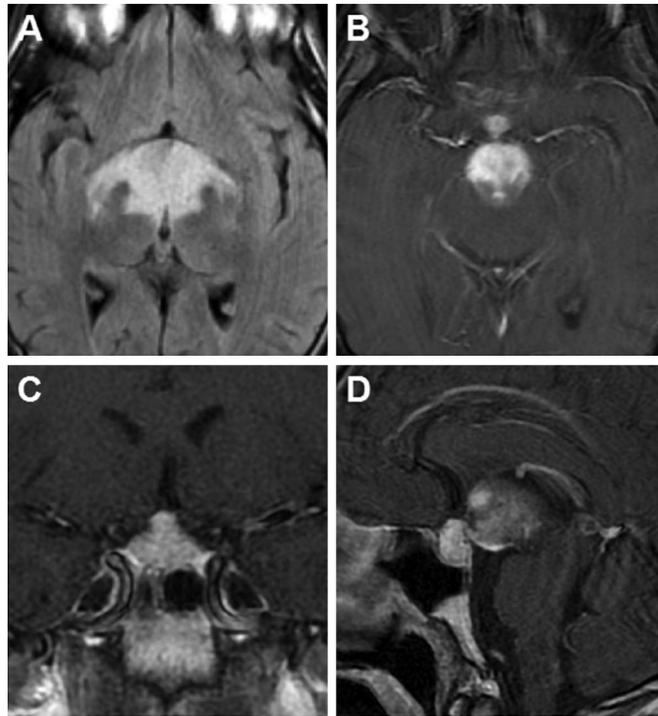


# Teaching NeuroImages: Ma2 encephalitis presenting as acute panhypopituitarism in a young man

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**Figure 1** Cerebral MRI on admission



Moderate edema in the hypothalamus and adjacent structures originating from an intensely enhancing, diffusely infiltrating process in the pituitary gland and the hypothalamus (A: axial fluid-attenuated inversion recovery; B–D: axial, coronal, and sagittal T1 with gadolinium).

A 21-year-old man presented with headache, hypotonia, hypothermia, and somnolence, deteriorating to a Glasgow Coma Scale score of 3 within days. Hormonal testing revealed panhypopituitarism. His cerebral MRI showed a gadolinium-enhancing lesion in the pituitary gland with adjacent changes to the hypothalamus, mid-brain, and basal ganglia (figures 1 and 2). Therapy with prednisolone resulted in rapid improvement. Ma2 antibodies were found in the patient's serum and CSF. FDG-PET demonstrated a tumor mass in the superior mediastinum and histology revealed a mediastinal seminoma. Ma2 antibody-mediated paraneoplastic disease has to be considered as a rare differential diagnosis in patients presenting with acute panhypopituitarism.<sup>1</sup>

#### AUTHOR CONTRIBUTIONS

Dr. Bergner, Dr. Lang, Dr. Spreer, Dr. Bähr, Dr. Mohr, Dr. Simons: analysis and interpretation.

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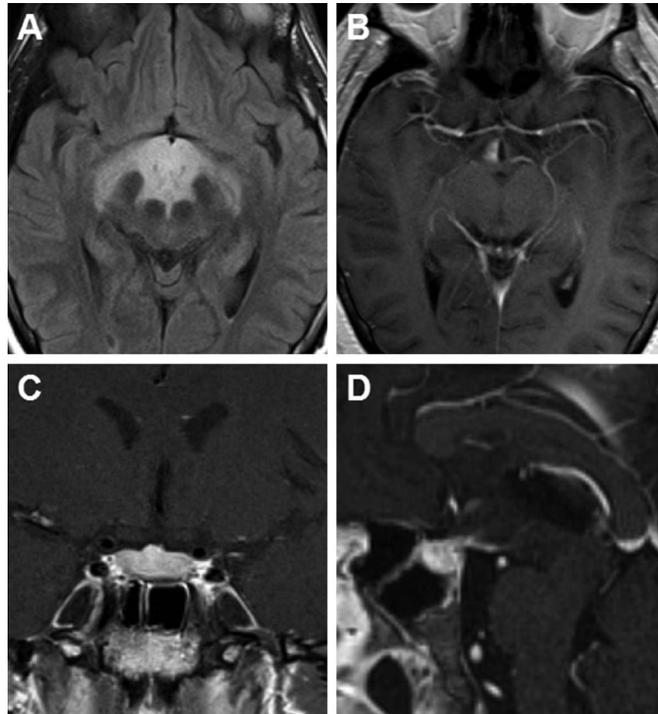
#### REFERENCE

1. Dalmau J, Graus F, Villarejo A, et al. Clinical analysis of anti-Ma2-associated encephalitis. *Brain* 2004;127:1831–1844.

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**Figure 2** Cerebral MRI after 5 days of oral steroids



(A-D) Almost unchanged edema but marked reduction of gadolinium enhancement suggestive of hypophysitis or lymphoma. Under continuous immunosuppressive treatment, edema resolved; residual enhancement persisted over the next months and after polychemotherapy.

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