

Introduction

Elevated lipase levels of three or more times the upper limit of normal along with abdominal pain and correlated findings on CT imaging can often diagnose a case of acute pancreatitis. Although uncommon, there are alternative causes of hyperlipasemia not related to acute pancreatitis that clinicians should be aware of. Here we present a case of significantly elevated lipase secondary to duodenal obstruction caused by gastrostomy tube migration.

Past Medical History

- Cerebral palsy
- Seizure disorder
- Chronic GJ tube

Home Medications

- Clonazepam 1mg bid
- Lacosamide 200mg bid
- Lamotrigine 100mg bid
- Levetiracetam 200mg bid

Social History

- Nonverbal at baseline
- No history of alcohol or tobacco use

Family History

- Depression in parents

Case Presentation

A 30-year-old nonverbal woman with a past medical history of cerebral palsy, refractory grand mal seizures, and chronic (fluoroscopically placed) gastrostomy tube (last changed about one month prior) presented to the hospital for breakthrough seizures, non-bilious vomiting of tube feeds, and abdominal pain. She arrived afebrile with a blood pressure of 165/85 mmHg and otherwise normal vitals. On examination, the patient was nonverbal and appeared uncomfortable with a moderately tender and distended abdomen. The external portion of her gastrostomy tube did not have signs of surrounding infection. Admission laboratory studies were remarkable for a white blood cell count of 13.3 k/uL and lipase of 8216 IU/L. Abdominal CT (Figure 1) showed a normal pancreas, but noted air fluid levels within the stomach as well as the balloon of the percutaneous feeding tube inflated within the second portion of the duodenum, concerning for obstruction. Patient was treated with a nasogastric tube to allow for decompression and the Interventional Radiology service repositioned the gastrostomy tube back into the stomach. After adjustment, the gastrostomy tube placement was confirmed and feeds were re-started. Patient was asymptomatic and tolerating her tube feeds without issue in less than 48 hours from initial presentation.

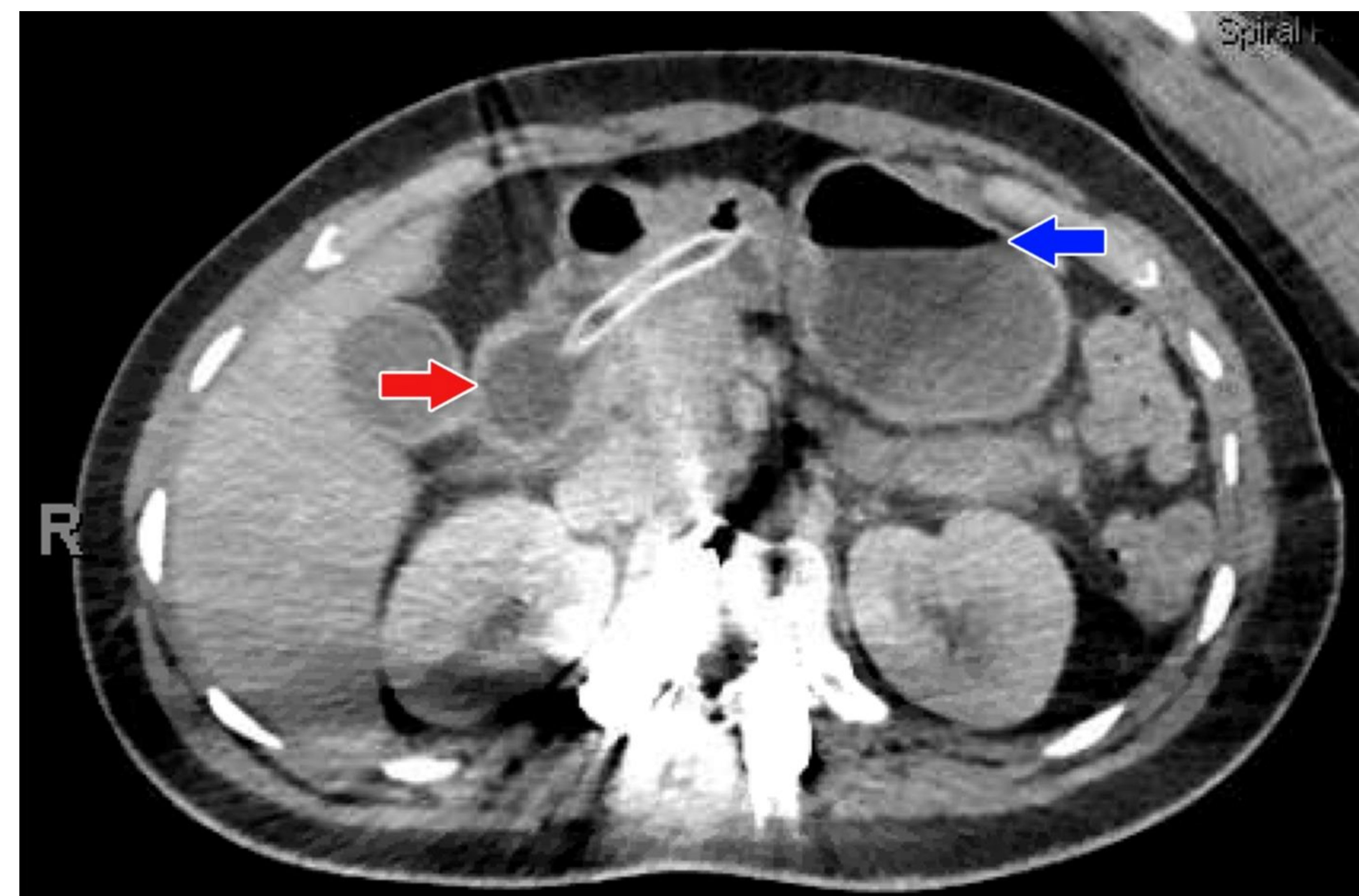


Figure 1. CT abdomen showing percutaneous feeding tube with balloon inflated in the second portion of the duodenum (red arrow) and mild fluid level within the stomach (blue arrow).

Vitals

99.1 F | 71bpm | 16 breaths/min
139/83 mmHg | 97% O₂ on room air

Laboratory Findings

- WBC: 13.3
- Hgb: 15.8
- Hct: 48.6
- Platelets: 238
- Alk Phos: 142
- ALT: 22
- AST: 54
- Lipase: 8219

Imaging

CT abdomen/pelvis with contrast

- Normal pancreas
- Percutaneous feeding tube within second portion of duodenum likely resulting in obstruction

Discussion

While this case initially appeared to be a straightforward diagnosis of acute pancreatitis, the imaging proved otherwise. Moreover, the patient's rapid clinical improvement after alleviating the obstruction helped support the alternative diagnosis. It is likely that the obstruction inhibited forward flow of the pancreatic enzymes and instead increased diffusion into the bloodstream causing elevated lipase levels. Clinicians should be aware of the possibility of small bowel obstruction as a cause of hyperlipasemia.

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