Gastric Emphysema in a Diabetic Patient Presenting as Chest Pain-A Case Report and Literature Review

Mazin Khalid[1*], **Ahmed Bakhit**[2], **Vijay Gayam**[1] **and Mowyad Khalid**[3]

[1]*Interfaith Medical Center, Medical Resident, 1545 Atlantic Ave, Brooklyn, New York, USA*

[2]*University of Lowa Hospitals and Clinics, Staff Physician, 200 Hawkins Drive, Lowa City, USA*

[3]*Medani Teaching Hospital-Medical officer, Wd Medani, Algezira, Sudan*

[*]**Corresponding author:** Mazin Khalid M.D, Interfaith Medical Center, Medical Resident, 1545 Atlantic Ave, Brooklyn, New York, 11213, USA, Tel: +1 (718) 613-4063; E-mail: mailto:Mkhalid@interfaithmedicalcenter.com

Received date: June 18, 2016, **Accepted date:** June 28, 2016, **Published date:** June 30, 2016

Abstract

Gastric emphysema (GE) is a rare radiological finding; Only 41 cases have been reported in literature between 1889-2003. During our review we found 22 cases that are reported in the last decade. The difficulty to differentiate GE from Emphysematous gastritis ï which entails a more malignant course, poses a challenge to the clinicians in management. To our knowledge this is the first case of gastric emphysema presenting with chest pain and vomiting.

We present a case of a diabetic woman whom presented with chest pain found vomiting and admitted initially as a cardiac case. Later on her admission she was found to have gastric emphysema. She was treated conservatively and had a full recovery.

Keywords: Gastric emphysema; Chest pain

&DVH 5HSRUW

A 46 years old female with history hypertension, type 2 diabetes mellitus and congestive heart failure, brought to our emergency room complaining of chest pain, nausea and vomiting. She was initially admitted to the telemetry unit and unoń ⁰ ỉy tMᶠMhe d vaMᶠN e M M´ tamlg

hydration. She was monitored closely. And EGD was done and revealed gastritis, but was otherwise normal. 48 hours later her repeat abdominal X-ray was normal. She tolerated diet normally and was discharged in a good condition.

'LVFXVVLRQ

Fraenkel }UVWdescribed presence of air in the stomach wall in 1889 [1], while the radiological diagnosis was }UVWmade by Weens in 1946 [2].

LV condition is a radiological diagnosis and diagnosed retrospectively based on radiology }QGLQJ rather than disease that has set GH}QHG clinical criteria for neither suspicion nor diagnosis. H literature did not show a VSHFL}F age, race or ethnic distribution.

It entails two divergent diagnoses, Emphysematous Gastritis (EG), a serious medical condition with an estimated mortality rate of around 61%, and Gastric Emphysema (GE), a more benign entity that usually resolves with medical management and observation alone [3-5].

Risk factors for EG include recent abdominal surgery, caustic ingestion, Alcohol abuse steroids, severe vomiting, gastroparesis and immunosuppression [3-7].

H causative organisms are *Streptococci*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Clostridium perfringens*, and *Staphylococcus aureus* [1].

Computerized tomography is the golden method of diagnosis as it documents the presence of air in the gastric wall and thickening of the wall might be seen; [8,9] however, a plain X-ray can detect presence of air as well [2].

Up to date there is no consensus on a subjective method to GLvHUHQWLDWH two conditions as they present with the same radiological }QGLQJV

However, a retrospective study concluded that lactic acidosis, creatinine and white blood cell count can be used as predictors for poor prognosis [10]. In our case the elevated creatinine was not associated with adverse outcomes, which concurs with a similar published case [11]. GE in diabetes, even in the presence of delayed perforation in one case, appears to be associated with favorable outcomes with conservative management [11-13].

Due to the rarity of this presentation, there are no clear guidelines for management. Non-surgical management has been carried successfully ret ńį s ¼mcoo Ôı" lr y%g a
imahỤ ᵠяicnṘ brhe wbd d tpresv es

16. Morris MS, Gee AC, Cho SD, Limbaugh K, Underwood S, et al. (2008) Management and outcome of pneumatosis intestinalis. Am J Surg 195: 679-682.

17. Khan SA, Boko E, Khookhar HA, Woods S, Nasr AH (2012) Acute gastric dilatation resulting in gastric emphysema following postpartum hemorrhage. Case Reports in Surgery.