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HIGH-GRADE GASTRIC CARDIA GIST PRESENTING WITH DYSPHAGIA: A CASE REPORT

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ABSTRACT

Background: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract. Gastric GISTs usually present with abdominal pain, gastrointestinal bleeding, or incidental findings on imaging. Dysphagia is an uncommon presenting symptom and is rarely associated with gastric cardia GISTs.

Case Presentation: We report the case of a 58-year-old male who presented with progressive dysphagia and weight loss. Contrast-enhanced computed tomography revealed a 6 × 6 cm exophytic mass arising from the gastric cardia. Upper gastrointestinal endoscopy demonstrated external compression near the gastroesophageal junction without mucosal ulceration. The patient underwent successful laparoscopic excision of the tumor with primary gastric closure. Histopathological examination confirmed a high-grade gastrointestinal stromal tumor with spindle cell morphology. Immunohistochemistry was positive for CD117 and DOG1. The postoperative period was uneventful. Adjuvant imatinib therapy was initiated, and follow-up imaging at 6 months showed no evidence of recurrence.

Conclusion: Gastric cardia GIST may rarely present with dysphagia due to mass effect near the gastroesophageal junction. Minimally invasive surgical excision with negative margins is feasible even for relatively large proximal gastric GISTs. Early diagnosis, complete resection, and adjuvant targeted therapy are essential for favorable outcomes in high-risk tumors.

KEYWORDS: Gastrointestinal stromal tumor, GIST, gastric cardia, dysphagia, laparoscopic excision, imatinib

INTRODUCTION

Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract, originating from the interstitial cells of Cajal. The stomach accounts for approximately 60–70% of GISTs, followed by the small intestine, colon, rectum, and esophagus. Most gastric GISTs present with nonspecific symptoms such as abdominal discomfort, anemia, gastrointestinal bleeding, or are discovered incidentally during imaging or endoscopy performed for unrelated reasons.

Tumors located near the gastroesophageal junction or gastric cardia are relatively uncommon and may pose diagnostic and surgical challenges. Dysphagia as the presenting symptom of gastric GIST is rare and usually results from extrinsic compression of the distal esophagus or gastroesophageal junction.

Complete surgical resection with negative microscopic margins remains the cornerstone of treatment for localized GIST. The advent of minimally invasive surgery has enabled successful laparoscopic management of selected gastric GISTs, including proximal gastric lesions. High-risk tumors additionally benefit from adjuvant tyrosine kinase inhibitor therapy with imatinib, which significantly reduces recurrence risk.

We present a rare case of a high-grade exophytic gastric cardia GIST presenting with progressive dysphagia, successfully managed by laparoscopic excision and adjuvant imatinib therapy.

Case Presentation

A 58-year-old male presented with progressive dysphagia to solids for 3 months, associated with early satiety and unintentional weight loss. There was no history of hematemesis, melena, vomiting, or prior upper gastrointestinal disease. Clinical examination was unremarkable, and laboratory investigations showed no significant abnormalities.

Upper gastrointestinal endoscopy revealed extrinsic compression near the gastroesophageal junction without mucosal involvement or ulceration. Contrast-enhanced computed tomography (CECT) of the abdomen demonstrated a well-defined exophytic soft tissue mass measuring approximately 6 × 6 cm arising from the gastric cardia region. The lesion showed heterogeneous enhancement without evidence of distant metastasis or adjacent organ invasion.

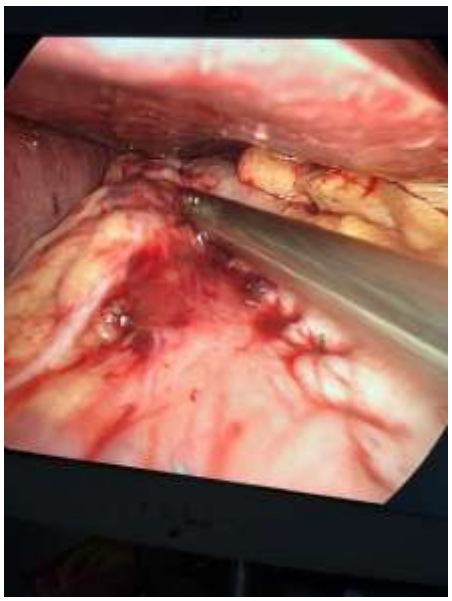
Based on imaging findings, a provisional diagnosis of gastric GIST was made. After multidisciplinary discussion, surgical resection was planned.

