Teaching Video NeuroImage: Parinaud Syndrome Due to Ventriculoperitoneal Shunt Malfunction in a Patient With Neurosarcoidosis

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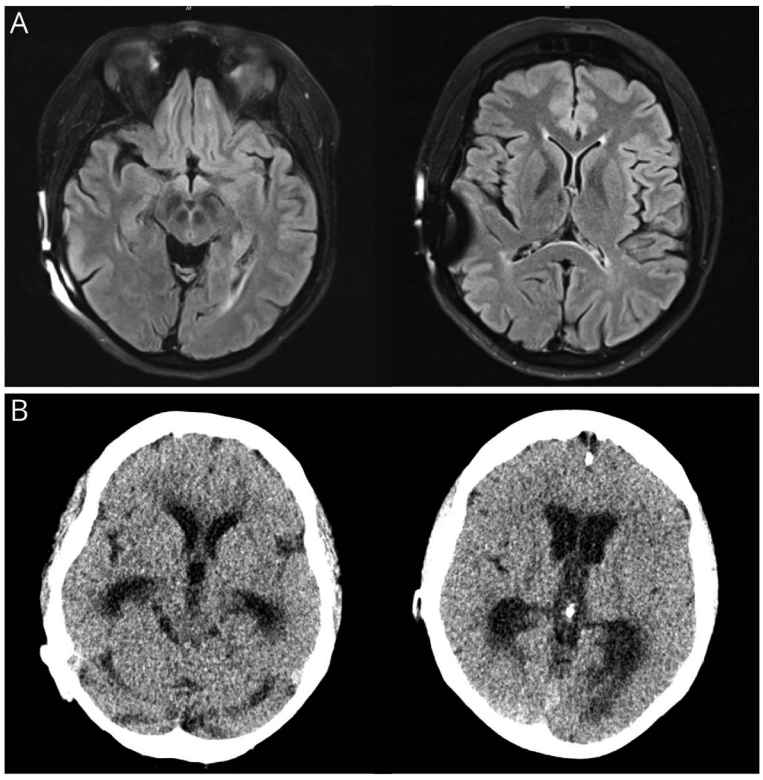
Figure Brain Imaging Before and After Valve Malfunction



(A) MRI showing normal-sized ventricles. (B) Cranial CT scan 3 days after the MRI examination demonstrating acute hydrocephalus with transependymal edema.

A 37-year-old patient with biopsy-proven neurosarcoidosis was admitted for a follow-up cranial MRI. Because of obstructive hydrocephalus at initial presentation, a ventriculoperitoneal shunt system had previously been implanted.

After the MRI, she developed diplopia, headache, and Parinaud syndrome (Video 1).[1,2] A CT scan showed impaired CSF drainage caused by altered valve pressure settings after the MRI (Figure). Elevated CSF pressure is a frequent cause of Parinaud (dorsal midbrain or pretectal) syndrome because of the proximity of the posterior commissure and its interstitial nucleus to the aqueduct. Readjustment of the valve settings rapidly cleared the Parinaud syndrome.

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Video

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Name	Location	Contribution
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