Pilocytic astrocytoma with anaplasia arising from the optic chiasm in a very elderly patient

Figure MRI and pathology

T1-weighted images show moderately enlarged optic chiasm (A, arrow) with contrast enhancement (B, C, arrows). Biopsy (D) reveals elongated cells with anaplasia, occasional Rosenthal fibers, microvascular proliferation, and necrotic foci. The *BRAF* V600E mutation was not detected by immunohistochemistry (Spring Bioscience, Pleasanton, CA; monoclonal antibody). Bar = 20 μ m.

An 81-year-old man presented with a 3-week history of impaired visual acuity (100/200 right eye, 2/200 left eye). He had a central scotoma (left eye) and bitemporal hemianopsia, with no abnormality in the optic discs. Cranial MRI suggested a tumor predominantly located at the optic chiasm and extending to the optic nerves, identified pathologically as pilocytic astrocytoma with anaplasia (PAA) (figure). He received temozolomide (for 14 months) and irradiation, but the tumor eventually extended to the hypothalamus. This unusual case of histologically proven PAA demonstrates an origin from the optic chiasm,¹ which is extremely rare in the elderly.²

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