Re: Wernicke's Encephalopathy After Laparoscopic Roux-en-Y Gastric Bypass: A Misdiagnosed Complication

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Sir,

We thank Dr. Tajeja for his insightful comments and acknowledge his contribution to this rare metabolic complication that may follow bariatric surgery [1].

Dr. Tajeja N elucidates the correct pharmacologic half-life of thiamine that is a matter of minutes rather than days as previously shown by Serra et al. [2–4]. In fact, biologic half-life time of oral administered thiamine is 154 min, whereas after i.v. administration, this is 96 min [5]. The time required to exhaust the total thiamine metabolic pool is approximately 20 days. In a healthy subject, any condition of unbalanced nutrition that lasts for 2–3 weeks may lead to thiamine depletion and Wernicke encephalopathy (WE) [2].

Normally, thiamine is absorbed in the entire duodenum and mostly in the acid milieu of the proximal duodenum [6]. However, despite that the duodenal absorption of

thiamine is rate-limited, as stressed by Dr. Tajeja N, this is of no interest in the case of patients undergoing Roux-en-Y gastric bypass (RYGBP). In fact, in the anatomy of RYGBP, the ingested food and drugs do not pass through the duodenum that is “bypassed”. Indeed, after RYGBP, most of the absorption is probably mediated through a saturable carrier-mediated exchange mechanism for thiamine transport across the human jejunum [7]. In WE after RYGBP, immediate parenteral administration of thiamine is needed instead of an oral administration. Oral administration is recommended after recovery and should be continued indefinitely at a dose of 50–100 mg three times per day [8].

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