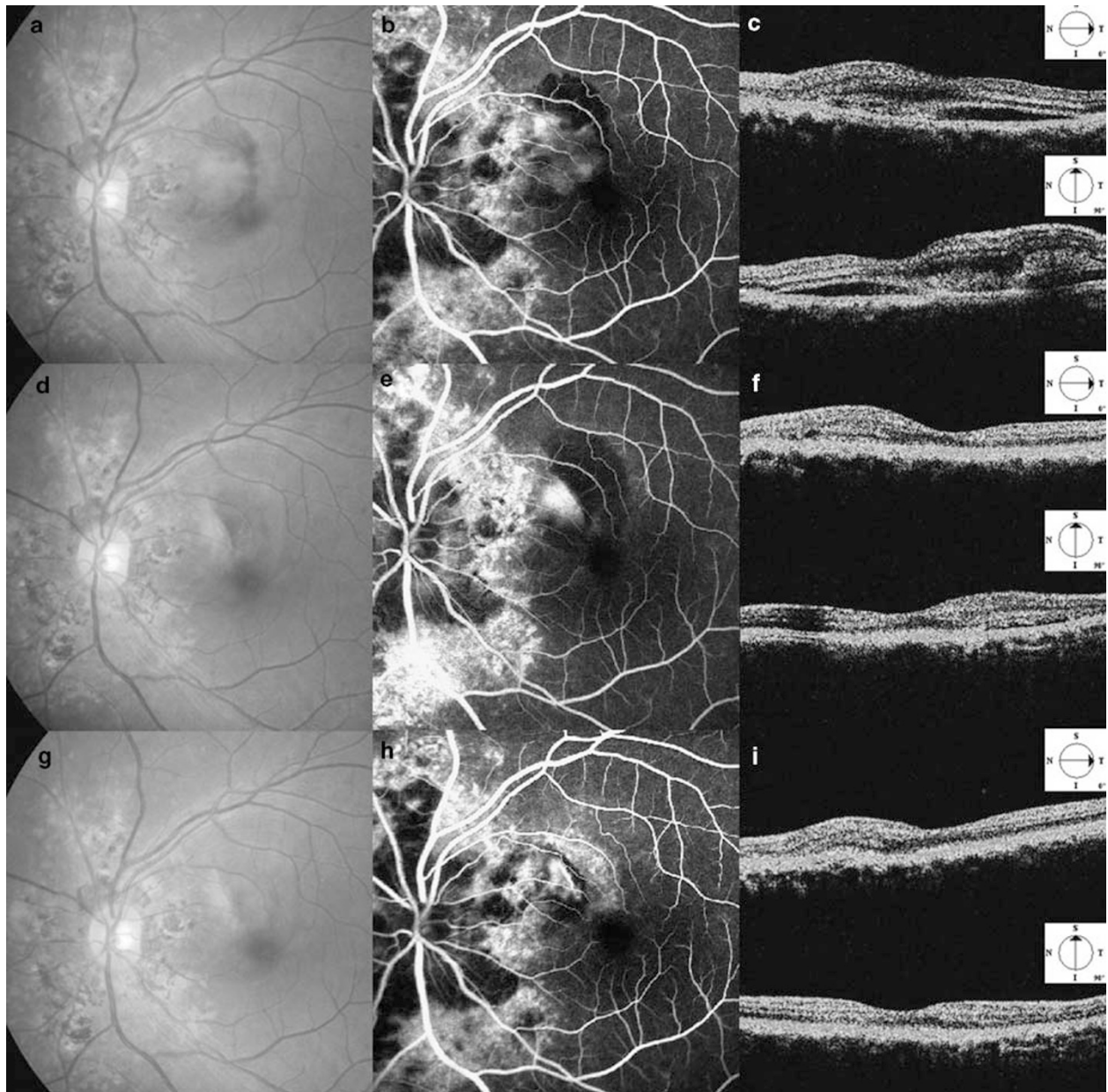


Figure 1 Fundus photographs, fluorescein angiography (FA) and macular ocular coherence tomography (OCT) of the left eye before treatment (a, b, c), at 6 weeks after first intravitreal ranibizumab injection (d, e, f), and at 2 months after second intravitreal ranibizumab injection (g, h, i). (a) Fundus photograph showed peripapillary chorioretinal atrophy and subretinal fluid with subretinal haemorrhage at juxtafoveal area in the left eye, suggesting the presence of CNV. (b) In FA, leakage confirmed CNV. (c) Macular OCT showed CNV with neurosensory detachment. (d) At 6 weeks after the first intravitreal ranibizumab injection, fundus photograph showed decreased subretinal haemorrhage and resolution of subretinal fluid. (e) FA revealed less leakage of fluorescein. (f) Macular OCT showed resolution of CNV and neurosensory detachment. (g) At 2 months after the second intravitreal ranibizumab injection, resolution of subretinal haemorrhage was shown. (h) FA showed no leakage but staining. (i) Macular OCT showed resolution of CNV and neurosensory detachment.

