

## Severe Gastrointestinal Bleeding Secondary to a Gastric Glomus Tumor: A Case Report

Abdelkrim Chetibi<sup>1\*</sup>, Rachid Ghemit<sup>1</sup>

<sup>1</sup>Department of General and Oncologic Surgery, Beni-Messous University Hospital Center, Algiers, Algeria

\*Corresponding Author: Abdelkrim Chetibi

Department of General and Oncologic Surgery, Beni-Messous University Hospital Center, Algiers, Algeria

Article History: | Received: 14.12.2025 | Accepted: 09.02.2026 | Published: 20.02.2026 |

**Abstract:** Glomus tumors are rare mesenchymal tumors usually located in the skin or subcutaneously, most often benign, however they can exceptionally be of gastric location appearing in the intramuscular layer, and generally present in the form of a solitary submucosal nodule in the antral and pyloric region. We report the case of a 36-year-old patient who consulted the surgical emergency department for severe upper gastrointestinal bleeding associated with abundant melena evolving for 3 days due to a glomus tumor of gastric location and effectively treated by an atypical gastrectomy following an exploratory laparotomy performed in emergency whose origin could not be specified by endoscopic explorations.

**Keywords:** Digestive Hemorrhage, Gastric Glomus Tumor, Gastric Resection.

**Copyright © 2026 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

### INTRODUCTION

Glomus tumors are rare mesenchymal neoplasms that are predominantly benign and usually arise in cutaneous or subcutaneous locations [1]. However, they may exceptionally occur in the stomach [1, 2]. These tumors generally present with nonspecific clinical manifestations and may be asymptomatic, being discovered incidentally. In most cases, they are identified during upper gastrointestinal endoscopy, which reveals a submucosal mass with or without mucosal involvement.

In clinical practice, preoperative diagnosis remains difficult because no typical imaging or endoscopic ultrasound features reliably distinguish glomus tumors from other gastric wall tumors. The most frequently suspected diagnoses on imaging are gastrointestinal stromal tumors (GISTs) or neuroendocrine tumors. Endoscopic ultrasound-guided biopsy allows histological diagnosis without the need for surgery [3].

Currently, there is no consensus regarding the optimal therapeutic management of gastric glomus tumors. Nevertheless, endoscopic resection using

submucosal dissection combined with endoscopic surveillance appears to be an effective option, allowing avoidance of open or laparoscopic surgery, particularly for tumors smaller than 30 mm.

### CASE PRESENTATION

A 36-year-old woman with no significant past medical history presented to the emergency department with severe upper gastrointestinal bleeding associated with abundant melena for three days, occurring intermittently, without bowel habit disturbances, and with moderately altered general condition.

#### Clinical Examination

Physical examination revealed marked mucocutaneous pallor, blood pressure of 100/60 mmHg, heart rate of 100 beats/min, and respiratory rate of 30 cycles/min. Abdominal palpation showed a soft, non-distended abdomen without palpable mass but with epigastric tenderness. Digital rectal examination demonstrated a normotonic sphincter with the presence of blood in the stool.

**Citation:** Abdelkrim Chetibi & Rachid Ghemit (2026). Severe Gastrointestinal Bleeding Secondary to a Gastric Glomus Tumor: A Case Report; *SAR J Med Case Rep*, 7(1), 1-4.

### Diagnostic Workup

Laboratory investigations showed severe anemia with hemoglobin level of 4.9 g/dL, leukocytosis of 12,000/mm<sup>3</sup>, and platelet count of 176,000/mm<sup>3</sup>. Coagulation tests were normal.

The patient received four units of packed red blood cells over 48 hours, increasing hemoglobin to 9 g/dL. Upper gastrointestinal endoscopy revealed an antral submucosal lesion measuring approximately 30

mm, ulcerated with an adherent clot (Figure 1). Contrast-enhanced thoracoabdominopelvic computed tomography (CT) demonstrated an endophytic, sessile, well-circumscribed, oval mass with heterogeneous enhancement and thickening of the upper antral wall.

