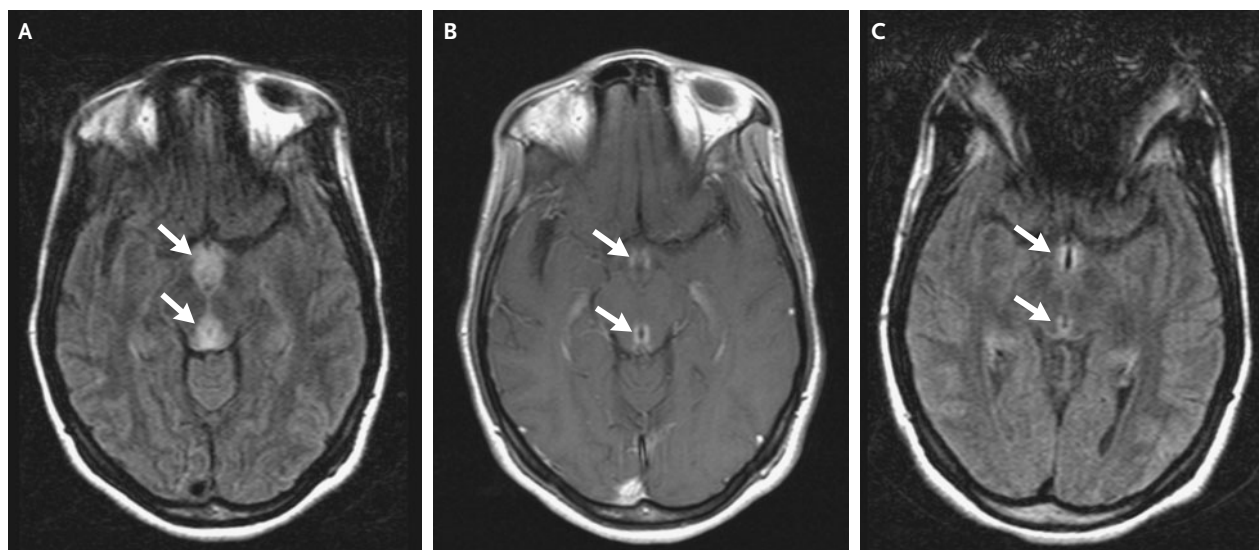


Wernicke's Encephalopathy



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A 21-YEAR-OLD WOMAN WITH SCHIZOAFFECTIVE DISORDER AND A FOUR-month history of diffuse abdominal pain, nausea, vomiting, and weight loss of more than 13 kg was admitted to the hospital because of altered mental status that had progressed over the previous seven days. The patient's family reported that she did not use alcohol or drugs. On physical examination, she was afebrile, had slight tachycardia, and was sleepy but able to be aroused. She was oriented only to person and had sparse and mildly slurred speech. She had ocular bobbing on primary gaze, but not on horizontal gaze, and an ataxic gait. Laboratory evaluation revealed normal sodium, potassium, chloride, and creatinine levels and negative results on screening for alcohol and other drugs. The results of cerebrospinal fluid studies and thyroid studies were normal, as was the vitamin B₁₂ level. The results of tests for the presence of antinuclear antibodies, human immunodeficiency virus, heavy metal, and urine porphobilinogen and a rapid plasma reagin test for syphilis were negative. An initial magnetic resonance image (MRI) of the brain, with fluid-attenuated inversion recovery, demonstrated abnormal hyperintensity of the mammillary bodies and periaqueductal gray matter (Panel A, arrows), with associated abnormal enhancement on T₁-weighted images that were obtained with the use of contrast material (Panel B, arrows). The findings from the clinical examination and imaging suggested Wernicke's encephalopathy. The patient was given thiamine, with marked improvement in her confusion, memory loss, slurred speech, and extraocular movements during the next seven days. A follow-up MRI of the brain that was obtained with fluid-attenuated inversion recovery seven days after the initial MRI demonstrated near-complete resolution of the abnormal mammillary body and periaqueductal hyperintensity (Panel C, arrows).

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