

HCA Healthcare

Scholarly Commons

Gastroenterology

Research & Publications

10-29-2019

A Scary Case of Gastroenteritis

Kairavee D. Dave

HCA Healthcare, kairavee.dave@hcahealthcare.com

Vivek Choksi

HCA Healthcare, vivek.choksi@hcahealthcare.com

Sufian Sorathia

HCA Healthcare, sufian.sorathia@hcahealthcare.com

Rulz Cantave

HCA Healthcare, rulz.cantave@hcahealthcare.com

Steven Kaplan

HCA Healthcare, steven.kaplan@hcahealthcare.com

Follow this and additional works at: <https://scholarlycommons.hcahealthcare.com/gastroenterology>



Part of the [Digestive System Diseases Commons](#), and the [Gastroenterology Commons](#)

Recommended Citation

Dave K, Choksi V, Sorathia S, Cantave R, Kaplan S. A Scary Case of Gastroenteritis. Poster presented at: American College of Gastroenterology Annual Meeting; October 28-30, 2019; San Antonio, TX.

This Poster is brought to you for free and open access by the Research & Publications at Scholarly Commons. It has been accepted for inclusion in Gastroenterology by an authorized administrator of Scholarly Commons.

A Scary Case of Gastroenteritis

Kairavee Dave MD, Rulz Cantave MD, Vivek Choksi MD, Sufian Sorathia MD, Steven Kaplan MD | HCA

Clinical Presentation

- A 52 year-old-male presents complaining of feeling “sick” for 1 day.
- One episode of non bloody vomiting with severe abdominal pains.
- Severe retching+.
- No fevers/chills/sick contacts/recent weight loss/loss of appetite/diarrhea.
- Never had EGD in the past.
- Colonoscopy 2 years ago, reported as normal.
- Uses NSAIDS once a month for occasional headaches.

PMH: GERD, Diabetes Mellitus type II, Anxiety, Depression, HLD, OSA.

PSH: Compound fracture in arm, s/p surgery.

FH: Mother-breast cancer, father-lung ca

SH: One drink of alcohol about every three months, no smoking, no drugs, married.

All: NKDA

HM: statin, aspirin, metformin, insulin, baby aspirin, sertraline, bupropion

Abdominal Imaging



On admission: Gas in the gastric venous system

Discussion

- Emphysematous gastritis or gastric emphysema (GE) is the presence of air within the wall of the stomach.
- It represents a spectrum of conditions ranging from benign disease to septic shock and death.
- Gastric emphysema with or without associated gas in the portal vein may be caused by various causes including gastric outlet obstruction, trauma, instrumentation, ischemia, infectious causes, air leak from alveoli, cardiopulmonary resuscitation, connective tissue disorders, diabetic gastroparesis, ingested toxins, pancreatitis, chemotherapy agents, gastric ischemia, as well as severe vomiting.
- Literature review: Multiple cases reported of recurrent episodes of vomiting led to development of GE and HPVG and the patient was managed successfully by conservative measures.
- A comparative review of 14 cases found till date revealed that vomiting-related gastric emphysema has a more benign presentation and clinical course. Surgical intervention can be avoided.

Physical Examination and Labs

Vitals: Temperature: 98.1 F, Pulse: 68/min, BP: 136/88 mm hg, SpO2: 99%

General appearance: alert, awake, oriented, no acute distress

HEENT: atraumatic, normocephalic

Cardiovascular: normal S1/S2, regular rate & rhythm

Respiratory: aerating well, clear to auscultation, no distress, no tenderness

Abdomen: some epigastric tenderness, soft, no distention, no guarding. No peritoneal signs.

Extremities: normal temperature, no edema

Neuro/CNS: alert, oriented X 3, normal speech

Skin: dry, normal temperature

Psychiatry: normal affect, normal mood

Laboratory Tests

CBC: Normal

Coagulation: Normal

Rotavirus ag: Negative

CMP: Normal

UA: Normal

Hospital Course

- Given the air in the gastric venous system+portal venous system on imaging, emphysematous gastritis and catastrophic etiologies like necrosis were considered.
- Stat surgery consultation requested. Emergent IV antibiotics provided.
- However, clinically, patient without acute abdomen and with benign presentation.
- The nausea/vomiting, abdominal pains resolved over next day.
- Repeat CT abdomen revealed resolution of the air in the portal venous and gastric venous system.
- Portal venous and gastric venous air suspected to be likely due to vigorous vomiting/retching related mucosal damage as the portal of air entry.
- Patient discharged in stable condition with close follow up with his gastroenterologist.

