M4 Case report: cognitive impairment due to hypoglycemia in an older patient; a long-term complication following biliopancreatic diversion

Topic medical

Presentation poster

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Abstract title

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Abstract body

A 74-year old female presented with weakness, recurrent falls, loss of weight and progressive cognitive deterioration. Her medical history included osteoporosis, herpes encephalitis (2010) and a biliopancreatic diversion (Scopinaro surgery) in 1995. There was a fluctuating level of consciousness. Her MMSE score was 13/30. Cerebral imaging showed known lesions following herpetic encephalitis, without major atrophy. Biochemical screening showed severe hypoalbuminemia (16g/dl), low iron storage and deficits in zinc, vitamin A and E. There was no proteinuria. Blood glucose level at presentation was normal, but during observation recurring hypoglycemia (glycogen depletion caused by starvation and dumping syndrome) was seen. The presence of neuroglycopenia probably accounted for the clinical picture.

Given malabsorption, total parenteral nutrition was started. This showed both a marked improvement in the cognitive functioning (MMSE 28/30 after 4 weeks) and an improvement in daily functioning. Consequently, albumin levels increased and there was a weight gain of 5kg.

Long term effects of bariatric surgery in older patients remain relatively unknown. As this case shows, deficiencies and malnutrition after bariatric surgery (in this case Scopinaro surgery) can cause major problems, including cognitive impairment. Atypical presentations are more common in older patients, and a low index of suspicion for evaluating underlying deficiencies is warranted in these patients. As bariatric surgery is performed more frequently, a larger proportion of patients will present with long-term complications, especially if oral intake decreases due to other causes.