

Case Report

Spontaneous Resolution of Emphysematous Gastritis with Vaso-occlusive Disease—A Case Report

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Submitted: 12 Jul 2012
Accepted: 7 Nov 2012

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Abstract

Emphysematous gastritis secondary to vaso-occlusive disease is a surgical emergency. It is a rare yet severe form of widespread phlegmonous gastritis. It is caused by corrosive ingestion, alcohol abuse, and on rare occasions, infections. The clinical presentation is diagnostic with supportive information from contrast-enhanced computed tomography (CECT) of the abdomen and gastroduodenoscopy. Here, we describe a case of emphysematous gastritis with spontaneous vaso-occlusive disease that was successfully managed without surgery.

Keywords: gastritis coeliac plexus, hepatic insufficiency, splenic infarction

Introduction

Emphysematous gastritis, previously known as gastritis acuta emphysematosa, is often confused with 'gastric emphysema' (1). Emphysematous gastritis describes air within the stomach wall with mucosal breach (1,2) and associated infection (3). Unlike patients with gastric emphysema, patients with this condition present with acute abdominal pain and prognosis is usually poor. Causative organisms include *Escherichia coli*, hemolytic streptococci, *Clostridia welchi*, and *Pseudomonas aeruginosa* (4).

Case report

A 72-year-old man, with no pre-morbid illness, presented with a history of fever, abdominal pain, and hematemesis for 15 days. General physical examination was unremarkable with no signs of decompensated liver disease. However, he had profound epigastric and left hypochondrial tenderness. He was anemic (Hb 9.2 gm%) with elevated liver enzymes (> 1000 IU) and a total count of 33.2 with bands. Hepatic viral studies were unremarkable with normal albumin and globulin levels. Gastroduodenoscopy revealed an ulcer with a nodule in the greater curvature of the stomach, without evidence of an active bleed or infarction. Contrast-enhanced computed tomography (CECT) of the abdomen

showed mottled air patches in the wall of the stomach consistent with emphysematous gastritis (Figure 1). Computed tomography revealed splenic vein thrombosis (Figure 2), coeliac artery thrombosis (Figure 3), and hepatic infarction (Figure 4). Primary prothrombotic workup ruled out hypercoagulable states. He was treated conservatively with intravenous antibiotics per the culture sensitivity report. Blood transfusion was given to correct anemia. Patient showed remarkable improvement and was symptom-free in the subsequent days.

Discussion

Emphysematous gastritis secondary to vaso-occlusive diseases is a surgical emergency with a mortality rate of 60 to 80% (5). Prompt treatment with broad-spectrum antibiotics and surgical revascularization has been reported to be 'lifesaving' in several cases (5). Perforation is the commonest indication for surgical intervention, though it is often fatal. In contrast, the patient described here showed complete resolution due to early presentation, expedited diagnosis using CECT (6), and timely intervention with appropriate antibiotics. We do believe that the non-specific ulcer was secondary to the vaso-occlusive event and the final histopathology was reported as non-specific haemorrhagic gastritis.

Mortality is usually very high even after surgical intervention in the form of gastrectomy (7); however, in the present case we were able to successfully treat the patient with conservative management. At the six-month follow up, he was healthy and symptom-free.

Acknowledgement

I would like to dedicate all my achievements and acknowledge my father who has been an inspiration to all his children and many others who have sought his advice.

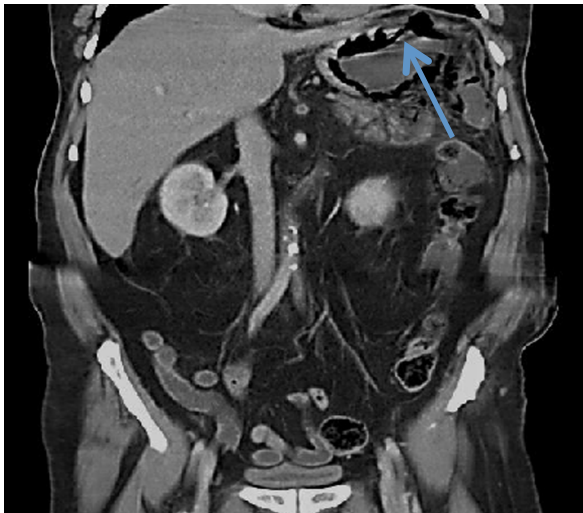


Figure 1: CECT of the abdomen (coronal section). Arrow shows intramural air in the stomach.

