

# A Case of Gastric Ischemia: Management and Prognosis

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## Keywords

Ischemia · Gastric ischemia · Gastrointestinal bleeding

## Isquemia gástrica: abordagem e prognóstico

## Palavras Chave

Isquemia · Isquemia gástrica · Hemorragia digestiva

An 85-year-old female presented to the emergency department with coffee ground emesis and abdominal pain. The patient had a medical history of diabetes mellitus, hypertension, and hip replacement 10 years before.

Physical examination revealed abdominal tenderness. The patient was hemodynamically stable and had no fever. The most important laboratory findings were hemoglobin 8.9 g/dL, C-reactive protein 0.03 mg/dL, and lactate dehydrogenase 177 U/L. Esophagogastroduodenoscopy revealed a vinous mucosa of dark coloration suggestive of necrosis and polypoid areas with exudate, extending from the proximal body to the proximal antrum, only sparing the anterior wall of the gastric cavity (Fig. 1, 2). Abdominal computed tomography revealed thickening of the gastric wall with signs of submucosal edema, more accentuated along the small curvature, in

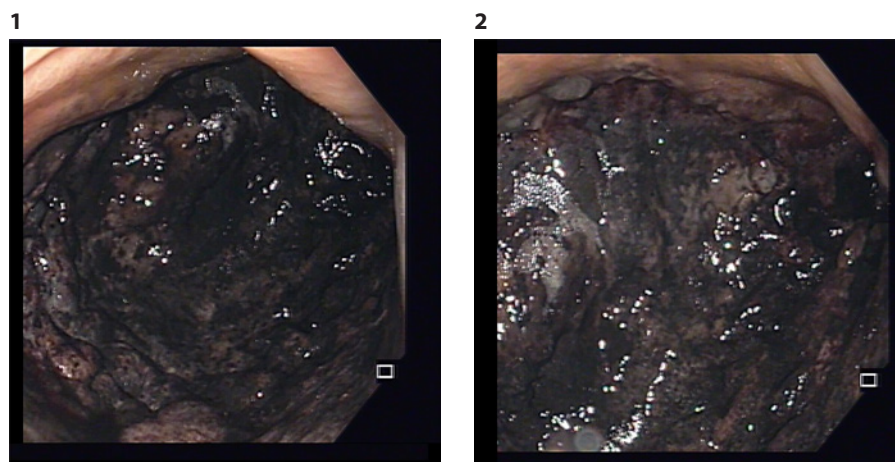
the region of the body, fundus, and in the cardia (Fig. 3). Histology was compatible to the endoscopic suspicion of gastric ischemia.

Considering clinical stability and the absence of complications, namely perforation, sepsis or persistent bleeding, the patient was hospitalized for medical treatment. The patient was treated with parenteral nutrition, intravenous fluids, intravenous proton pump inhibitors, and broad-spectrum antibiotics with favorable clinical outcome. Considering the favorable clinical evolution without evidence of complications, endoscopic reevaluation was not necessary. The patient was discharged after 3 weeks of medical treatment and was reevaluated at 6 months, remaining asymptomatic.

Gastric ischemia is uncommon because of the rich collateral blood supply of the stomach. It is infrequently reported in the medical literature and is likely under-recognized both clinically and histopathologically [1]. Few cases of gastric ischemia have been reported in patients with predisposing factors, such as atherosclerosis, vasculitis, paraesophageal hernia, gastric volvulus, gastric dilation, disseminated intravascular coagulation, shock, and post-operatively [2–4]. There are also reports of gastric ischemia as a complication of endoscopic procedures and secondary to hypoperfusion [2, 5]. Etiopathogenesis, clinical features, endoscopic/radiologic findings, and patient outcomes are not well known due to the rarity of this condi-

**Fig. 1.** Vinous mucosa of dark coloration suggestive of necrosis, extending from the proximal body to the proximal antrum, sparing the anterior wall.

**Fig. 2.** Vinous mucosa of dark coloration suggestive of necrosis, extending from the proximal body to the proximal antrum, sparing the anterior wall.



**Fig. 3.** Thickening of the gastric wall with signs of submucosal edema, more accentuated in the small curvature.

tion [2]. Patients are usually treated conservatively unless signs of perforation, sepsis, or persistent bleeding (despite endoscopic intervention) are developed, in which case gastrectomy is warranted [3]. In patients treated conservatively, hemorrhagic recurrence is low, although the mortality rate as a direct result of gastric ischemia is approximately 24% within 6 months [2].

Gastric ischemia was previously described in elderly patients of both sexes with risk factors for ischemic events. Most published cases report evidence of vascular occlusion.

In this case, it was possible to endoscopically document ischemic necrosis involving almost the entire gas-

tric cavity in a patient with no evidence of vascular disease. The patient presented important risk factors for gastric hypoperfusion (diabetes and hypertension) in the absence of major vascular abnormalities.

This is an exemplary case of good response and 6-month survival in a patient with extensive gastric ischemic necrosis.

#### Statement of Ethics

Informed consent was obtained from the patient.

#### Disclosure Statement

The authors declare no conflicts of interest for this article.

#### Funding Sources

Grant support was not provided for this article.

#### Author Contributions

João Carlos Silva: Composition and drafting of the article. Evaluation of the patient at admission, endoscopic study, and hospital admission.

Adélia Rodrigues: Evaluation of the patient at admission, endoscopic study, and hospital admission.

Ana Ponte: Critical revision of the article for important intellectual content.

Ana Paula Silva: Critical revision of the article for important intellectual content.

João Carvalho: Critical revision of the article for important intellectual content.

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