

## The developmental venous anomaly associated with the cavernous malformation

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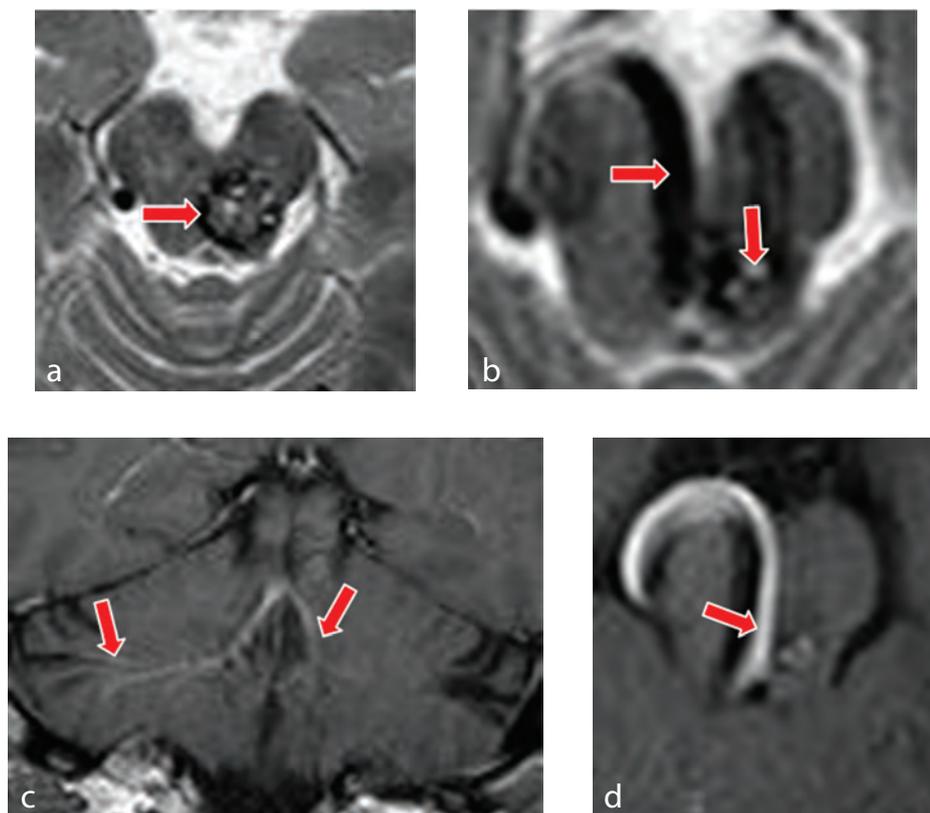
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A magnetic resonance imaging (MRI) study was ordered in a 32-year-old man with a 6 month history of double vision and confirmed left abducens nerve palsy on neurological examination. Non-enhanced T1 and T2-weighted images revealed the presence of a cavernous malformation (CM) in the left lateral aspect of the mesencephalon (mostly in the left inferior colliculus), asso-

ciated with a large blood vessel in the close vicinity of the CM, which corresponded to the collector vein of the developmental venous anomaly (DVA), also known as venous angioma (Figure A, B). The contrast-enhanced T1-weighted images showed small dilated medullary veins of the DVA in both cerebellar hemispheres and a large collector vein draining toward the deep venous system, also visualised on non-enhanced images (Figure C, D). The neurosurgeon suggested neuro-radiological follow-up. The prevalence of DVAs associated with CM can be underestimated even when high field MR is used. Based on MR imaging and intraoperative findings, Wurm et al. identified 25.9% patients with CM who had associated DVA (1). Although CMs have a relatively benign nature, surgery may be recommended when they become symptomatic (most frequently associated with seizures, less frequently with neurological deficit), or if bleeding occurs. In the present case we did not find evidence of recent intracerebellar bleeding. When surgical intervention is ordered and if the DVA is in a close vicinity to the CM, the DVA should be spared in order to prevent the development of venous infarction due to resection of the main collector vein (2). Contrast-enhanced MRI has the most important role in detection of a DVA associated with a CM, since it may be invisible on non-enhanced MRI.



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