NEUROIMAGES

Surgical treatment of chiasmal glioma in neurofibromatosis 1

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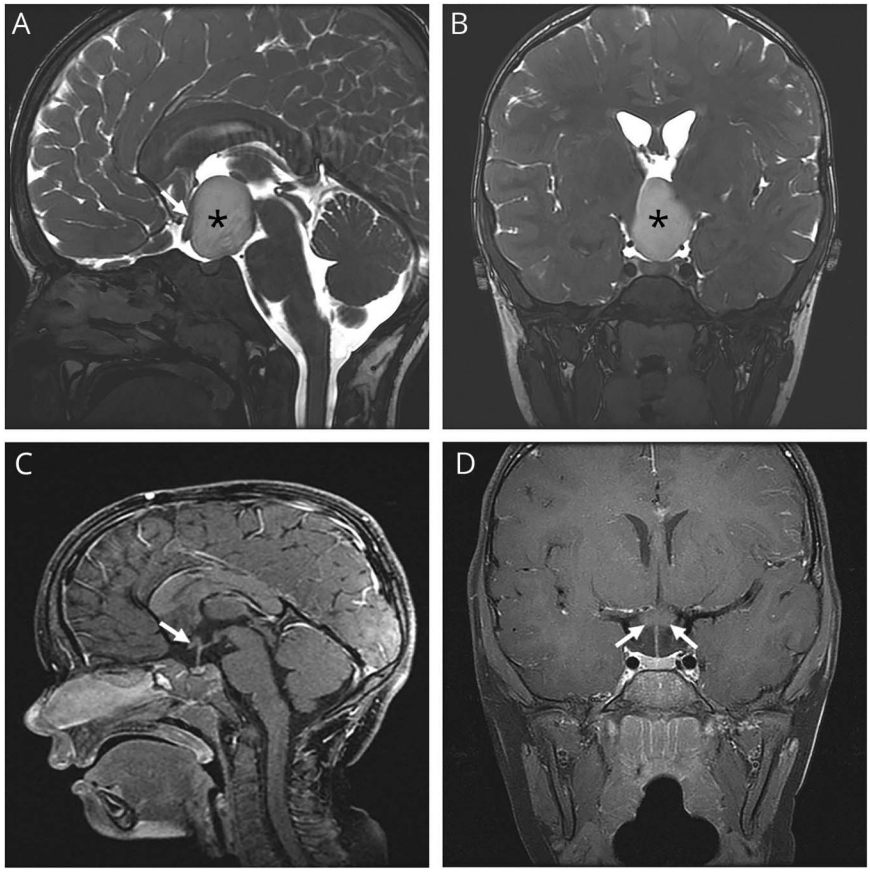
A 3-year-old boy with neurofibromatosis 1 had 20/40 acuity OU with normal color vision, confrontation visual fields, and optic nerves. MRI showed a large mass in the suprasellar cistern with superior and anterior displacement of the chiasm (figure, A and B). He underwent transcallosal surgical resection of the tumor, with pathology demonstrating low-grade glioma. Six months later, visual acuity was 20/25 OU, with normal color vision and confrontation fields. MRI showed restoration of normal suprasellar anatomy (figure, C and D). Surgical resection can restore vision when an optic pathway

Figure Chiasmal glioma



(A) Preoperative sagittal MRI shows large egg-shaped chiasmal glioma (asterisk) filling the suprasellar cistern. The chiasm (arrow) is stretched and draped over the anterior aspect of the mass. (B) Preoperative coronal MRI shows large suprasellar mass (asterisk). (C) Postoperative sagittal MRI shows restoration of the normal suprasellar anatomy and normal position of the chiasm (arrow). (D) Postoperative coronal MRI shows normal suprasellar anatomy with residual chiasmal enlargement (arrows).

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glioma extends downward into the suprasellar cistern to extrinsically compress the chiasm.[1,2]

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Disclosure

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Michael C. Brodsky, MD	Departments of Ophthalmology and Neurology, Mayo Clinic, Rochester, MN	Patient care, data collection, clinical interpretation, manuscript preparation
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