Due to persistent bleeding, the patient received three additional units of packed red blood cells within 24 hours, without clinical improvement. Emergency surgical resection was therefore indicated.

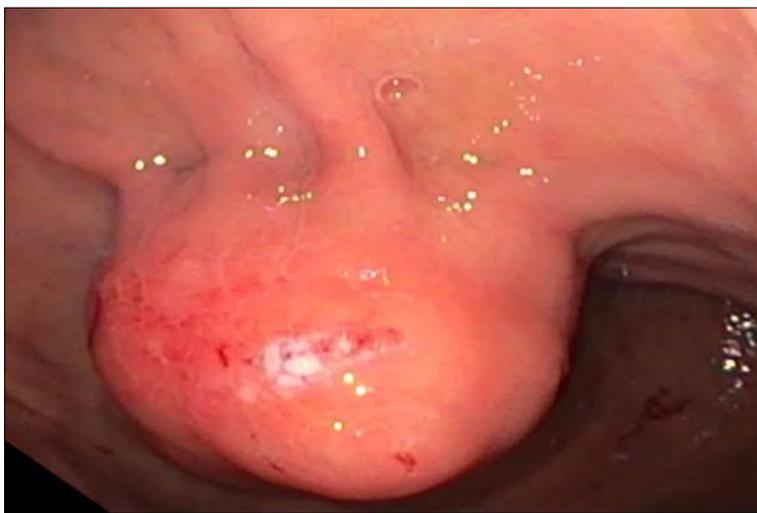


Figure 1: Ulcerated antral submucosal lesion

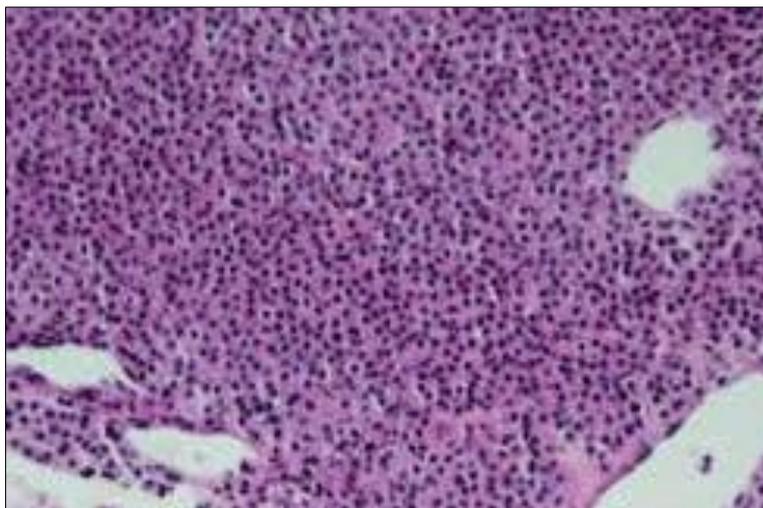
### Therapeutic Intervention

Intraoperative exploration revealed a submucosal antral gastric mass. An atypical gastric wedge resection was performed with 2 cm safety margins on both sides of the tumor, followed by closure of the gastric wall using interrupted absorbable 3/0 sutures (Figure 2).

Immunohistochemical analysis showed positive staining for S-100 protein and a negative Ki-67 proliferation index. Histopathological examination of the surgical specimen confirmed a glomangioma (Figure 3).



Figure 2: Atypical gastric resection removing the mass



**Figure 3: Histological section of a gastric glomus tumor**

### Follow-Up

Postoperative recovery was uneventful. The patient was discharged on postoperative day 8. At one-month follow-up, she was asymptomatic. Clinical and radiological follow-up at three and six months showed no abnormalities.

### DISCUSSION

Glomus tumors are rare benign neoplasms originating from the glomus body. They were first described by Hoyer in 1877, with the first clinical description by Masson in 1924. These tumors are usually cutaneous or subcutaneous [1–3], while gastric localization was first reported by De Bussacher in 1948 [4]. More than 130 cases of gastric glomus tumors have been reported in the literature [4].

