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EJK Lee and EJ Hollick

Department of Ophthalmology, King's College Hospital, Denmark Hill, London SE5 9RS, UK

Correspondence: EJK Lee,
Tel: +44 203 299 9000; Ext. 3797;
Fax: +44 203 299 3738.
E-mail: edwardlee@doctors.org.uk

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Sir,

An unusual presentation of Terson's syndrome

Terson's syndrome is an oculo-cerebral condition of retinal and vitreous haemorrhage most commonly associated with subarachnoid haemorrhage (SAH). It was first described by Albert Terson in 1900.[1] Intraocular haemorrhages have been documented in 10–40% of patients with SAH.[2] This figure may be substantially higher considering the mortality associated with this condition. Ocular haemorrhages tend to be bilateral but can be uniocular. Early studies suggested that the size, number, and distribution of haemorrhages may be of relevance to the degree of intracranial haemorrhage.[3,4] It has been found that any type of intraocular haemorrhage in patients with SAH may be associated with increased mortality, although retrospective studies confirm that vitreous haemorrhage is an indicator of poor prognosis in SAH.[5,6] It has been postulated that the source of vitreous haemorrhage is due to damage to peripapillary tissue induced by intracranial hypertension transmitted via the intervaginal space of the optic nerve sheath.[7] Typically visual loss is noted only after the patient regains consciousness.

We describe a case of visual loss secondary to Terson's syndrome from anuerysmal rupture that presented to the ophthalmic emergency service without any classical symptoms or signs of SAH.

Case report

A 50-year-old gentleman presented to the Eye Casualty with gradual reduction in vision in his right eye over several days. He had had a 'flu like' illness approximately 3 weeks earlier with associated myalgia, sweats, pyrexia, vomiting, diarrhoea, and significant weight loss. This had resolved spontaneously. He took no medications and was a non-smoker. There was no significant past history.

On examination visual acuity was HM RE and 6/12 LE. Vitreous haemorrhage precluded the fundal view in the right eye, and the left eye showed multiple intra- and pre-retinal haemorrhages and disc swelling (Figure 1). An ultrasound scan of the right eye revealed no obvious fundal pathology. The rest of the ocular examination was unremarkable. Systemic examination was normal and it was noted that he had a cachetic appearance. It was felt that several of the retinal haemorrhages in his left eye

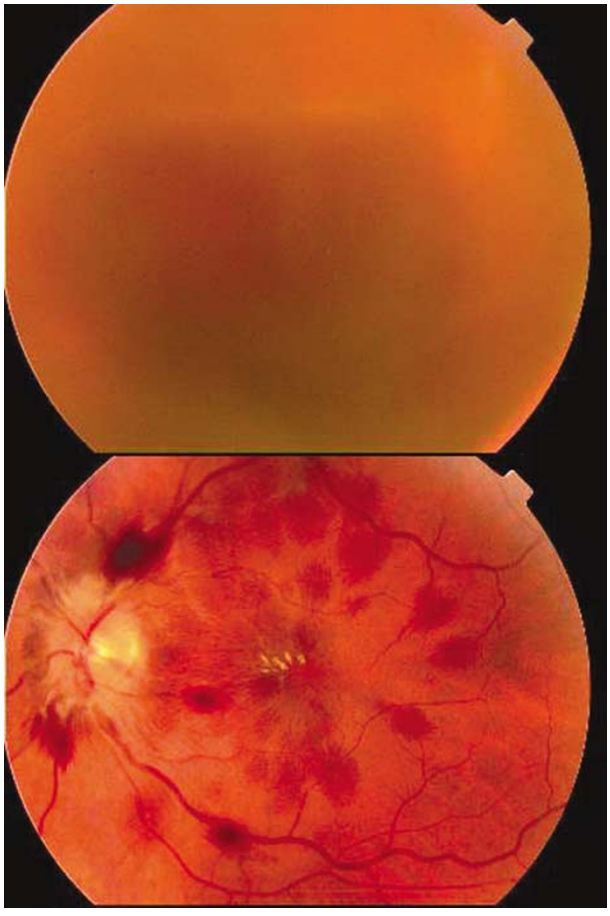

Figure 1 Fundus photographs of right and left eyes.

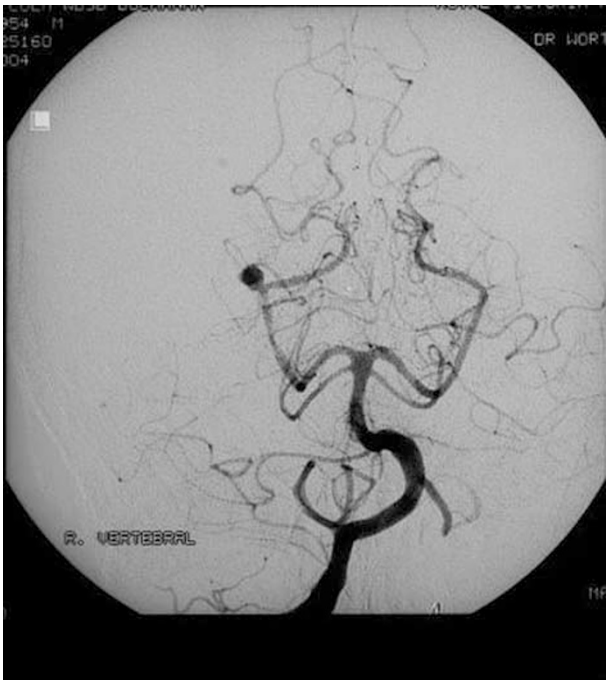

Figure 2 Angiogram showing PcomA.

resembled Roth's spots, considering his recent medical history differential diagnoses of leukaemia, aneamia, and bacterial endocarditis were suggested.

The patient was admitted for investigation; however, 3 days later, in the early hours of the morning he collapsed with loss of consciousness. A CT scan revealed a large intraventricular bleed. Subsequent cerebral angiography confirmed a large posterior communicating artery aneurysm (Figure 2). The patient proceeded to have coiling of the aneurysm with insertion of a ventriculo-peritoneal shunt. He is currently awaiting vitrectomy for non-resolving vitreous haemorrhage in his right eye. Vision is presently CF (PH 6/18) RE and 6/12 LE.

Comment

A history of unconsciousness and headache is seen in 89% of patients with Terson's syndrome.[7] Our case is unusual with respect to its presentation—there were no classical symptoms of Terson's syndrome. Atypical presentations of Terson's syndrome have been described in past.[8–10] In these cases however, there was associated seizure activity or meningeal irritation near the time of visual loss. This case is unique in that the patient had no neurological symptoms until collapse. Considering the increased mortality that exists in Terson's syndrome associated with SAH,[5] there should be a high index of suspicion and close monitoring of patients with intraocular haemorrhage of unknown cause.[11] The lack of neurological features of SAH should not be a contraindication to radiological imaging. CT angiography may reveal intracerebral aneurysms despite no intracranial blood being present.[9] In conclusion, Terson's syndrome should be included in differential diagnoses of intraocular haemorrhage in patients without predisposing factors.

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S Subbiah, S Wilson and R Best

Department of Ophthalmology, Eye and Ear Clinic, Royal Victoria Hospital, Grosvenor Road, Belfast, Belfast, Co Antrim BT12 6BA, UK

Correspondence: S Subbiah
Tel: +44 2890 240 503;
Fax: +44 2890 330 744.
E-mail: shanu.subbiah@gmail.com

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