

Abstract

A pseudoaneurysm can lead to a lethal presentation of upper gastrointestinal hemorrhage that is associated with a 40-80% mortality rate.

This is a rare case of left gastric artery pseudoaneurysm secondary to *Helicobacter pylori* (*H. pylori*) infection-associated peptic ulcer disease presenting as upper gastrointestinal hemorrhage.

Introduction

Acute upper gastrointestinal bleeds presenting to the emergency department are most commonly secondary to variceal hemorrhage or peptic ulcer disease.

Peptic ulcer disease can result in gastric artery pseudoaneurysm, but only one case report was found in literature search.

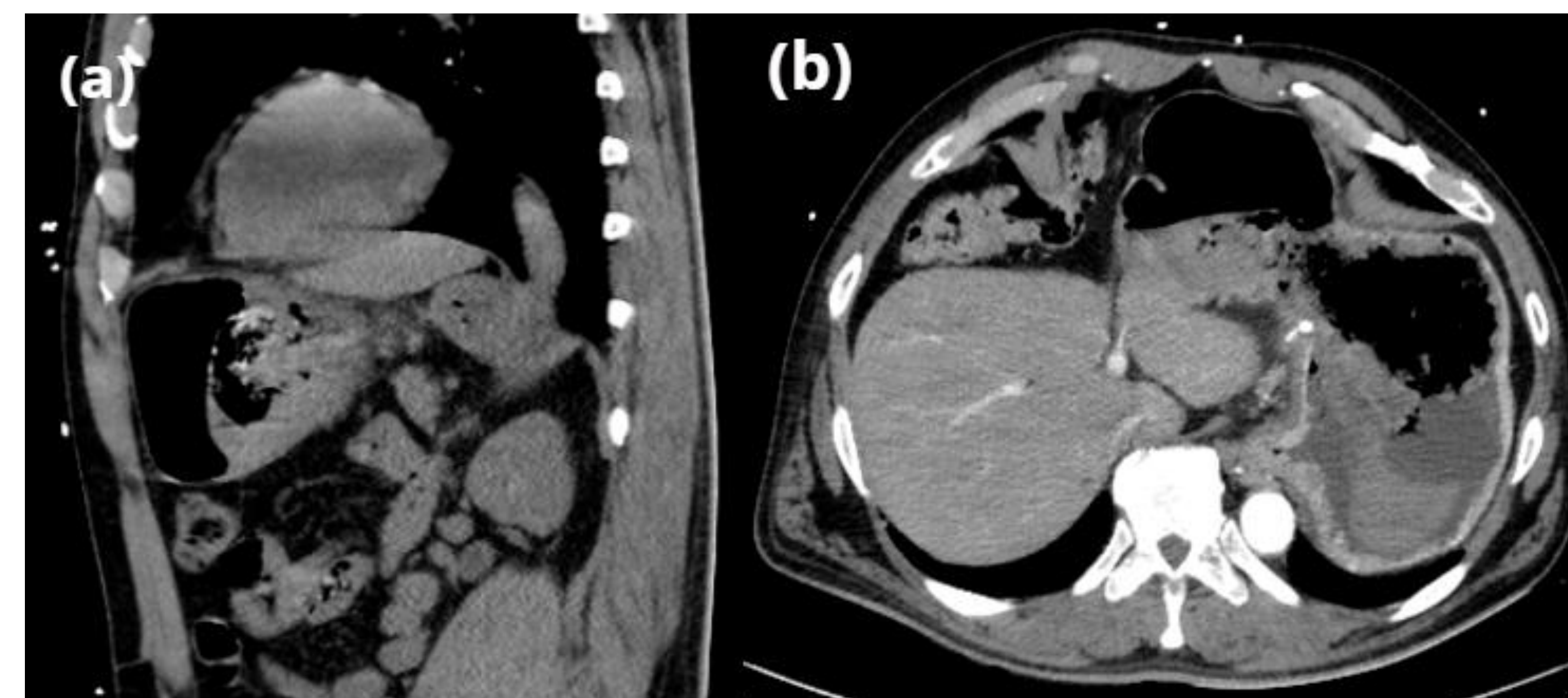
More commonly pseudoaneurysms are associated with chronic pancreatitis with the risk of mortality due to rupture ranging from 40 to 80% (1).

Case Presentation

A 62 y.o. male with a past medical history of oral cancer status post resection in 2015, polysubstance use disorder, hypertension, and GERD presented to the hospital complaining of chest and epigastric pain with melena for 1 month.

- CTA was significant for a small pseudoaneurysm arising from the left gastric artery projecting into the wall of the stomach with a heterogeneous material within the stomach concerning for intraluminal hemorrhage.
- IR performed embolization of the left gastric artery pseudoaneurysm shortly after identifying active bleeding into the lesser curvature of the stomach on an angiogram.
- An EGD was performed which found a 2.5 cm ulceration over the lesser curvature of the stomach and the biopsy was positive for *H. pylori* infection.

Figure 1. Figure 1. Computed tomography angiography. (a) Sagittal plane, (b) Transverse plane.



Discussion

The pathogenesis of pseudoaneurysm is thought to be due to a local inflammatory process.

- Inflammation of mucosa can spread to adjacent structures such as an artery.
- This can compromise vessel wall integrity, leading to a pseudoaneurysm.
- Most common cause of gastric artery pseudoaneurysm is chronic pancreatitis.

A systematic review of gastric artery pseudoaneurysms due to gastric ulcers only resulted in one case report (2).

This is a very rare case of gastric artery pseudoaneurysm secondary to a gastric ulcer from an untreated *H. pylori* infection.

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References

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2. Sudo, Gota1,2; Tanuma, Tokuma1; Nakase, Hiroshi2 Image: Gastric Ulcer Bleeding Due to Left Gastric Artery Pseudoaneurysm, *American Journal of Gastroenterology*; September 2018 - Volume 113 - Issue 9 - p 1281 doi: 10.1038/ajg.2018.0126-4