

## Localized amyloidosis of the stomach: A case report

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### Abstract

We report an unusual case of primary amyloidosis of the stomach in a patient complaining of dyspeptic symptoms. The diagnosis was confirmed histologically and other gastrointestinal site or systemic involvement was ruled out. Uncharacteristic dyspeptic symptoms may hide this rare metabolic disease.

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**Key words:** Amyloidosis; Gastrointestinal tract; Dyspepsia

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### INTRODUCTION

The term amyloidosis refers to a group of disorders characterized by the extracellular accumulation of insoluble, fibrillar proteins in various organs and tissues. Amyloidosis commonly shows a systemic involvement. Localised deposition of amyloid is a rather uncommon form, and amyloid deposit confined to the stomach is extremely rare. The clinical manifestations of gastric amyloidosis are often uncharacteristic and subclinical<sup>[1]</sup>.

### CASE REPORT

A 55-year old Caucasian male was referred to our open-



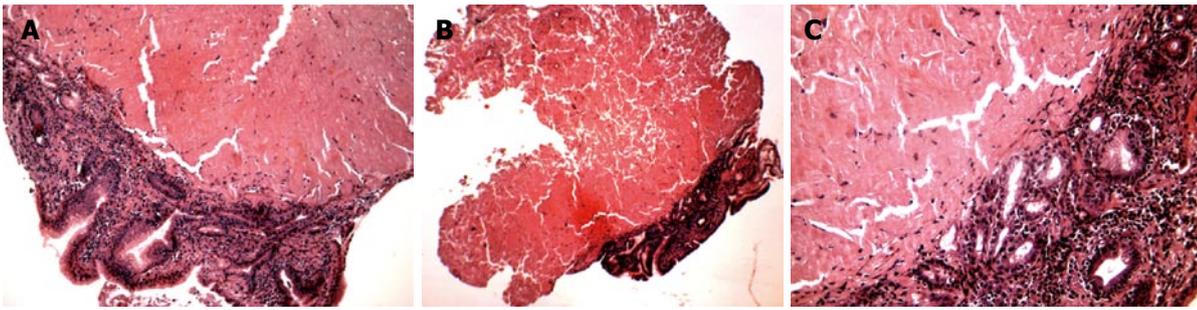
**Figure 1** Upper GI endoscopy showing a white-yellowish 3-cm circular area with fine granular appearance at the gastric body (above the angulus).

access Digestive Endoscopy Unit by his family physician due to epigastric pain, heartburn and mild weight loss (< 3 kg). Physical examination showed reduced lower thoracic basis sound, more evident on right side, no wheezes, crackles, or rhonchi. Blood tests and urinalysis were normal. Chest X-rays were normal. Upper gastrointestinal (GI) endoscopy showed two white-yellowish 3-cm circular areas with fine granular appearance on the distal portion of the gastric body and angulus (Figure 1). Histologic examination of biopsy specimens taken at the edges of the lesions showed deposition of fibrillar eosinophilic substance, infiltration of lymphocytes and polyclonal mature plasma cells in the lamina propria, compatible with a pattern of gastric amyloidosis (Figure 2). Endoscopic examination and biopsy samplings of the esophagus, duodenum and rectum excluded other gastrointestinal localizations. Endoscopic ultrasound showed mild thickening of the first two layers of the gastric wall with no pathological perigastric or coeliac lymph nodes. The patient was then evaluated in the Centre for the Study of Systemic Amyloidosis of the University of Pavia, where examination of serum, liver, kidney and heart ruled out any multiorgan involvement.

### DISCUSSION

Amyloidosis is a disorder characterized by extracellular deposition of amyloid in various tissues and organs. Common gastrointestinal manifestations include gastroparesis, constipation, malabsorption, intestinal pseudo-obstruction, and bleeding<sup>[2,3]</sup>. The absence of systemic symptoms may make diagnosis difficult. Endoscopic findings such fine granular appearance and polypoid protrusions are common and may reflect amyloid deposition in the mucosa or submucosa of the alimentary tract<sup>[4]</sup>.

Localized gastric amyloidosis is an uncommon form



**Figure 2** Photomicrograph of the endoscopic biopsy specimens showing deposition of fibrillar eosinophilic substance (A) (HE, x 10), positive Congo red staining (B) (Congo red, x 10), and high power image showing infiltration of the lamina propria with lymphocytes and polyclonal plasma cells (C) (HE, x 25).

of the disease, sometimes associated with gastric malignancies, such as carcinoma and stromal tumours<sup>[5,6]</sup>. The patient reported herein complained of dyspeptic symptoms, and had isolated gastric involvement without any other gastrointestinal or systemic localizations. Proton pump inhibitors (pantoprazole 40 mg daily per os) were administered as intermittent “on demand” therapy for his dyspeptic complaints, associated with a prokinetic drug (domperidone twice daily before meals). No further treatment was deemed necessary, since the patient was symptoms-free on a clinical follow-up of about 10 mo. Periodic controls have been scheduled to follow the evolution of disease and early recognition of multiorgan involvement.

Although gastric amyloidosis is rare, it should be considered among the possible diagnoses in dyspeptic patients and clinical follow-up in specialized centres is warranted in the management of these cases.

## REFERENCES

- 1 Deniz K, Sari I, Torun E, Patiroğlu TE. Localized gastric amyloidosis: a case report. *Turk J Gastroenterol* 2006; **17**: 116-119
- 2 Lee JG, Wilson JA, Gottfried MR. Gastrointestinal manifestations of amyloidosis. *South Med J* 1994; **87**: 243-247
- 3 Kim H, Jee SR, Lee SB, Lee JH, Park SJ, Park ET, Lee YJ, Lee SH, Seol SY, Chung JM. A case of secondary amyloidosis presenting as massive gastrointestinal bleeding. *Korean J Gastroenterol* 2006; **47**: 397-401
- 4 Tada S, Iida M, Iwashita A, Matsui T, Fuchigami T, Yamamoto T, Yao T, Fujishima M. Endoscopic and biopsy findings of the upper digestive tract in patients with amyloidosis. *Gastrointest Endosc* 1990; **36**: 10-14
- 5 Bedioui H, Chebbi F, Ayadi S, Ftériche F, Sassi K, Jouini M, Ksantini R, Ammous A, Kacem M, Ben Safta Z. Gastric amyloidosis mimicking malignancy. A case report. *Ann Chir* 2006; **131**: 455-458
- 6 Overstreet K, Barone RM, Robin HS. Secondary amyloidosis and gastrointestinal stromal tumors. A case report and discussion of pathogenesis. *Arch Pathol Lab Med* 2003; **127**: 470-473

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