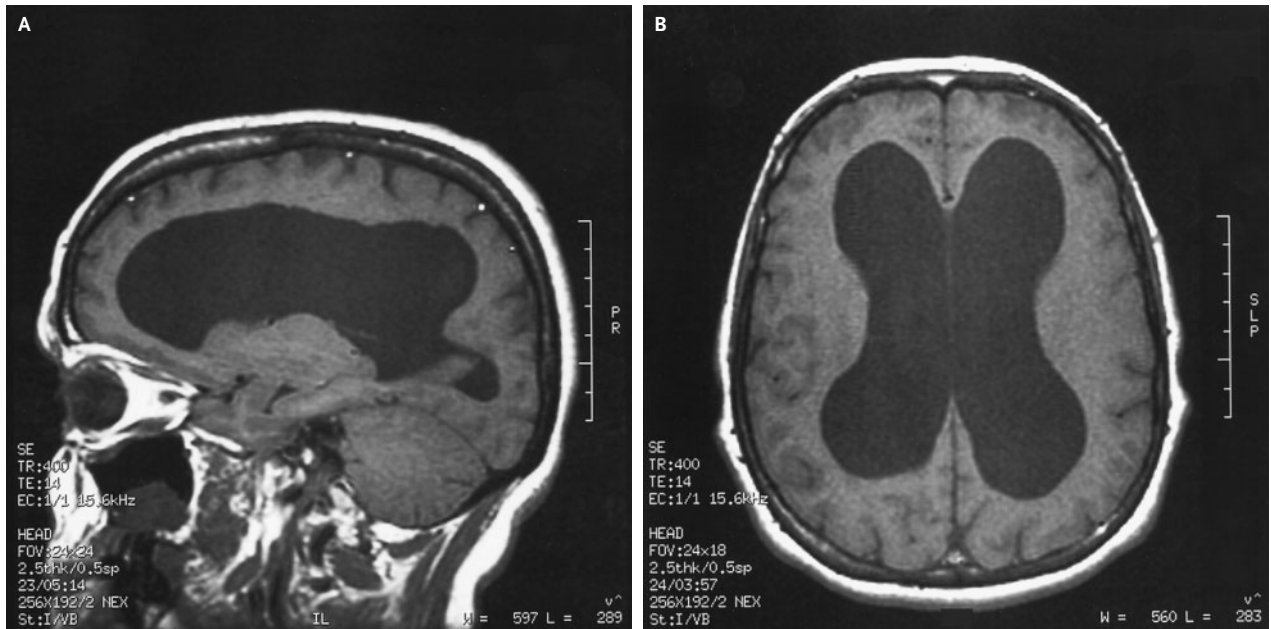


IMAGES IN CLINICAL MEDICINE

Communicating Hydrocephalus



A 56-YEAR-OLD WOMAN, WHO WAS A PEDIATRIC SURGEON, PRESENTED with a five-year history of memory deficits, loss of professional self-confidence, and dysphoric mood that was unresponsive to antidepressant medication; her symptoms had necessitated early retirement. Notable findings on the physical examination included a large head circumference (59 cm) and a bulging forehead. Neurologic examination showed bilateral palmomental reflexes but no other frontal reflexes. The patient was not incontinent and had a normal gait.

T₁-weighted magnetic resonance imaging (MRI) showed gross enlargement of the lateral, third, and fourth ventricles and effacement of the subarachnoid space (Panels A and B). No gross transependymal absorption of cerebrospinal fluid was noted. Several small, nonenhancing periventricular areas of hyperintensity were present. Other images showed normal flow of cerebrospinal fluid through the aqueduct and foramen of Magendie. Communicating hydrocephalus, presumptively long-standing, was diagnosed. The findings on MRI one year later showed that the patient's condition had not changed. During an 18-month follow-up period, serial neuropsychological testing consistently demonstrated moderate cognitive deficits, including impairments in concentration, short-term memory, problem-solving ability, and other executive functions. These findings indicated a stable frontal-lobe syndrome. In the light of the patient's clinical, radiologic, and neuropsychological stability, ventricular shunting of the cerebrospinal fluid was not performed. She remained in retirement.

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