

## De Novo Postoperative Simple Cerebellar Cyst

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**Abbreviations Used:** CSF, cerebrospinal fluid; CT, computed tomography; MR, magnetic resonance

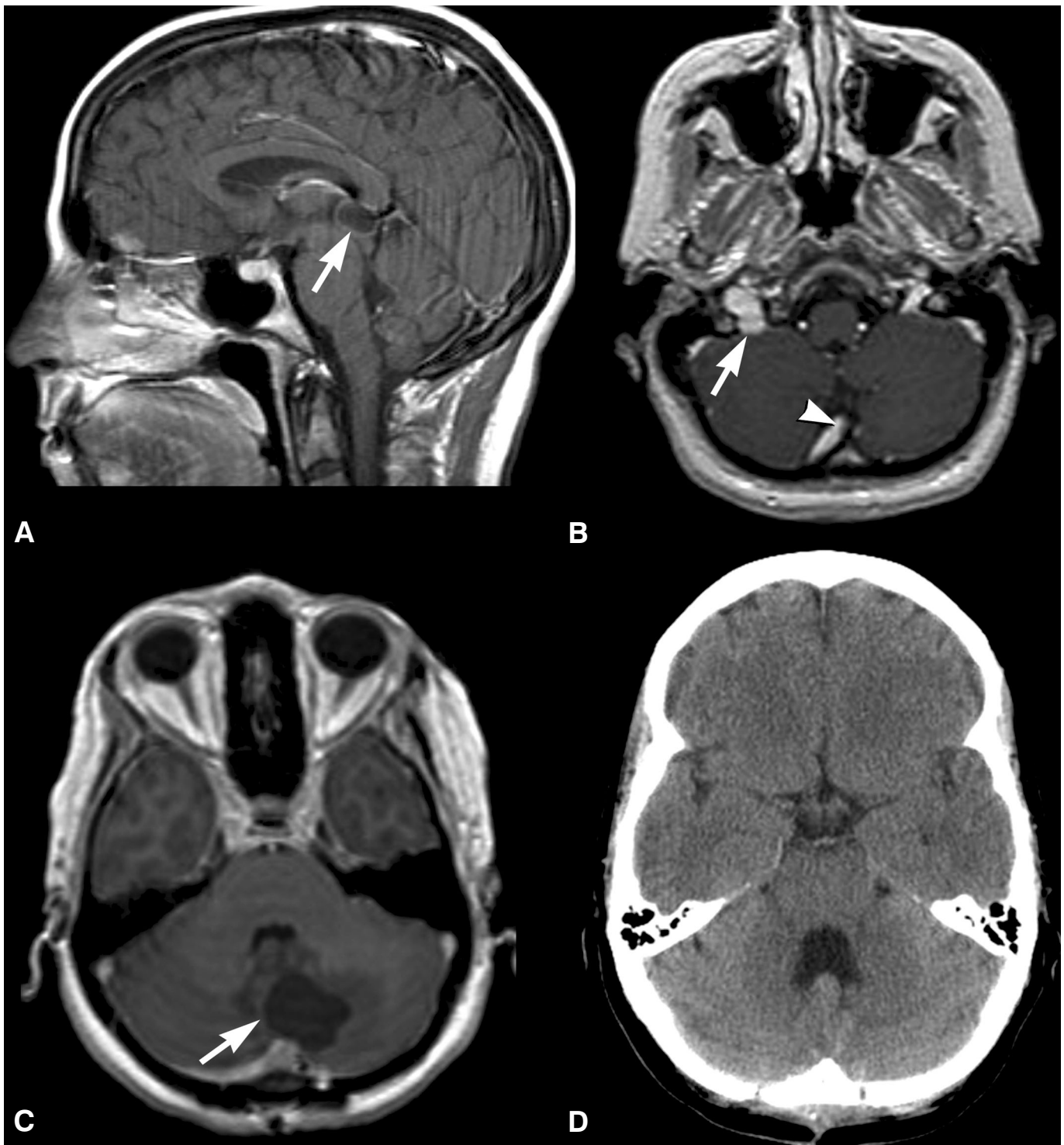
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We could find no report in the literature similar to the following case, nor had any neurosurgeon in our institution previously encountered such a case.

A 45-year-old woman who sought treatment for symptoms of tectal compression and intermittent hydrocephalus underwent MR imaging. A sagittal contrast-enhanced T1-weighted MR image (*Panel A*) showed a pineal cyst (*arrow*) compressing the tectum. An axial contrast-enhanced T1-weighted MR image (*Panel B*) showed a dominant occipital sinus (*arrowhead*) draining into the jugular bulb (*arrow*).

During a supracerebellar infratentorial approach, bleeding from the dominant occipital sinus resulted in its sacrifice. A watertight dural closure was not performed. Postoperative MR imaging was unremarkable (*not shown*). The patient underwent placement of a lumboperitoneal shunt to manage a CSF leak. Six weeks after surgery her examination was normal. During the eighth week after surgery, she reported headaches, nausea, vomiting, dizziness, and unsteadiness. An axial contrast-enhanced T1-weighted MR image obtained at that time (*Panel C*) showed a nonenhancing, 2.8-cm cerebellar cyst (*arrow*) with no diffusion restriction associated with surrounding edema of the fourth ventricle. Laboratory examination was unremarkable. A presumptive atypical abscess was diagnosed.

Intraoperatively, we encountered a cyst with no evidence of infection. The cyst, which was under pressure, was fenestrated to the cisterna magna, and the lumboperitoneal shunt was externalized. Pathological examination revealed



degenerative white matter. Cultures remained negative. She never received antibiotics. Her externalized shunt was removed, and she was discharged home intact. Three months after surgery, she was normal. An axial nonenhanced CT scan (*Panel D*) confirmed resolution of

the cerebellar cyst and fourth ventricular hydrocephalus ex vacuo.

We considered atypical abscess to be the most likely diagnosis. Ultimately, we are left with the diagnosis of a simple cerebellar cyst. We suspect that alteration in venous drainage related to

ligation of the large occipital sinus, in concert with altered CSF flow from the lumboperitoneal shunting, may have played a role.