

## Vomiting-Induced Gastric Pneumatosis and Portal Venous Gas

Rajesh Essrani MD

*Lehigh Valley Health Network*, [rajesh.essrani@lvhn.org](mailto:rajesh.essrani@lvhn.org)

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# Vomiting-Induced Gastric Pneumatosis and Portal Venous Gas

Rajesh Essrani, MD

Lehigh Valley Health Network, Allentown, Pa.



Figure A  
Fluoro Esophagram did not show extraluminal leak in the gastroesophageal junction or proximal stomach. Unremarkable esophagram.

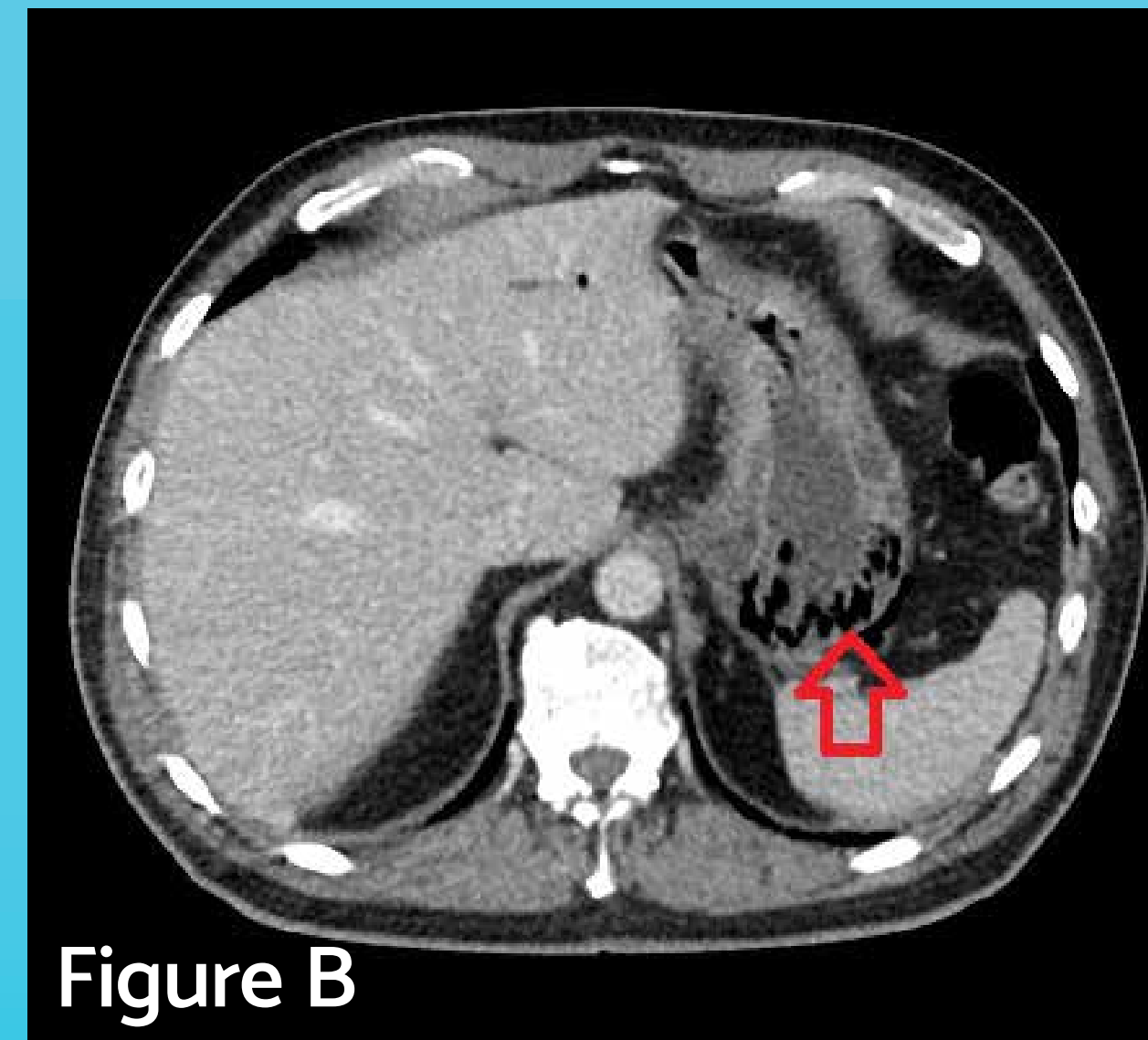


Figure B  
CT scan of this abdomen showed pneumatosis of the posterior gastric greater curvature wall with portal venous gas.

