

but mainly peripapillary distribution would be unusual if that was the case.

In this child, malnutrition was precipitated by an episode of choking and a subsequent fear of this occurring again. A similar case has been reported previously in the literature in a 10-year-old boy with good recovery of neurological function 1 month after treatment.³

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Sir, Increased and persisted subretinal haemorrhage after photodynamic therapy for choroidal neovascularization secondary to angiod streaks

Increased subretinal haemorrhage after photodynamic therapy (PDT) for choroidal neovascularization (CNV) secondary to angiod streaks

Angiod streaks are discontinuities in thickened and calcified Bruch's membrane.¹ CNV has been reported to occur in patients with angiod streaks² and, because of macular involvement and central visual loss, the visual prognosis is usually poor.^{1,2} The treatment efficacy of PDT for angiod streaks with CNV remains under evaluation.^{3–5} In this study, we report a case of increased subretinal haemorrhage after PDT for CNV secondary to angiod streaks with a final disciform scar formation.

Case report

A 52-year-old male was referred to our clinic due to image distortion of his right eye for months. The fluorescein angiography disclosed an extrafoveal CNV lesion secondary to angiod streak (Figure 1a and b). The greatest linear dimension (GLD, including the CNV, the area of leakage, and areas of blocked fluorescence in the lesion) of the CNV was 700 µm. He was known to suffer from angiod streaks, which had led to visual loss in his left eye due to disciform macular scar. The best-corrected Snellen visual acuity (BCVA) was 6/8.6 in his right eye and 6/60 in the left eye. Verteporfin PDT was performed on the right eye to treat the extrafoveal CNV. Unfortunately, increased subretinal haemorrhage was noted 2 months after PDT and it persisted for 20 months during follow-up. The CNV was progressively enlarged to 3000 µm associated with subfoveal involvement