They are most commonly discovered during endoscopy as submucosal masses with or without mucosal involvement. The true incidence is difficult to estimate because many tumors are asymptomatic. They typically occur in adults aged 30–50 years and show a female predominance of approximately 75% [5]. Gastric glomus tumors are most often located in the antrum, as in our case.

Clinical presentation is nonspecific and includes abdominal pain or upper gastrointestinal bleeding, particularly when the tumor is ulcerated [6]. Preoperative diagnosis is challenging, although well-circumscribed lesions located in the antrum and arising from the submucosa or muscularis propria may suggest the diagnosis.

There is currently no established consensus regarding management. Endoscopic submucosal dissection or surveillance may be considered, especially for tumors smaller than 30 mm. Liu *et al.*, reported that endoscopic resection is the preferred technique for small gastric glomus tumors, offering better tolerance and lower morbidity than surgery [8].

In our patient, the choice of surgical treatment was dictated by persistent hemorrhage and hemodynamic deterioration. Wide atypical gastric resection with adequate margins was performed to prevent recurrence. Histopathological examination showed uniform round tumor cells surrounding capillaries. Immunohistochemistry demonstrated strong diffuse positivity for S-100 protein and negativity for CD34 and c-Kit.

### CONCLUSION

Gastric glomus tumors are rare and usually benign. They often present with nonspecific symptoms or are discovered incidentally. Preoperative diagnosis is difficult, and imaging and endoscopic findings are not pathognomonic. Histopathological examination remains the gold standard for diagnosis. Surgical resection is indicated in complicated forms, while endoscopic management may be appropriate for small, uncomplicated lesions.

### Clinical Implications

This case highlights the rarity of gastric localization and the need to consider differential diagnoses such as gastrointestinal stromal tumors and neuroendocrine tumors. Preoperative diagnosis remains challenging, and histopathological confirmation is essential. Surgical resection in complicated cases prevents recurrence, which remains exceptional.

**Patient Perspective:** During treatment, the patient was satisfied with the quality of care received.

**Informed Consent:** Written informed consent was obtained from the patient for participation in this study.

**Authors' Contributions:** All authors contributed to this work and have read and approved the final version of the manuscript.

## REFERENCES

1. Hu J, Ge N, Wang S, Liu X et al. The role of endoscopic ultrasound and endoscopic resection for gastric glomus: A case series and literature review. *J Transl Intern Med* 2019;7:149-54.
2. Arias-Romano AJ, Puya-Gamarro M, Rodríguez-Lobalzo Sa et al. Tumor glómico gástrico: un reto en el diagnóstico preoperatorio de las lesiones subepiteliales del estómago. *Gastroenterol Hepatol* 2018;41:670-1.
3. Arnaud Ronfaut, Marion Allart-Sava, Nelly Guilain, Benjamin Ducloux Lebon, Jean Philippe Le Mouel, Denis Chatelain. Les tumeurs glomiques gastriques. Intérêt des biopsies sous échoendoscopie pour le diagnostic. À propos de deux cas. Doi: 10.1016/j.annpat.2021.03.013.
4. Zhang Y, Zhou P, Xu M, Chen W, et al. Endoscopic diagnosis and treatment of gastric glomus tumors. *Gastrointest Endosc* 2011;73:371-5.
5. Miettinen M, Paal E, Lasta J, et al. Gastrointestinal glomus tumors a clinicopathologic, immunohistochemical, and molecular genetic study of 32 cases. *Am J Surg Pathol* 2002 26 301-11.
6. R. Frikh et al. Tumeurs glomiques : étude anatomoclinique de 14 cas avec revue de littérature . *Ann Chir Plast Esthét*(2009).
7. J. Arias-Romano et al. Tumor glómico gástrico: un reto en el diagnóstico preoperatorio de las lesiones subepiteliales del estómago. *Gastroenterol Hepatol*(2018).
8. Liu S, Zhou X, Yao Y et al. Resection of the gastric submucosal tumor (G-SMT) originating from the muscularis propria layer: comparison of efficacy, patients' tolerability, and clinical outcomes between endoscopic full-thickness resection and surgical resection. *Surg Endosc* 2020;34:405364.