Post-gastric bypass Wernicke encephalopathy

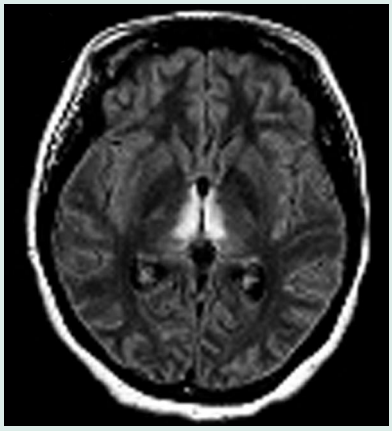

Figure. Axial fluid-attenuated inversion recovery image: bilateral symmetric hyperintense lesions of the periaqueductal gray matter and medial portions of both thalami.

Foster et al. describe a 35-year-old woman with progressive neurologic deterioration, MRI evidence of Wernicke encephalopathy, and a response to high dose thiamine repletion. The clinical picture was not typical of Wernicke encephalopathy.

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Wernicke encephalopathy after bariatric surgery: Losing more than just weight

Commentary by Heidi Schwarz, MD

Most Americans are overweight or obese, and the prevalence of morbid obesity quadrupled between 1986 and 2000. Obesity is increasing in the rest of the developed world. The association between morbid obesity and premature death is well established.[1] Weight loss from dieting and supplements is rarely sustained. Bariatric surgery is the only treatment resulting in sustained weight loss and improving comorbid medical conditions in the morbidly obese.[2]

Bariatric surgery has risks, particularly metabolic complications: anemia, vitamin D deficiency and bone resorption, rhabdomyolysis, vitamin A deficiency, and hypocalcemia.[3] Neurologic complications are frequently seen after bariatric surgery, particularly when associated with intractable vomiting: myelopathy and ataxia due to deficiencies in vitamin B12, copper, or vitamin E; peripheral neuropathy, plexopathies, and mononeuropathies due to vitamin deficiency or micronutrient deficiencies or as yet unknown causes.[4]

Wernicke encephalopathy is a complication of bariatric surgery. The case described by Foster et al. is unusual for its presentation with hearing loss. Although thiamine deficiency was not documented serologically, the course, MRI findings, and response to thiamine establish the diagnosis. This case highlights the variable presentation of Wernicke encephalopathy in which the classic triad of oculomotor abnormalities, confusion, and ataxia are seen in less than 20% of patients. Patients who have had bariatric surgery require a high index of suspicion for Wernicke encephalopathy so that prompt treatment can be given to prevent devastating and often permanent disability.

References

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