# When a bruise is not just a bruise

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#### **CASE**

A 58-year-old woman developed binocular diplopia after violently retching during an episode of gastroenteritis. She experienced discomfort over the left lower eyelid and then developed diplopia, maximal on left gaze.

On examination, there was restriction of left eye abduction. Visual acuity was normal. Her pupils were equal and reactive. She had no ptosis or proptosis, and fundoscopy was normal. An unenhanced CT scan of head was reported as normal and she was discharged home with a diagnosis of an idiopathic left sixth cranial nerve palsy. Two days later, a bruise started to appear just below the left orbit (figure 1). Over the next 6 days her diplopia spontaneously recovered.

She was reviewed in the neuro-ophthalmic clinic 3 months later. Examination was normal. On closer inspection of her earlier CT scan, there was an abnormality at the left orbital apex, suggestive of a vascular malformation (figure 2). She proceeded to have a spiral CT scan of the head and orbits with intravenous contrast (figure 3), confirming a small left orbital varix, which appeared smaller than in the previous scan.

### DISCUSSION

Orbital varices are rare venous malformations of the orbit, usually located at the orbital apex. They may present with intermittent diplopia or proptosis during Valsalva manoeuvres, or when bending forwards, due to engorgement of the varix. Periorbital ecchymoses may also



Figure 1 Left suborbital ecchymosis.



Figure 2 CT scan of head, which was initially reported as normal. On closer inspection, there is a left orbital apex anomaly.

result.<sup>1</sup> Complications from an orbital varix include acute thrombosis and intraorbital haemorrhage. The diagnosis is made by MRI or CT imaging, which demonstrates an increase in the size of the lesion during Valsalva.<sup>2</sup> Surgical intervention is recommended in cases of thrombosis, optic nerve compromise or progressive proptosis.

Our patient's case, like most idiopathic orbital varices, was probably congenital. Her presentation was in keeping with an acute orbital haemorrhage provoked by a



Figure 3 Contrast-enhanced CT scan of head 5 months later. This confirmed a left orbital varix, reduced in size compared with her previous scan.

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## **IMAGE OF THE MOMENT**

sudden rise in venous pressure, causing unilateral restrictive ophthalmoparesis and delayed suborbital ecchymosis. Because she did not have proptosis, the ophthalmoparesis closely resembled a sixth cranial nerve palsy. Periorbital ecchymosis should alert us to the possibility of orbital haemorrhage. We are also reminded that orbital pathology can easily be missed during CT reporting.

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