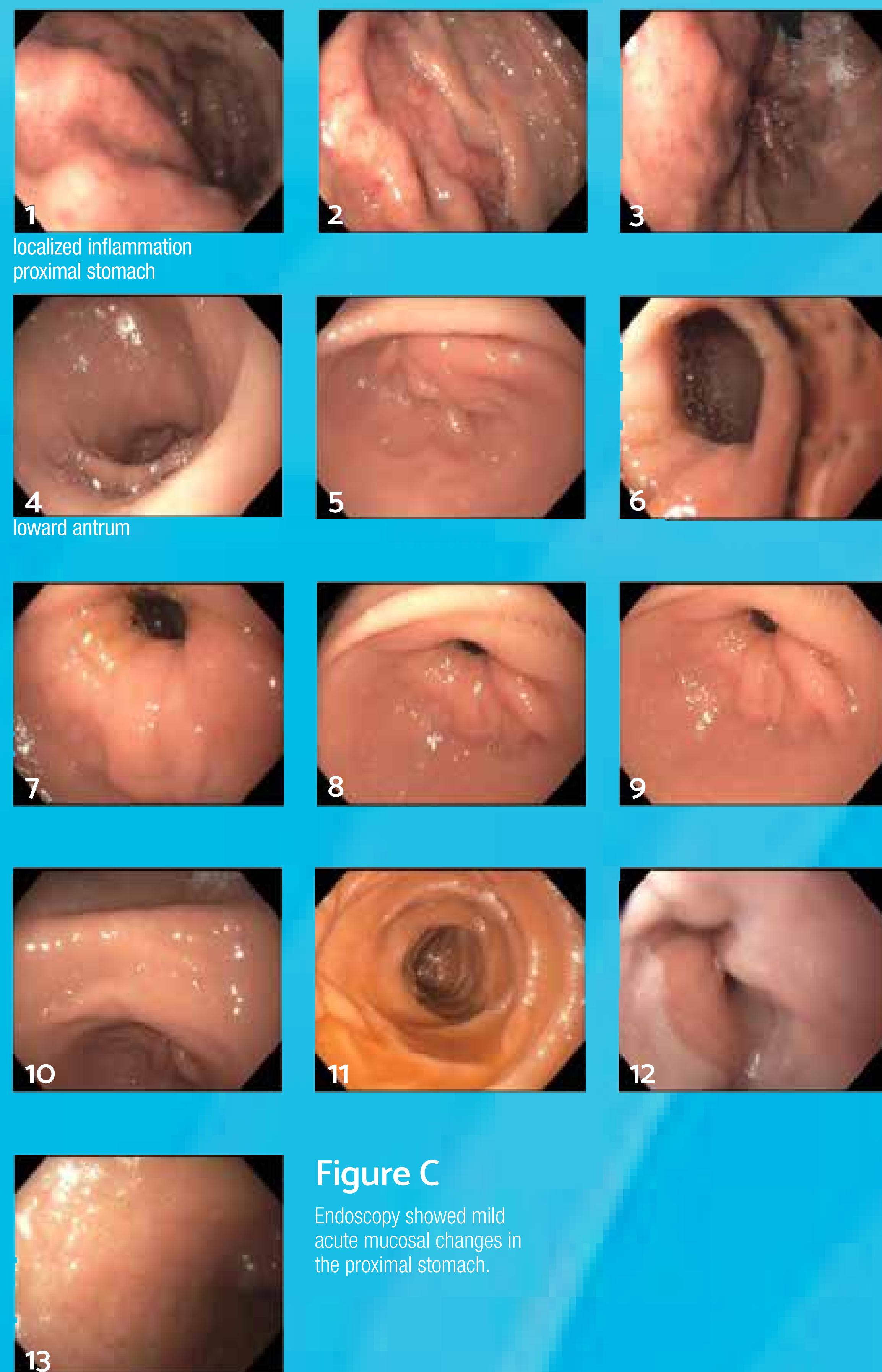


Figure C  
Endoscopy showed mild acute mucosal changes in the proximal stomach.

## Introduction

The air in the stomach wall is called gastric pneumatosis, which is caused by gastric emphysema (GE), which is self-resolving, and emphysematous gastritis, which is likely due to infectious etiology and indicates a worse prognosis. We report a case of a vomiting-induced gastric pneumatosis.

## Case Description

An 80-year-old male presented to the hospital with complaints of epigastric pain, nausea, and vomiting for the last two days. He had a regular bowel movement and denied any fever, or blood in the stool. His blood work, like WBC, lactate, lipase, and comprehensive metabolic panel, were within normal limits. He had a fluoro esophagram which did not show extraluminal leak in the gastroesophageal junction or proximal stomach (figure A). CT scan of this abdomen showed pneumatosis of the posterior gastric greater curvature wall with portal venous gas (figure B). Endoscopy showed mild acute mucosal changes in the proximal stomach (figure C). He was treated conservatively and discharged home.

## Discussion

Intestinal pneumatosis is referred to the presence of gas within the wall of the gastrointestinal tract and it can appear in any site from stomach to the rectum. The stomach is the least common site of presentation; one retrospective study identified only 18 cases during a period of 15 years. Emphasizing on the gastric chamber, it can be classified into two categories: emphysematous gastritis and gastric emphysema. GE can be caused by trauma like severe vomiting, or CPR, gastric outlet obstruction, and alveolar rupture. Clinical manifestations in GE are usually nonspecific. These patients are usually asymptomatic or complain of nausea, vomiting, epigastric discomfort, or abdominal pain. In general, it has a benign clinical course and resolves spontaneously resolution after the cause is removed. The presence of gas in the portal venous system can be an acute abdominal emergency, but it is also associated with GE. Vomiting induced GE and portal vein gas has a benign clinical course and resolves spontaneously without any complication.