suggesting the presence of CNV (Figure 1b). Optical coherence tomography (OCT) showed subretinal fluid accumulation and retinal thickening with CNV (Figure 1c).

The risks and benefits of the intravitreal injection of ranibizumab were explained to the patient and an informed consent was obtained. The intravitreal injection of 0.5 mg of ranibizumab was done.

BCVA of the left eye improved to 20/25 in the following six months, although a remaining CNV leakage appeared on FA (Figure 1d–f). The intravitreal injection of ranibizumab was repeated. CNV regressed on FA and OCT at 2 months after the second injection (Figure 1g–i), with BCVA recovered to 20/20 and relief of metamorphopsia. The patient did not receive any systemic therapy for the following 6 months and there was no recurrence of CNV.

Comment

In serpiginous choroiditis, vision may become severely affected depending upon the degree of foveal involvement. If secondary CNV develops, visual loss may accelerate. Although an exact pathogenesis of CNV is unknown, ischaemic injury to choroids and the outer retina from inflammation of Bruchs' membrane and choriocapillaris may produce the proliferation of the choriocapillary endothelium.³

Laser photocoagulation has been tried for extrafoveal and juxtafoveal lesions. But in cases with CNV at subfoveal lesion, a laser treatment is not available. Recently, PDT with verteporfin has been tried.^{3–4} Ranibizumab has been used successfully for the treatment of CNV secondary to age-related macular degeneration.⁵

Although the underlying diseases were different, intravitreal ranibizumab for the treatment of CNV secondary to serpiginous choroiditis resulted in dramatic improvement of visual acuity and regression of CNV. We propose that repeated intravitreal ranibizumab injection may be a useful treatment in CNV secondary to serpiginous choroiditis. Long-term follow up and further studies are warranted to confirm the role of intravitreal ranibizumab in CNV.

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Sir, Surgical management of sclopetaria associated with macular hole in a young patient: long term results

We describe a case of sclopetaria occurring in a young male (10-year-old) shot by a high-velocity bullet (air-pistol) passing adjacent to the eye wall at close range.

The retinal examination showed an area of injury adjacent to the path of the missile in the inferior temporal quadrant characterized by the presence of retinal and choroidal haemorrhages (Figure 1a). A second area of injury remote from the path of the missile involved the macula area and caused a traumatic macular hole (Figure 1b and c). Visual acuity was R.E.: 20/20 and L.E.: 20/40. CT scan of the head and ultrasound of the globe and orbit were performed to rule out foreign body and ruptured globe.

As the risk of acute retinal detachment was low,¹ we thought that observation was the appropriate management of this injury.

However, patient noted a progressive visual loss. The BCVA decreased to 20/100. At this stage, we decided to perform a three-port pars plana 20 gauge vitrectomy with triamcinolone-assisted peeling of the posterior hyaloid face from the posterior pole (Kenalog, Squibb-Mayers). Indocyanine green dye (0.5%) was instilled over the macula, and after removal of the ICG, the retinal internal-limiting membrane (ILM) was peeled. Gas tamponade with perfluoropropane was used and patient was asked to position himself facedown for 1–2 weeks. During the surgical procedure, a retinal break remote from the path of the missile in the superior temporal quadrant was detected and it was treated with the laser.

Sclopetaria^{1–3} may be a consequence of trauma by blunt object. In our case, the patient developed a progressive visual loss caused by a full-thickness macular hole. The injury is believed to result indirectly from transmission of shock waves through the wall of the eye.⁴ Vitreous surgery with ILM removal lead to hole closure and visual improvement (Figure 1e and f). The chorioretinal peripheral lesion healed with the development of white, fibrous scar tissue (Figure 1d).

BCVA 2 years later was 20/26. The last OCT examination confirmed the complete closure of the macular hole: the retina has regained the normal foveal contour.