



Ulcerated Gastric Lipoma Presenting with Gastrointestinal Bleeding and Hypovolemic Shock

PEDRO MARQUES 

ALEXANDRA SANTOS 

ANA GERMANO 

**Author affiliations can be found in the back matter of this article*

IMAGES IN CLINICAL
RADIOLOGY

]u[ubiquity press

ABSTRACT

Teaching Point: Gastric lipomas are very rare and generally asymptomatic benign tumors; however, they can manifest as life-threatening complications, readily diagnosed by CT.

CORRESPONDING AUTHOR:

Pedro Marques

Hospital Prof. Doutor Fernando
Fonseca, PT

pedrotomasrmarques@gmail.com

KEYWORDS:

gastric lipoma; gastrointestinal
bleeding; CT

TO CITE THIS ARTICLE:

Marques P, Santos A,
Germano A. Ulcerated Gastric
Lipoma Presenting with
Gastrointestinal Bleeding
and Hypovolemic Shock.
*Journal of the Belgian Society
of Radiology.* 2022; 106(1):
2, 1–4. DOI: [https://doi.
org/10.5334/jbsr.2700](https://doi.org/10.5334/jbsr.2700)

CASE HISTORY

A 73-year-old female was brought to our emergency department for being found by her son in bed, prostrated, cold, and not reactive. Patient's relevant medical history was depression and dementia syndrome. Physical examination revealed Glasgow coma scale of 9, paleness, cyanosis, hypothermia, hypotension (50/20 mmHg), and tachycardia (109 bpm). Digital rectal examination without evidence of active bleeding. Analytically, peripheral oxygen saturation of 85%, low hemoglobin (5,9 g/dL), leukocytosis ($29 \times 10^9/L$), high C-reactive protein (5,95 mg/L), and high creatinine (5,17

mg/dL) were found. Hypovolemic shock of undetermined origin was assumed, and fluid therapy with warm saline was started. Due to the impossibility of providing a history, the patient underwent head computed tomography (CT) with intravenous contrast and chest radiograph, both without significant abnormalities. After stabilization, a non-contrast-enhanced (due to renal function worsening) abdominopelvic CT was performed, which revealed a bulky oval image of fat density in the gastric antrum wall, apparently submucosal, measuring $60 \times 44 \times 41$ mm, suggestive of a gastric lipoma (dotted line on axial, [Figure 1](#); coronal, [Figure 2](#); and oblique-axial, [Figure 3](#), planes). A solution of continuity was observed in



Figure 1.



Figure 2.

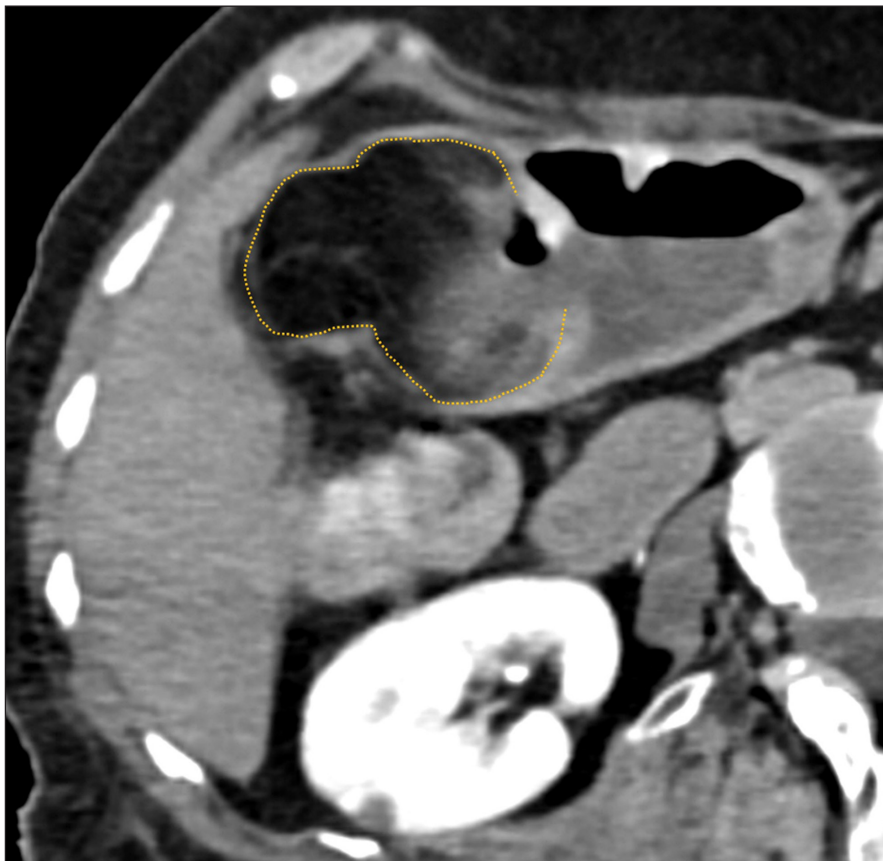


Figure 3.

the lesion's inferior aspect, compatible with an ulcerated area (bracket on [Figures 1](#) and [2](#)), containing near air and high-density areas. These findings were consistent with an ulcerated submucosal fat-containing lesion of the gastric antrum, with probable bleeding. The patient underwent subtotal gastrectomy with gastro-jejunal anastomosis. The specimen histological evaluation confirmed a gastric lipoma with wide steatonecrosis, located in the submucosal and muscular layers and extending to the mucosa with an area of ulceration. No evidence of atypia was found. Thus, the diagnostic hypothesis of hypovolemic shock caused by upper gastrointestinal (GI) bleeding originating from an ulcerated gastric lipoma was confirmed.

COMMENT

Gastric lipomas are very rare tumors, corresponding to less than 3% of benign gastric tumors and less than 5% of all gastrointestinal lipomas [1]. Gastric lipomas are usually solitary tumors, located in the submucosa of the antrum. Most are asymptomatic and their diagnosis is incidental [1]. Rarely, larger lipomas (>3 cm) can become symptomatic, manifesting both by mild and chronic symptoms (abdominal pain and slight GI bleeding due to ulceration)

or by serious and potentially fatal complications, such as gastric outlet obstruction, gastroduodenal intussusception and massive acute GI bleeding. In these last situations, all of which can be diagnosed by CT, surgical excision of the lipoma is recommended [1].

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Pedro Marques  orcid.org/0000-0003-0473-4864
Hospital Prof. Doutor Fernando Fonseca, PT

Alexandra Santos  orcid.org/0000-0003-4072-1585
Hospital Prof. Doutor Fernando Fonseca, PT

Ana Germano  orcid.org/0000-0003-2057-1006
Hospital Prof. Doutor Fernando Fonseca, PT

REFERENCE

1. **Sullivan I, Hota P, Dass C.** Gastric lipomas: A case series and review of a rare tumor. *BJR Case Rep.* 2019; 5: 20180109. DOI: <https://doi.org/10.1259/bjrcr.20180109>

TO CITE THIS ARTICLE:

Marques P, Santos A, Germano A. Ulcerated Gastric Lipoma Presenting with Gastrointestinal Bleeding and Hypovolemic Shock. *Journal of the Belgian Society of Radiology*. 2022; 106(1): 2, 1–4. DOI: <https://doi.org/10.5334/jbsr.2700>

Submitted: 29 October 2021 Accepted: 14 December 2021 Published: 17 January 2022

COPYRIGHT:

© 2022 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.

Journal of the Belgian Society of Radiology is a peer-reviewed open access journal published by Ubiquity Press.

