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Case report

Atypical Presentation of Gurvits Syndrome as an Uncommon Cause of Gastrointestinal Bleeding: Case Report

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Abstract

Introduction: Gurvits syndrome, also referred to as *acute esophageal necrosis*, is characterized by circumferential black discoloration of the esophageal mucosa. It is a rare entity, with an estimated incidence ranging from 0.01% to 0.28% in autopsy studies and endoscopic series. Its pathophysiology is multifactorial, the clinical presentation nonspecific, and diagnosis requires esophagogastroduodenoscopy. No standardized therapeutic approach has been established; however, management focuses on addressing the underlying cause and preventing complications. **Case report:** We present the case of a 71-year-old woman with a history of controlled hypertension who was initially hospitalized for lumbar pain. She later developed sudden epigastric pain and a single episode of hematemesis. Esophagogastroduodenoscopy confirmed acute esophageal necrosis. A conservative management strategy—established jointly with the general surgery and gastroenterology teams—resulted in favorable clinical outcomes. **Conclusion:** Recognizing Gurvits syndrome as an uncommon cause of gastrointestinal bleeding is essential to ensure timely diagnostic and therapeutic intervention, ultimately improving patient outcomes.

Keywords

Necrosis, esophagus, endoscopy, gastrointestinal bleeding.

INTRODUCTION

Gurvits syndrome, also known as acute esophageal necrosis or black esophagus, is a rare entity characterized by circumferential black discoloration of the esophageal mucosa, with an estimated incidence ranging from 0.01% to 0.28% in autopsy series and endoscopic studies[(1)].

Its etiology is not fully understood; however, its pathophysiology is considered multifactorial, involving noxious factors such as ischemic events, corrosive injury from gastric acid, and intrinsic alterations of the esophageal mucosal barrier[(2)].

Clinical presentation is nonspecific, and esophagogastroduodenoscopy (EGD) is required for diagnostic confirmation, in which variable involvement of the esophagus is observed. Most commonly, the distal portion is affected due to its lower degree of vascularization compared with the proximal and middle segments[(3)].

Currently, there is no specific treatment. Initial measures aim to restore hemodynamic stability, correct the underlying cause, and prevent the development of complications[(4)].

We report the case of a patient with sudden epigastric abdominal pain and an episode of hematemesis, in whom EGD revealed acute necrotizing esophagitis. The patient was managed conservatively, with favorable clinical outcomes and no development of complications. The objective is to highlight the diagnostic and therapeutic approach to an unusual entity such as Gurvits syndrome.

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CLINICAL CASE

A 71-year-old female patient with a single medical history of controlled arterial hypertension presented with a two-day history of nonradiating low back pain associated with nausea, without other symptoms such as fever, angina, dyspnea, or vomiting.

Upon admission to the emergency department, blood pressure was 140/80 millimeters of mercury (mm Hg), heart rate (HR) was 92 beats per minute (bpm), oxygen saturation (SpO_2) was 94% on room air, and temperature was 37 degrees Celsius.

Laboratory tests were obtained and showed evidence of acute kidney injury. The remaining studies revealed no electrolyte abnormalities, anemia, leukocytosis, thrombocytopenia, or prolonged coagulation times, and urinalysis showed no evidence of infection. Given the characteristics of the pain, thoracoabdominal aortic computed tomography angiography was performed, which ruled out aortic emergency and other differential diagnoses.

The neurosurgery team considered the pain to be nonspecific low back pain without signs suggesting a clear etiology and therefore decided on symptomatic management.

During the following 24 hours, the patient developed sudden epigastric abdominal pain and a single episode of non-coffee-ground hematemesis. She was evaluated by the general surgery service, which noted marked abdominal pain but no hemodynamic instability or signs of peritoneal irritation. Consequently, an urgent non-contrast abdominal computed tomography (CT) scan was requested, which ruled out pneumoperitoneum, hollow viscus perforation, and showed no causal findings explaining the patient's pain. Immediate EGD was therefore considered, which revealed acute necrotizing esophagitis without complications (**Figure 1**).

Conservative management was chosen. Parenteral nutrition (PN) was initiated, and additional extension studies were completed by internal medicine without identifying an underlying etiology. The patient was evaluated by gastroenterology, which concluded that, after ruling out differential diagnoses and given the clinical presentation, the extensive esophageal involvement was secondary to gastroesophageal reflux disease.

At 72 hours, with favorable clinical evolution and without abdominal pain, sepsis, or signs of perforation or mediastinitis, PN was discontinued and the diet was advanced until full tolerance of oral intake was achieved. The following day, after reassessment by gastroenterology, the patient was discharged with dual-dose proton pump inhibitor therapy for 12 weeks and a follow-up endoscopic evaluation scheduled in four weeks. The patient ultimately decided not to continue follow-up.

DISCUSSION

Gurvits syndrome is an uncommon clinical condition characterized by circumferential black discoloration of the esophageal mucosa[3,4]. The first case was described in 1990 by Goldenberg and colleagues, and it was subsequently classified as a syndrome by Gurvits and colleagues[5].

