venous pulsation on optic fundoscopy. From day 6 after embolization, repeat lumbar punctures showed elevated pressure, but these were taken in a distressed state. Because of this distress and the normalization of her fundoscopic appearances, we refrained from further CSF pressure measurement. Three months posttreatment the patient was found to have mild left optic atrophy, a visual acuity of 6/6 for the right eye and 6/9 for the left, and near normal visual fields. Follow-up MRI of the brain at 3.5 months showed no new abnormality and complete occlusion of the pial AVM.

Discussion
The few reports on BIH and its association with AVM have described the condition in adults (Barrow 1988, Rosenfeld et al. 1991) and some in adolescents (Kamite et al. 1994).

Two factors are thought to play a role in the pathophysiology of intracranial hypertension in the context of an unruptured AVM. First, high pressure distal to the fistula may inhibit venous return from the surrounding brain. This may increase cerebral blood volume and produce raised intracranial pressure. Second, high venous pressure due to the fistula may result in a reduction of CSF absorption across the arachnoid villi with subsequent high CSF pressure (Weisberg et al. 1977, Barrow 1988, Chimowitz et al. 1990).

Surgical excision of the AVM has been reported to give good results in relieving intracranial hypertension (Barrow 1988, Chimowitz et al. 1990, Kamite et al. 1994). In some patients, such as the one presented here, an endovascular approach with embolization may be the preferred method of treatment.

We report the first child of less than 10 years of age presenting with clinical BIH, possibly caused by a pial AVM, and treated by embolization. Although medication and lumbar CSF drainage were also used in this child, we are of the opinion that embolization of the AVM with Onyx played the crucial role in her recovery by obliterating the likely cause of her raised intracranial pressure.

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References


Erratum
‘Architecture of the medial gastrocnemius in children with spastic diplegia’
Shortland et al.
DMCN 43: 796–801.

The version of the above article published in the December issue contained a number of errors. These resulted from the word ‘fibre’ being transposed to ‘fascicle’. We regret these errors, and will reprint the paper in full in the March issue.