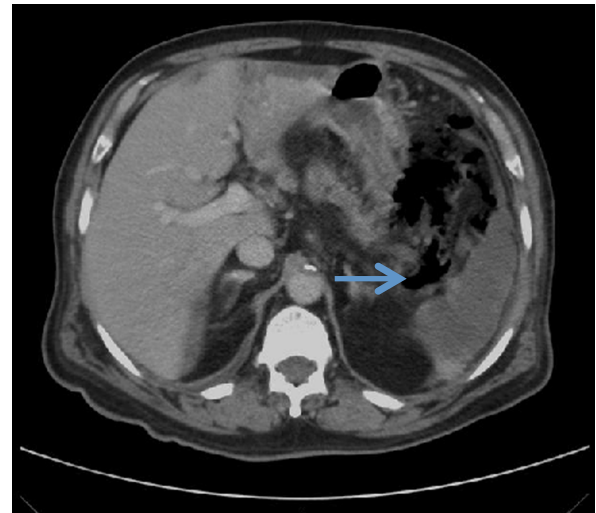


Figure 2: CECT of abdomen (axial section). Arrow shows (above) splenic vein thrombus.

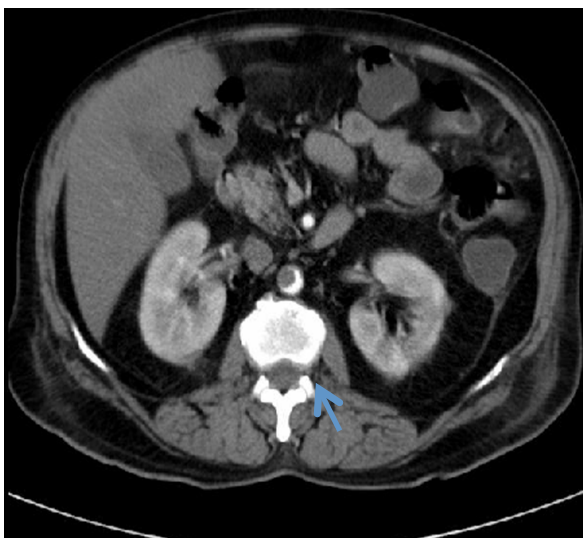


Figure 3: CECT of abdomen, arrow shows thrombus in the coeliac artery.

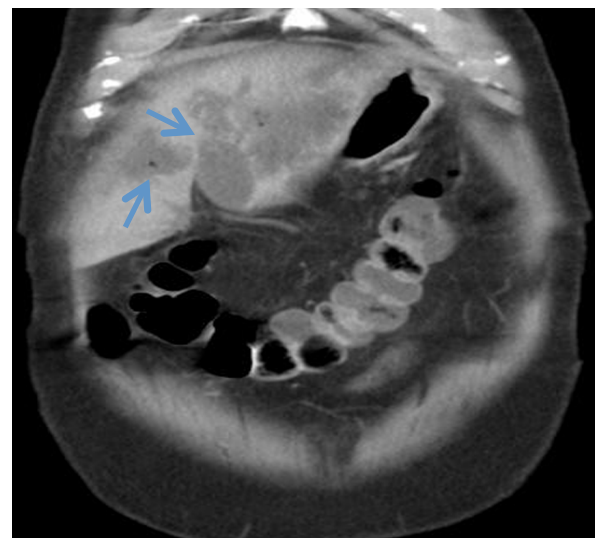


Figure 4: CECT of abdomen, arrows showing necrosis in multiple liver segments suggestive of ischemic hepatitis.

Conflict of interest

None.

Funds

None.

Authors' Contributions

Conception and design, analysis and interpretation of the data and critical revision of the article for the important intellectual content: RN

Final approval of the article: SA

Drafting of the article: RN, BN

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