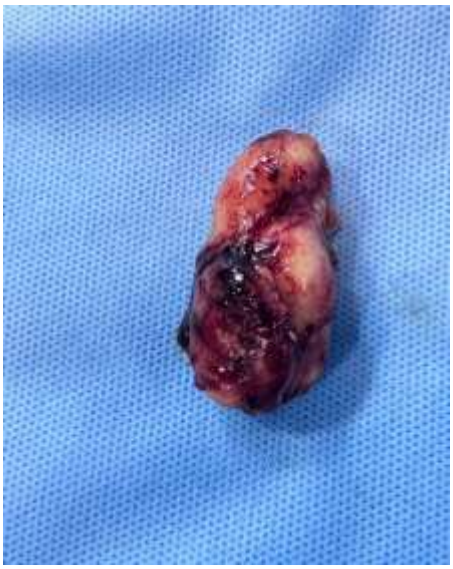
Surgical Technique

The patient underwent laparoscopic excision under general anesthesia. Intraoperatively, a large exophytic tumor arising from the gastric cardia along the proximal stomach was identified. Careful dissection was performed to avoid tumor rupture and preserve the gastroesophageal junction. The lesion was completely excised with adequate gross margins. Primary gastric closure was performed laparoscopically in two layers.

The specimen was retrieved using an endoscopic retrieval bag to avoid tumor spillage. No intraoperative complications occurred, and blood loss was minimal.

The postoperative recovery was uneventful. Oral liquids were initiated gradually, and the patient tolerated diet well. He was discharged in stable condition.





Histopathological Findings

Gross examination showed a well-circumscribed tumor measuring 6 × 6 cm. Microscopic examination revealed spindle cell morphology with increased mitotic activity consistent with a high-grade gastrointestinal stromal tumor. Surgical margins were free of tumor.

Immunohistochemistry demonstrated positivity for CD117 (KIT) and DOG1, confirming the diagnosis of GIST.

Given the tumor size and high-grade histology, the patient was categorized as high risk for recurrence and was started on adjuvant imatinib therapy.

At 6-month follow-up, the patient remained asymptomatic, and surveillance imaging demonstrated no evidence of recurrence.

DISCUSSION

GISTs are mesenchymal tumors characterized by activating mutations in KIT or platelet-derived growth factor receptor alpha (PDGFRA). Gastric GISTs are the most common subtype and generally have a better prognosis than small intestinal GISTs. Clinical presentation depends on tumor size, location, and growth pattern.

Tumors arising from the gastric cardia are uncommon and may present atypically because of their proximity to the gastroesophageal junction. Dysphagia is an unusual manifestation and occurs secondary to external compression or distortion of the distal esophagus. Such presentations may mimic esophageal malignancy or submucosal lesions.

Contrast-enhanced CT remains the primary imaging modality for evaluating GISTs and assessing tumor extent, metastatic disease, and operability. Endoscopic ultrasound may aid tissue diagnosis in selected cases, although biopsy is not mandatory in clearly resectable lesions due to the risk of bleeding or tumor seeding.

Surgical resection with intact pseudocapsule and negative margins is the standard treatment for localized GIST. Routine lymphadenectomy is generally unnecessary because lymphatic spread is rare. Laparoscopic resection has become increasingly accepted for gastric GISTs owing to reduced postoperative pain, shorter hospital stay, and faster recovery. However, proximal gastric lesions near the gastroesophageal junction remain technically challenging because of the risk of stenosis and difficulty obtaining adequate margins.

In the present case, laparoscopic excision with primary closure was successfully achieved without compromising the gastroesophageal junction. Avoidance of tumor rupture is critical because intraoperative spillage significantly increases recurrence risk.

Risk stratification of GIST depends on tumor size, mitotic index, anatomical location, and tumor rupture status. High-grade tumors carry substantial recurrence risk even after complete resection. Adjuvant imatinib therapy has significantly improved recurrence-free survival in high-risk patients and is currently recommended for at least 3 years in eligible cases.

This case highlights the importance of considering gastric GIST in the differential diagnosis of dysphagia caused by extrinsic gastroesophageal compression. Early recognition and minimally invasive surgical management can achieve excellent short-term outcomes.

CONCLUSION

High-grade gastric cardia GIST presenting with dysphagia is rare. Proximal gastric GISTs may mimic esophageal pathology because of compression at the gastroesophageal junction. Careful preoperative evaluation and complete surgical excision are essential. Laparoscopic resection with primary closure is feasible in selected patients and can provide favorable outcomes when combined with adjuvant imatinib therapy.

Learning Points

- Gastric cardia GIST can rarely present with progressive dysphagia.
- Exophytic proximal gastric tumors may mimic esophageal disease.
- Complete surgical excision without tumor rupture is the cornerstone of treatment.

● Laparoscopic resection is feasible even for selected proximal gastric GISTs.
● High-risk tumors benefit from adjuvant imatinib therapy and close surveillance.

Patient Perspective
The patient reported significant improvement in swallowing following surgery and was satisfied with the minimally invasive approach and postoperative recovery.

Informed Consent
Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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