Teaching NeuroImages:

Central neurocytoma

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Figure CT and MRI scans of the brain show a central gangliocytoma

Axial ([A] axial CT without contrast, [B] axial T2-weighted MRI without contrast), sagittal ([C] sagittal T2-weighted MRI with contrast), and coronal ([D] coronal T1-weighted fast low-angle shot MRI with contrast) views show a $5 \times 5 \times 4$ -cm cystic mass resulting in hydrocephalus. Incidentally, an approximate 2-cm displacement of the cerebellar tonsils is evident (C), consistent with a Chiari I malformation. The presentation of amenorrhea can be attributed radiographically to the increased intracranial pressure reflected by the enlarged suprasellar cistern and by the direct contact of the mass with the hypothalamus.

A woman in her mid-20s presented with a 6-month history of worsening headaches, amenorrhea, and nausea. Neurologic examination demonstrated word-finding difficulties, mild right-sided weakness of the upper and lower extremities, and mild right-sided neglect. Imaging revealed a complex, cystic, heterogeneously enhancing mass in the left lateral ventricle extending to the foramen of Monro (figure). Pathology after surgical resection was consistent with a central neurocytoma. This benign tumor, comprising 0.25%–0.5% of all brain tumors, typically affects young adults and arises from subependymal neural

progenitor cells. Treatment consists of surgery and radiation therapy, and generally carries a favorable prognosis.^{1,2}

AUTHOR CONTRIBUTIONS

Dr. Smith-Cohn: case report concept, design and critical revision of content, takes responsibility for the data, the analyses and interpretation, and the conduct of the case report. Dr. House: critical revision of the manuscript content. Dr. Anzai: critical revision of the manuscript content.

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