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CASE REPORT OF PHLEGMONOUS GASTRITIS

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ABSTRACT
Phlegmonous gastritis (PG) is a rare, suppurative bacterial infection of the gastric wall. We report a case of a 45-year-old male who presented with severe epigastric and right upper quadrant abdominal pain. The serum alanine aminotransferase, total bilirubin, alkaline phosphatase, lactate dehydrogenase, amylase, and lipase were within normal ranges. On hospital day 10, the antibiotic regimen was changed to orally administered amoxicillin/clavulanic acid and clindamycin. The patient was discharged on hospital day 11.
This case emphasized the importance of early diagnosis of this potentially fatal infection that can follow endoscopic procedures and illustrates ACS and septic shock as serious complications.
Key words: Phlegmonous, Gastritis

INTRODUCTION
Phlegmonous gastritis (PG) is a rare disease characterized by suppurative bacterial infection of the gastric wall, which without prompt diagnosis and appropriate treatment, may rapidly evolve to a fatal systemic septicemia. PG affects the submucosa and muscularis propria layers of the stomach wall in a focal or diffuse manner. It typically presents with upper gastrointestinal (GI) symptoms, such as nausea, vomiting, and hematemesis. The exact etiology and pathophysiology of disease are poorly understood; however, multiple risk factors such as mucosal injury, alcoholism, achlorhydria, advanced age, prior gastric surgery or biopsy, and an immunocompromised state have been cited. Numerous bacterial organisms have been implicated as the most common pathogens; however, the Streptococcus genus accounts for approximately 67–75% of cases. Diagnosis is difficult and requires a combination of clinical presentation, imaging, bacterial culture, and pathology.[1-3] In the present paper, we have presented the case report of a 45 year old patient who was diagnosed with phlegmonous gastritis.

CASE REPORT
A 45 year patient reported with the chief complaint of upper abdominal pain, nausea, hematemesis, and nonbloodydiarrhea. On the day of admission, the patient awoke with severe epigastric and right upper quadrant abdominal pain. There was no history of alcoholism, and the patient did not smoke tobacco. On examination, the skin was clammy and mottled. Bowel sounds were hyperactive, and the upper abdomen was tender to palpation, but there was no evidence of peritonitis. Stool obtained by digital rectal examination tested positive for occult blood. Initial treatment included intravenously administered fluids, antibiotics and dopamine. The serum alanine aminotransferase, total bilirubin, alkaline phosphatase, lactate dehydrogenase, amylase, and lipase were within normal ranges. On hospital day 10, the antibiotic regimen was changed to orally administered amoxicillin/clavulanic acid and clindamycin. The patient was discharged on hospital day 11.

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DISCUSSION

Phlegmonous gastritis (PG) is an uncommon, often fatal condition characterized by suppurative bacterial infection of the stomach. It may arise from a local or a disseminated hematogenous infection and may involve either a portion (localized) of the stomach or the entire stomach (diffuse). Although the pathogenesis is not precisely known, predisposing factors such as mucosal injury, alcoholism, achlorhydria, debilitation, and immunocompromise have been postulated as important etiologic factors.[4- 7]

In the present case report, a 45 year patient reported with the chief complaint of upper abdominal pain, nausea, hematemesis, and nonbloodydiarrhea. On the day of admission, the patient awoke with severe epigastric and right upper quadrant abdominal pain. On hospital day 10, the antibiotic regimen was changed to orally administered amoxicillin/clavulanic acid and clindamycin. The patient was discharged on hospital day 11. Yang H et al in their case reportdescribed the diagnosis and treatment of acute phlegmonous gastritis. A 47-year-old man was referred to our hospital because of abdominal pain, high fever, and vomiting for 4 days, with aggravation for 24 hours. Physical examination revealed epigastric abdominal pain, rebound pain, and abdominal wall tightness. Abdominal CT showed thickening of the stomach wall with edema and gas. On the basis of symptoms and CT imaging findings, the patient was diagnosed with acute PG. The patient immediately underwent an operation after conservative treatment using antibiotics proved ineffective. The whole stomach was obviously swollen, and the anterior side and posterior wall of the stomach were nigrescent necrotic. Hence, total gastrectomy was performed followed by reconstruction (roux-en-y), and pus that accumulated in the stomach wall was cultured. At postoperative broad-spectrum antibiotic coverage, the patient finally recovered.[8]

More recently, mortality rates have ranged from 17% to 33%, though it remains unclear whether surgical or medical management is optimal. In 36 cases reported from 1973 to 2003, there was a decreased mortality rate in early gastric resection when compared to medical management alone (20% vs 50%). Conversely, Iqbal et al. reviewed 25 cases from 2007 to 2017 and found an increase in both the number of patients successfully managed with medical therapy alone and an improved overall mortality rate of 12%. This suggests that it is reasonable to defer surgical intervention in favor of trialing antibiotics, particularly in early diagnosis, and to reserve invasive treatment for patients who fail to improve or who develop complications. Broad-spectrum empiric antibiotic therapy should be initiated, given high rates of polymicrobial infection and reports of multi-drug resistant pathogens.DeCinoA et al described a case of a 47-year-old patient admitted with gastrointestinal symptoms and sepsis. He was found to have beta-hemolytic streptococcus bacteremia with a purulent gastric ulcer on endoscopic evaluation, consistent with the diagnosis of PG. Even though surgical evaluation is often required in cases of PG, our patient quickly improved with parenteral antibiotic therapy. Their case highlights an uncommon source of sepsis and demonstrates the success of antibiotic monotherapy with early recognition.[9]

CONCLUSION

Phlegmonous gastritis lacks specific clinical performance, and abdominal CT is helpful for both early diagnosis and detecting complications. Thus, it requires serious attention by clinicians.

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