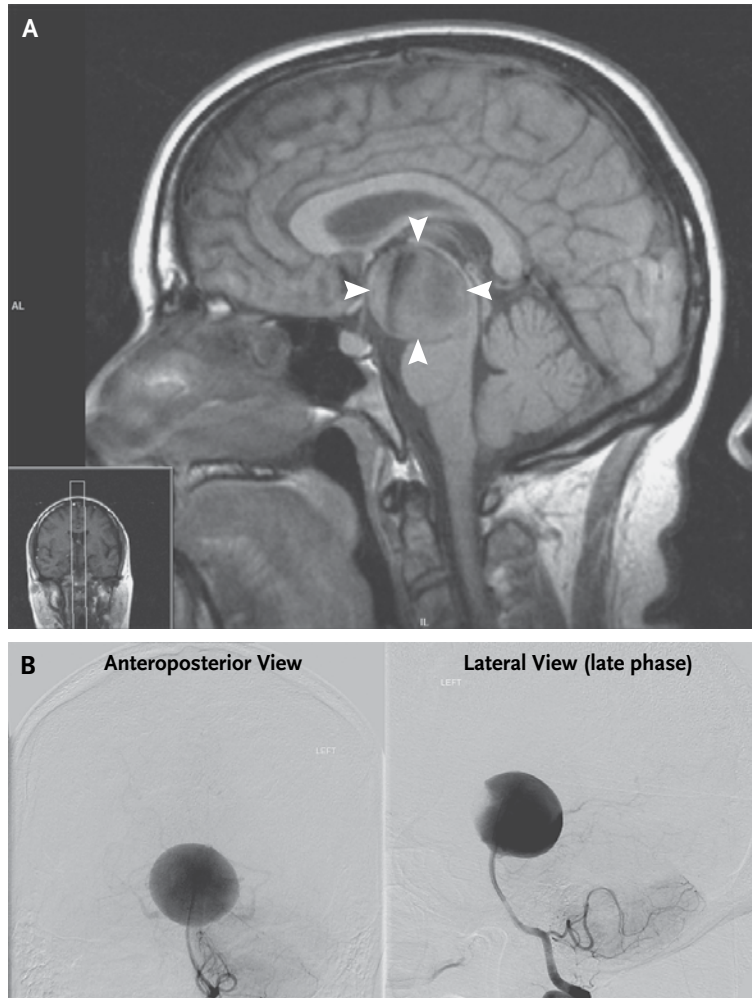


Giant Basilar-Artery Aneurysm



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A 46-YEAR-OLD RIGHT-HANDED WOMAN PRESENTED WITH A 3-MONTH HISTORY OF OCCIPITAL HEADACHE, progressive confusion, and personality change. Neurologic examination revealed mildly impaired smooth-pursuit eye movements, mildly impaired walking with a tandem gait, and a score of 30 out of 38 on the Kokmen Short Test of Mental Status (with a score of ≤ 29 indicating dementia). Computed tomography of the head revealed a circumferential midbrain lesion with mass effect and hydrocephalus. Magnetic resonance imaging (MRI) and magnetic resonance angiography revealed an aneurysm (3.5 cm by 4 cm) (Panel A, arrowheads; the inset indicates the imaging plane) at the bifurcation of the basilar artery, with compression of the midbrain and probably the mamillary body; these findings were confirmed by cerebral angiography (Panel B). Because the aneurysm incorporated the origin of both posterior cerebral arteries, it was not amenable to safe direct surgical clipping or to endovascular embolization. A surgical clip was used to occlude the basilar artery below the origin of the superior cerebellar arteries to reverse the flow and promote aneurysm thrombosis; this permitted adequate collateralization to the top of the basilar territory through the posterior communicating artery. The patient was discharged home 3 days after the procedure, with no neurologic deficits. Follow-up MRI 1 month later revealed persistent filling of the aneurysm through collateral vessels. She died suddenly 6 weeks after treatment, possibly owing to progressive hydrocephalus or delayed aneurysm rupture. No autopsy was performed.

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