Figure 1. Post-gadolinium T1-weighted MR images (A, C) demonstrate the recurrent glioblastoma multiforme within the left cerebral hemisphere with contiguous extension to the subependymal surface of the lateral and third ventricles, and thick nodular enhancement of the leptomeninges and infundibulum consistent with leptomeningeal metastases. Corresponding fluid-attenuated inversion recovery images (B, D) demonstrate abnormal sulcal and cisternal CSF hyperintensity consistent with leptomeningeal metastases and/or proteinaceous fluid.

Figure 2. Post-gadolinium T1-weighted sagittal (A) and coronal (B) images demonstrate diffuse nodular subependymal and leptomeningeal metastases from the patient's primary glioblastoma multiforme. Note the thick nodular metastatic leptomeningeal coating of the pituitary infundibulum.

Leptomeningeal and ependymal invasion by glioblastoma multiforme

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A 67-year-old man with a history of recurrent glioblastoma multiforme was admitted with the sudden onset of myoclonic

jerks, rigidity, and altered mental status. An MRI of the brain (figures 1 and 2) showed recurrence at the primary tumor site, with extensive leptomeningeal, ependymal, and subependymal metastases.^{1,2} The patient was transferred to hospice service and died 3 weeks later. An autopsy was not performed.

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