

Spontaneous subdural haemorrhage in a child with bilateral middle cranial fossa arachnoid cysts

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DESCRIPTION

A 9-year-old previously healthy boy presented to the emergency room with a 3-week history of progressive headaches and intermittent vomiting without history of preceding trauma. The neurological examination was non-focal. A CT revealed a large, right-sided subdural haemorrhage of mixed signal intensity and a midline shift in the absence of superficial swelling or fracture (figure 1). Bilateral middle cranial fossa arachnoid cysts were detected without intracystic haemorrhage. An MR angiography revealed no evidence of vascular malformation. The patient underwent emergent drainage of the subdural haemorrhage with stable neuroimaging at the 1-year follow-up. Spontaneous subdural and intracystic haemorrhage in association with intracranial arachnoid cysts has been previously reported in association with larger cyst size.¹ Small bridging vessels located between dura and outer cyst membrane are generally considered the most likely source of haemorrhage based on neurosurgical experience.² Patients with symptomatic arachnoid cysts can safely undergo a key-hole craniotomy and drainage procedure with reported success.³ Our case highlights the association between a subdural haemorrhage and an intracranial arachnoid cyst even in the absence of trauma or intracystic haemorrhage that is worthy of further study regarding incidence and pathophysiological mechanisms.

Learning points

- ▶ Intracranial arachnoid cysts are most often incidental findings but in rare cases may be associated with a subdural haemorrhage in the absence of trauma.
- ▶ Microsurgical approaches may be warranted for symptomatic patients with middle cranial fossa arachnoid cysts.

Contributors All authors have contributed equally to the design and construction of the case report. All authors have reviewed its content prior to submission.

Competing interests None.

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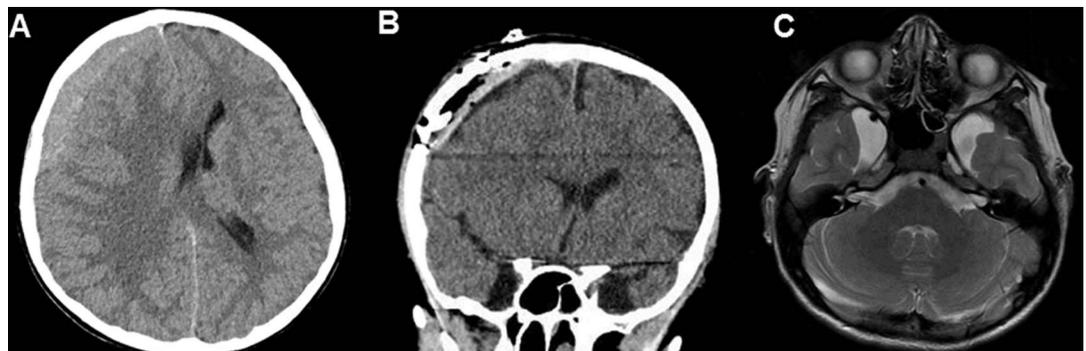


Figure 1 (A) Non-contrast axial CT reveals subdural haemorrhage of mixed signal intensity with midline shift. (B) Postoperative CT showing resolution of subdural haemorrhage with postoperative changes and bitemporal arachnoid cysts. (C) Axial T2-weighted MRI demonstrating bitemporal arachnoid cysts.

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