Although effective prophylactic treatment of recurrent ODEMS with prednisolone and azathioprine sodium has been described, the number of reported cases to date are insufficient to determine whether immunosuppression is the treatment of choice.[3]

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Sir,

Acute suprachoroidal haemorrhage in a patient treated with streptokinase for myocardial infarction

The risk of death following an acute attack of myocardial infarction has been shown to be reduced by 10–50% following thrombolytic therapy.[1] However, systemic administration of these agents can cause a variety of haemorrhagic complications. We describe a patient who lost all vision in one eye due to suprachoroidal haemorrhage.

Case report

A 78-year-old hypermetropic woman presented to the accident and emergency department with chest pain. Her blood pressure was 140/80 mmHg and the results of a full blood count and urea and electrolytes were normal. An electrocardiogram confirmed an anterior myocardial infarction. She was given 300 mg aspirin and after ruling out contraindications to thrombolysis, 1.5 million units of streptokinase were administered intravenously in 100 ml of normal saline over 1 h. Eight hours later she complained of blurred vision in her left eye. The best corrected visual acuities were hand movements in the left eye and 6/9 in the right. Examination of both anterior segments were normal. Ophthalmoscopy showed a left superior retinal detachment with peripapillary subretinal haemorrhage and preretinal haemorrhage inferior to the fovea. No retinal breaks were identified. The right fundus was normal.

Twenty-four hours later, large 'kissing choroidals' (Fig. 1) were seen in the left eye, dropping the visual acuity to light perception. The iris lens diaphragm was pushed forward causing shallowing of the anterior chamber and a secondary angle closure glaucoma. The intraocular pressures (IOPs) were 58 mmHg in the left eye and 15 mmHg in the right. B-scan ultrasonography confirmed the presence of extensive choroidal detachments, a superotemporal retinal detachment and suprachoroidal haemorrhage.

The raised IOP was treated with oral acetazolamide and a topical prostaglandin synthetase inhibitor. Two days later the left visual acuity was light perception but the anterior chamber had deepened and the choroidal detachments were smaller. The IOP was 14 mmHg, and all ocular hypotensives were stopped. A B-scan 2 weeks after streptrokinase treatment showed an extensive left retinal detachment, underlying resolving choroidal detachments and suprachoroidal haemorrhage. The visual acuity, anterior chamber depth and IOP remained unchanged.

At 6 weeks follow-up the visual acuity had dropped to no perception of light. A repeat B-scan showed dense intra-gel haemorrhage. The choroidal detachments and suprachoroidal haemorrhage had almost settled; the retinal detachment persisted. At the final follow up, 4 months after streptokinase treatment, there was still no fundal view due to persistent vitreous haemorrhage. A B-scan showed the choroidal detachment had settled significantly and the retina was flat. Vision was still no light perception.

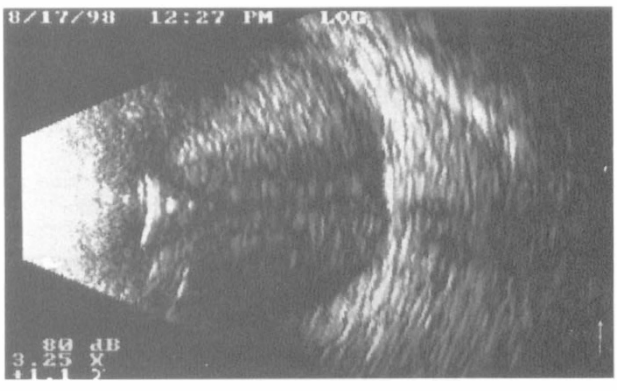

Fig. 1. *B-scan ultrasonography of the left eye showing large 'kissing choroidals'*

Comment

Sudden visual loss due to thrombolytic therapy is rare. In this case it is necessary to explain the occurrence of combined retinal and choroidal detachment. It is possible that the patient developed rhegmatogenous retinal detachment causing hypotony leading to sudden choroidal detachment and suprachoroidal haemorrhage after treatment with streptokinase. However, we failed to find any retinal breaks and the retina was flat at follow-up. Thus the diagnosis of combined exudative retinal detachment with suprachoroidal haemorrhage is more likely.

Although rare, combined exudative retinal detachment and choroidal detachment have been reported previously in cases associated with nanophthalmos,[2] scleritis,[3] carotid cavernous fistula,[4] orbital pseudotumour[5] and following glaucoma filtering surgery.[6]

Of course it is impossible to prove a definite causal relationship between treatment with streptokinase and the ocular symptoms; however, the short time interval between treatment and the suprachoroidal haemorrhage is highly suggestive. There have been several recent reports of visual loss after the use of thrombolytic agents but these involved tissue plasminogen activator.[7,8]

To our knowledge this is the first case report of visual loss due to suprachoroidal haemorrhage following the use of streptokinase in a patient without previous ocular surgery.

We would like to thank Mr Peter Good of Birmingham and Midland Eye Centre for performing the ocular ultrasound.

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Sir,

Valsalva retinopathy associated with blowing balloons

Valsalva retinopathy is an uncommon condition which occurs in response to the Valsalva manoeuvre. It is characterised by the spontaneous appearance of unilateral macular haemorrhages. We report a case of Valsalva retinopathy associated with the blowing up of a party balloon and discuss its management.

Case report

A 47-year-old man presented with an acute reduction of central acuity in his left eye whilst inflating a long party balloon. He was otherwise well with no past medical or past ophthalmic history of note. Snellen acuity was 6/24 left eye and 6/6 right eye. Intraocular pressures were 16 mmHg bilaterally. There was no relative afferent pupil defect and anterior segment examination was unremarkable.

Dilated fundal examination revealed deep and superficial retinal haemorrhages scattered in the posterior pole of the left eye (Fig. 1a). There was no evidence of any preretinal haemorrhages, cotton wool spots or macular oedema. Investigations including blood pressure, urinalysis, full blood count and clotting studies were all normal. Fluorescein angiography of the left fundus demonstrated masking of the background choroidal fluorescence by the haemorrhages. There was no leakage from the retinal vessels.

At 4-week follow-up, visual acuity of the left eye improved to 6/9 and dilated fundal examination revealed marked resolution of the haemorrhages (Fig. 1b). At the 8-week follow-up, visual acuity returned to 6/6 in the left eye and the retinal haemorrhages had completely resolved with no evidence of any retinal sequelae.

Comment

Valsalva haemorrhagic retinopathy is characterised by unilateral macular haemorrhages occurring in healthy individuals due to a rapid rise in intrathoracic or intra-abdominal pressure against a closed glottis or the physiological equivalent.[1] Due to the absence of valves in the venous system, this pressure is transmitted to the eye causing rupture of the superficial retinal capillaries.

Valsalva haemorrhagic retinopathy has been described following vigorous sexual activity,[2] aerobic exercise,[3] weight-lifting,[4] constipation,[5] dental and prostate surgery.[6,7] This is the first reported case of