Acute esophageal necrosis is four times more common in men than in women and occurs more frequently in the sixth decade of life, with a mean age at presentation of 71 years. The most common risk factors include arterial hypertension, diabetes *mellitus*, dyslipidemia, chronic kidney disease, peripheral arterial disease, coronary artery disease, heart failure, cancer, and cardiovascular disease[5].

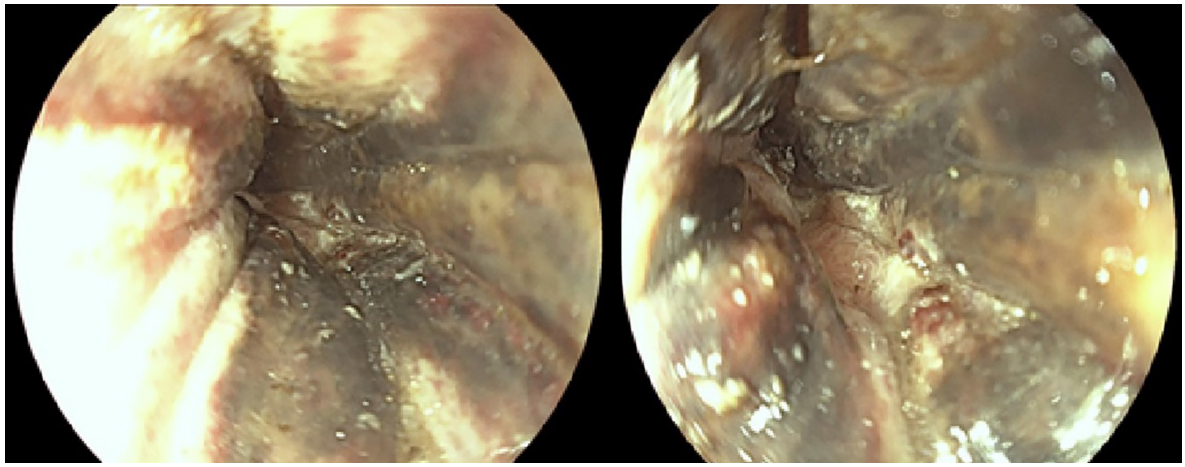


Figure 1. Esophagogastroduodenoscopy showing extensive esophageal necrosis. Author's file.

As mentioned previously, its etiology is often multifactorial, resulting from the combination of factors such as vascular compromise due to ischemic alterations, corrosive injury from massive secretions in the setting of gastroesophageal reflux, and reduced effectiveness of the protective barriers of the mucosa[6].

Clinical presentation is nonspecific, which makes diagnostic suspicion difficult. Onset may occur with symptoms related to complications associated with the underlying condition (diabetic ketoacidosis, anemia, pharyngitis, sepsis of urinary or gastrointestinal origin) and, in some cases, with upper gastrointestinal bleeding (UGIB). Given the rarity of this entity and the heterogeneity of its clinical spectrum, the true frequency of UGIB as the initial manifestation of acute esophageal necrosis remains unknown[7,8].

UGIB is, in turn, a common cause of consultation and hospitalization worldwide, with an incidence of 40 to 150 cases per 100,000 inhabitants. Pinto and colleagues performed a statistical analysis of the main causes of UGIB in a series of 249 patients and found that 72% were due to nonvariceal bleeding. Of these, 44% corresponded to peptic ulcer disease, 11% to erosive gastropathy or duodenopathy, 10% to esophageal ulcer, 5% to gastrointestinal neoplasia, 4% to Mallory-Weiss syndrome, 4% to Dieulafoy's lesion, 2% to angiodysplasia, 2% to gastric antral vascular ectasia, and another 2% to Cameron ulcer; Gurvits syndrome was not mentioned among the causes of UGIB in this study[9]. Notably, in the literature review conducted, Gurvits syndrome is considered an unusual cause of bleeding, and no records were found regarding the incidence of this entity as an etiology of UGIB.

A particular feature of our case is that the patient had controlled arterial hypertension as her only medical history, in contrast to most reported cases, which describe patients with a high burden of comorbidities and multiple risk factors, such as hemodynamic shock, advanced cardiovascular disease, metabolic dysfunction, and gastric outlet obstruction secondary to malignancy or gastroduodenal ulcer disease[6].

Esophagogastroduodenoscopy is the diagnostic method of choice, in which multiple findings may be observed, including active bleeding, clots, and esophageal, duodenal, or gastric ulcerations. It is characterized by predominant involvement of the distal esophagus due to its lower degree of vascularization[5,10]. Computed tomography has been described as a useful modality to rule out complications[4,11].

Treatment is usually conservative. A systematic review by Bayati and colleagues reported that most cases were managed conservatively with favorable outcomes and that the rate of endoscopic intervention with stent placement increased from 9.7% to 30%[12].

Conservative measures include withholding oral intake, initiating intravenous fluid resuscitation, transfusion of blood products when necessary, treatment of the underlying cause or coexisting clinical conditions, use of proton pump inhibitors, and administration of antibiotics in cases of concomitant infection or esophageal perforation. Surgical interventions are indicated in the presence of hemodynamic instability, signs of peritoneal irritation, failure of medical management, or complications[8,13,14].

