

Rare Presentation of Thiamine Deficiency as Gastrointestinal Syndrome

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Abstract

Introduction: Thiamine deficiency is prevalent among nutritionally deficient persons and manifests as Wernicke encephalopathy or beriberi. Rare accounts of a primary syndrome consisting of GI symptoms are described in the literature.

Case Report: The following report illustrates the case of a 30-year-old man with intractable nausea and vomiting, leukocytosis, transaminitis, and lactic acidosis that resolved rapidly after thiamine infusion. The patient was admitted with severe epigastric pain, nausea, and vomiting over the previous week and abdominal pain for the previous 2 weeks. Past medical history was significant for a four-year history of intermittent abdominal pain, and no alcohol consumption. The patient was started on IV pantoprazole for peptic ulcer disease or other gastritis. He was given IV ciprofloxacin and metronidazole for possible infection given his leukocytosis. CT and ultrasound were unremarkable. His condition improved briefly on day 5, but he failed to tolerate a clear liquid diet. Lactic acidosis began to increase on day 7, with hydration failing to alleviate the acidosis. An upper endoscopy on day 9 showed a deep duodenal ulcer, and pantoprazole was restarted. AST and ALT rose from day 4, peaking at 98 and 154 on day 11. The patient was switched from pantoprazole to famotidine on day 11 with no improvement in his LFTs. On the 12th day the patient reported numbness and tingling on his chest. He was treated with thiamine. Lactate levels that had risen to 8.7mmol/L dropped to 2.3 within 24 hours, and the leukocytosis, nausea, and vomiting resolved. The patient stated he felt “the best he had felt in weeks” and was discharged on day 13. Abnormal signs, symptoms, and lab values resolved over the following weeks. Blood drawn on day 12 was positive for low thiamine.

Discussion: Thiamine deficiency is a rare cause of GI symptoms of nausea, vomiting, abdominal pain, and lactic acidosis. An under-diagnosed condition, failure to recognize and treat it may result in morbidity and death. Clinicians should have increased awareness of this problem, consider it in all patients with GI symptoms, and lactic acidosis, and have a low threshold to treat with thiamine.

Conflict of Interest

The authors report no conflict of interest.

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