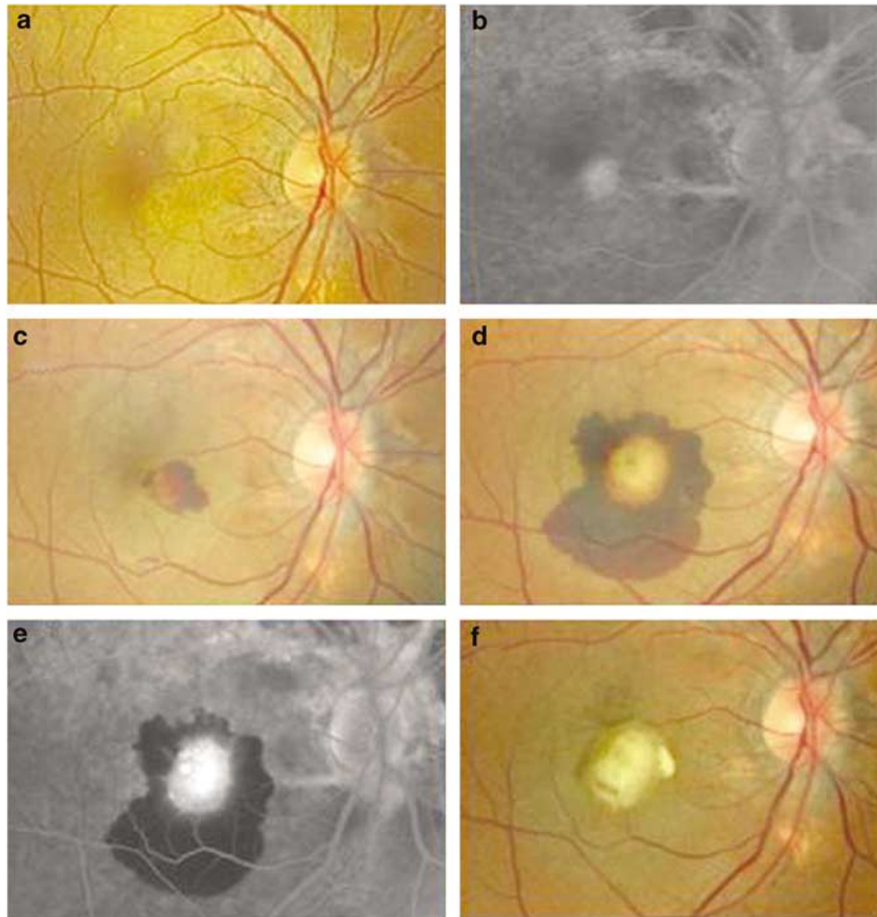


Figure 1 The colour fundus photograph and fluorescein angiography (FA) of patient with angioid streak. (a) The colour fundus photograph before photodynamic therapy (PDT) shows angioid streaks with subretinal fluid accumulation. (b) The FA shows extrafoveal choroidal neovascularization (CNV) with late leakage. (c) The colour fundus photograph 2 months after initiation of PDT shows increase of subretinal haemorrhage (d and e): The colour fundus photograph 6 months after initiation of PDT shows increased subretinal haemorrhage with enlarged CNV with leakage. (f) Disciform scar formation 22 months after initiation of PDT.

(Figure 1c–e). He received three retreatments in the following 22 months. Finally, a macular disciform scar with the BCVA of 6/60 was noted (Figure 1f).

Comment

The treatment efficacy of PDT for angioid streaks with CNV remains under evaluation.^{3–5} Recently, a review of patients with macular CNV secondary to angioid streaks disclosed that the functional and anatomic results of PDT were not satisfactory, even when retreatments were performed within 3 months.⁵ In our study, the CNV was progressively enlarged with subfoveal involvement despite the use of PDT and the visual outcome was poor due to disciform transformation of the CNV.

The increased subretinal haemorrhage was observed 2 months after PDT and it persisted for 20 months. Puig *et al*² reported that subretinal haemorrhage was found in 59% of eyes with angioid streaks, either with or without

CNV. A high risk of subretinal haemorrhage after minor trauma was found in eyes with angioid streaks,² probably due to the primary fibre abnormality of Bruch's membrane with deposition of metal salts resulting in secondary brittleness.¹ Retinal haemorrhage after verteporfin PDT in treatment of CNV had been reported in the past.^{6,7} Recently, histological damage to choriocapillary endothelial cells was found in eyes treated with PDT.⁸ The structural,⁹ angiographic,⁸ and biological effects⁸ induced by verteporfin therapy may cause increased subretinal haemorrhage after treatment.⁸

It is difficult to correlate the increased and persisted subretinal haemorrhage with the verteporfin treatment in our patient. However, the disease entity predisposing to haemorrhage,² compounded by the possible structural and biological impact of PDT,^{8,9} may have caused the increased and persisted subretinal haemorrhage in our study. It should be noted that the damage induced by the

persisted subretinal haemorrhage could have been responsible for the poor visual prognosis after PDT,¹⁰ except the progressive enlargement and disciform transformation of the CNV.

We report a case of increased and persisted subretinal haemorrhage after PDT for CNV secondary to angioid streaks. The visual prognosis was poor despite retreatments of PDT.

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Sir,

Acute subretinal macular haemorrhage following an accidental electrical shock

Ocular complications of electrical trauma are widely reported. This presentation of a severe macular subretinal haemorrhage following an electrical shock has not been described previously.

Case report

A 58-year-old man presented with a 24 h visual deterioration in his left eye following an accidental electrical shock (230 V AC) to his left forearm, lasting a few seconds. There was no relevant past ocular or medical history. His left visual acuity was reduced to counting fingers. Fundus examination showed a large, elevated subretinal haemorrhage at the macula (Figure 1), with no other abnormalities. The right eye was normal, with no risk factors for choroidal neovascularisation such as drusen or retinal pigment epithelial changes. Fluorescein and indocyanine green angiography were not performed. The haemorrhage took several months to resolve (Figure 2). At 2 years, a dense macular scar remains (Figure 3) with visual acuity of counting fingers. There are no lens opacities or other abnormalities noted.

Comment

The first documented case of electrical trauma to the eye was reported by St Yves in 1722 when a field worker developed cataracts following a lightning strike.¹ Since then, ocular complications of electrical trauma have been widely reported.