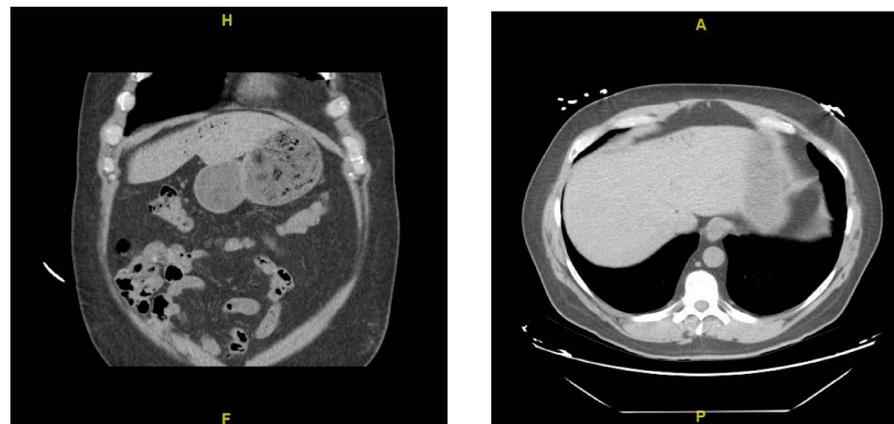
This research was supported (in whole or in part) by HCA and/or an HCA affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA or any of its affiliated entities.

Take Home Points

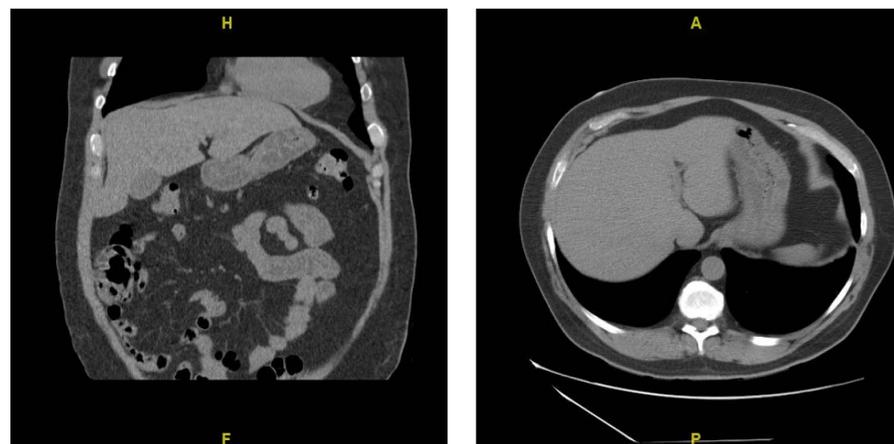
- Contrast enhanced CT abdomen is very useful for the diagnosis of gastric emphysema and associated hepatic portal venous gas.
- Vomiting induced gastric emphysema is believed to be caused by transmural diffusion of the air from the mucosal breaks in the wall of the stomach due to repeated and forceful vomiting and retching.
- Hemodynamic status is the most important determinant in making the decision between conservative approach and surgical intervention.
- By identifying appropriate patients for conservative approach, unnecessary aggressive surgical interventions can be reduced, morbidity and complications of surgery can be avoided and a cost effective approach to patient care be followed.

References

1. Inayat F, Zafar F, Zaman MA, Hussain Q. [Gastric emphysema secondary to severe vomiting: a comparative review of 14 cases.](#) BMJ Case Rep. 2018 Sep 27;2018. doi: 10.1136/bcr-2018-226594. Review. PubMed PMID: 30262542.
2. Ginesu GC, Barmina M, Cossu ML, Feo CF, Fancellu A, Addis F, Porcu A. [Conservative approach to Hepatic Portal Venous Gas: A case report.](#) Int J Surg Case Rep. 2017;30:183-185. doi: 10.1016/j.ijscr.2016.12.006. Epub 2016 Dec 11. PubMed. PMID: 28024211.
3. Nevins EJ, Moorji P, Ward CS, Murphy K, Elmes CE, Taylor JV. [A rare case of ischaemic pneumatosis intestinalis and hepatic portal venous gas in an elderly patient with good outcome following conservative management.](#) Int J Surg Case Rep. 2016;25:167-70. doi: 10.1016/j.ijscr.2016.06.033. Epub 2016 Jun 23. PubMed PMID: 27376775; PubMed Central PMCID: PMC4932613.



6 hours later: Gas in the gastric and portal venous system



24 hour later: Resolution of the gas in the gastric and portal venous system