Regarding complications, none exceed an incidence of 10% of all cases, with esophageal perforation being the most severe. This complication should be suspected in the presence of rapid clinical or hemodynamic deterioration. Other complications include mediastinitis, pneumomediastinum, abscess formation, superinfection, and stricture development[15].

Overall, prognosis is poor and largely depends on the presence and decompensation of underlying comorbidities, the patient's hemodynamic status, critical illness, or the development of complications. Exact mortality data for the different clinical scenarios are not available; however, disease-specific mortality is estimated to be approximately 6%[15].

CONCLUSION

Considering Gurvits syndrome as an unusual cause of gastrointestinal bleeding allows for a timely diagnostic and therapeutic approach and, consequently, a favorable impact on patient clinical outcomes.

Conflict of Interests

The authors declare no conflicts of interest.

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Ethical Considerations

This research complies with current regulations in bioethical research. Authorization was requested and obtained from the Research and Research Ethics Committee of Hospital Pablo Tobón Uribe to proceed with publication. The images used do not disclose personal information that would allow patient identification, and complete anonymity has been preserved.

REFERENCES

1. Monteiro JMC, Castelo LF, Fischer WGG, Felipe-Silva A. Black esophagus. Autops Case Rep. 2019;9(1):e2018077. https://doi.org/10.4322/acr.2018.077
2. Bong HSS, Soh YSA, Shabbir A, So JBY. Gastrointestinal: Black esophagus. J Gastroenterol Hepatol. 2022;37(1):46. https://doi.org/10.1111/jgh.15542
3. Thomas M, Sostre Santiago V, Suhail FK, Polanco Serra G, Manocha D. The Black Esophagus. Cureus. 2021;13(10):e18655. https://doi.org/10.7759/cureus.18655
4. Uyar S, Duman A, Tan A, Akbay Harmandar F, İnal G, Köker G, et al. Black esophagus. Turk J Gastroenterol. 2019;30(11):986-7. https://doi.org/10.5152/tjg.2019.181019
5. Dias E, Santos-Antunes J, Macedo G. Diagnosis and management of acute esophageal necrosis. Ann Gastroenterol. 2019;32(6):529-40. https://doi.org/10.20524/aog.2019.0418
6. Chugh P, Tzimas D, Gurvits GE. A rare cause of upper gastrointestinal bleeding. Gastroenterology. 2013;145(6):e11-2. https://doi.org/10.1053/j.gastro.2013.07.045
7. González Díaz I, Moreno-Sánchez M, Zarauza Soto Y, Burgos Garcia A. Black esophagus. Rev Esp Enferm Dig. 2023;115(11):646-7. https://doi.org/10.17235/reed.2022.9217/2022
8. Rehman O, Jaferi U, Padda I, Khehra N, Atwal H, Parmar M. Epidemiology, Pathogenesis, and Clinical Manifestations of Acute Esophageal Necrosis in Adults. Cureus. 2021;13(7):e16618. https://doi.org/10.7759/cureus.16618
9. Pinto C, Parra P, Magna J, Gajardo A, Berger Z, Montenegro C, et al. Hemorragia digestiva alta variceal y no variceal: mortalidad intrahospitalaria y características clínicas en un hospital universitario (2015-2017). Rev Med Chil. 2020;148(3):288-94. https://doi.org/10.4067/S0034-98872020000300288
10. Chinta S, Jyala A, Ghazanfar H, Makker J. Black Esophagus: A Rare Case of Acute Esophageal Necrosis. Cureus. 2024;16(1):e52660. https://doi.org/10.7759/cureus.52660
11. Grigore M, Enache I, Chirvase M, Popescu AL, Lonita-Radu F, Jinga M, et al. Acute Esophageal Necrosis in Acute Pancreatitis-Report of a Case and Endoscopic and Clinical Perspective. Diagnostics (Basel). 2023;13(3):562. https://doi.org/10.3390/diagnostics13030562
12. Al Bayati I, Badhiwala V, Al Obaidi S, Didia C, Zuckerman MJ, Elhanafi S. Endoscopic Treatment of Black Esophagus With Fully Covered Metallic Stent. J Investig Med High Impact Case Rep. 2022;10:23247096221084540. https://doi.org/10.1177/23247096221084540
13. Kitawaki D, Nishida A, Sakai K, Owaki Y, Nishino K, Noda Y, et al. Gurvits syndrome: a case of acute esophageal necrosis associated with diabetic ketoacidosis. BMC Gastroenterol. 2022;22(1):277. https://doi.org/10.1186/s12876-022-02349-z
14. Jaber F, Alsakarneh S, Sripada S, Gaur R, Rajab R, Mohamed I, et al. "Black Esophagus" or Gurvits Syndrome: A Rare Cause of Upper Gastrointestinal Bleeding in Diabetic Ketoacidosis. Cureus. 2023;15(2):e34989. https://doi.org/10.7759/cureus.34989
15. Gurvits GE. Black esophagus: acute esophageal necrosis syndrome. World J Gastroenterol. 2010;16(26):3219-25. https://doi.org/10.3748/wjg.v16.i26.3219