Amyloid tumor of the stomach simulating an obstructing gastric carcinoma: case report and review of the literature

Systemic amyloidosis is known to rarely affect the stomach [1–5]. A 59-year-old male patient presented with intermittent nausea, vomiting, daily bowel movements, and weight loss of 20 kg over 2 months. His past medical history was significant for arterial hypertension, prostate cancer for 10 years, multiple myeloma, and recent renal failure. Barium upper gastrointestinal X-ray series revealed a large constricting lesion in the gastric antrum and proximal duodenum suggestive of malignancy (**Fig. 1**). Upper gastrointestinal endoscopy revealed a large, fungating, friable mass which obstructed nearly 75% of the prepyloric lumen (**Fig. 2**). Pathological analysis of the biopsies revealed amyloid deposits on the muscularis mucosae.

Exploratory laparotomy found a 4 × 5 cm obstructing soft mass in the prepyloric antrum. A Billroth II partial gastrectomy was performed. Pathological analysis showed infiltration of the muscularis mucosae and muscularis propria by amyloid and no malignancy. The postoperative course was marked by progressive impairment of the gastrointestinal motility. The patient died 5 months later.

Gastric outlet obstruction by an amyloid tumor is exceptional, with five published reports (**Table 1**). All patients were treated with surgery, a most reliable management of gastric outlet obstruction. In patients with known systemic amyloidosis who present with gastric outlet obstruction, regional amyloid deposition should be included in the differential diagnosis, along with other, more common causes such as ulcer or carcinoma. The obstruction can co-exist with a previously unrecognized amyloid gastrointestinal motility disorder, which can worsen the outcome.

Fig. 1 Barium meal showing a constricting lesion of the gastric antrum and proximal duodenum suggestive of gastric cancer.

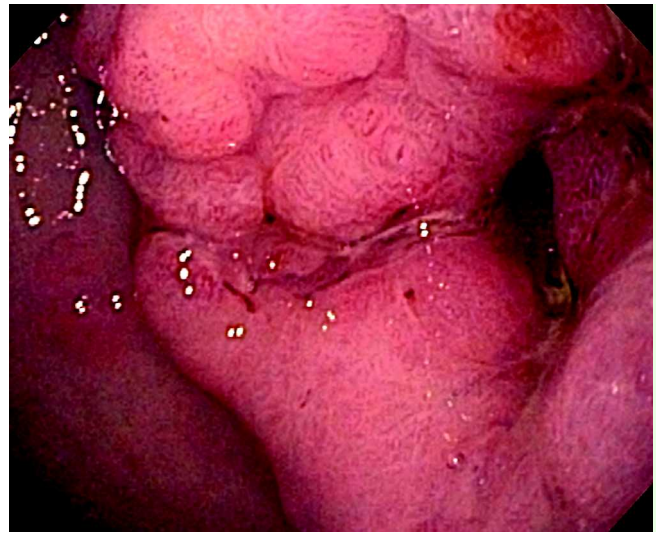

Fig. 2 Endoscopic appearance of a large circumferential, fungating, friable mass in the prepyloric antrum.

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Study	Age/ gender	Underlying disorder	Duration of GI disorder	Diagnosis	Treatment	Outcome/ cause of death
Golden [1]	66/F	Primary amyloidosis	16 years	Surgical specimen	Partial gastrectomy	Died from malnutrition (69 days)*
Shnider and Burka [2]	52/F	Multiple myeloma	6 months	Surgical specimen	Partial gastrectomy	Died from anastomotic leak (15 days)
Klingenberg [3]	63/M	Primary amyloidosis	1.5 years	Surgical specimen	Partial gastrectomy	Died from pulmonary embolism (5 days)
Lewis [4]	68/F	Multiple myeloma	months**	Endoscopy	Gastrojejunostomy	Died from GI bleeding (3 months)
Cryer and Kissane [5]	37/F	Multiple myeloma	1 year	Surgical specimen	Gastrojejunostomy	Not reported

* I.e., days after surgery; GI, gastrointestinal.
** the authors did not specify how many days after surgery.

Table 1 Previously published cases of gastric amyloid tumor causing gastric outlet obstruction.

J. E. Losanoff[1], F. Antaki[2], W. A. Salwen[1], D. Edelman[1], A. Reddy[2], E. Levi[3], M. D. Basson[1]

[1] Department of Surgery, John D. Dingell VAMC and Wayne State University, Detroit, Michigan, USA
[2] Department of Medicine, Division of Gastroenterology, John D. Dingell VAMC and Wayne State University, Detroit, Michigan, USA
[3] Department of Pathology, John D. Dingell VAMC and Wayne State University, Detroit, Michigan, USA

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Corresponding author

J. E. Losanoff, MD
Department of Surgery (11S)
John D. Dingell VA Medical Center
4646 John R
Detroit
MI 48201
USA
Fax: +1-313-5761002
jelosanoff@yahoo.com

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