Revista de Gastroenterología de México xxx (xxxx) xxx–xxx

REVISTA DE GASTROENTEROLOGÍA DE MÉXICO
www.elsevier.es/rgmx

CLINICAL IMAGE IN GASTROENTEROLOGY

Gastric amyloidosis as an initial presentation of multiple myeloma

Amiloidosis gástrica como presentación inicial de mieloma múltiple

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A 65-year-old woman presented with a one-month history of abdominal distension and pain. Physical examination revealed left abdominal tenderness, positive shifting dullness, and bilateral lower limb edema. Laboratory tests showed moderate anemia, hypoalbuminemia, impaired renal function, and hypercalcemia. Serum protein electrophoresis revealed a monoclonal protein level of 24%, and the serum β2-microglobulin level was 9.31 mg/l. Gastroscopy detected a 0-IIa + IIc lesion at the antrum-body junction, measuring approximately 3 × 6 cm, with smooth mucosa and easy bleeding on touch (Fig. 1). Biopsy revealed chronic inflammation in regenerating gastric mucosa. The cytological examination of the bone marrow smear was consistent with multiple myeloma (MM). Bone marrow biopsy identified moderately differentiated plasma cell myeloma infiltration (Fig. 2a-b). Congo red staining of prior gastric specimens showed submucosal amyloid deposition (Fig. 3a) with apple-green birefringence under polarized light (Fig. 3b). A diagnosis of MM with gastric amyloidosis was made. The patient was treated with bortezomib, cyclophosphamide, and dexamethasone. Her abdominal distension and pain were relieved.

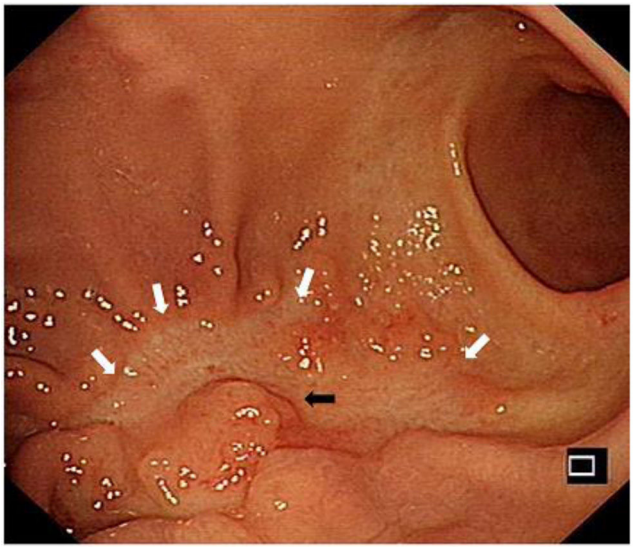

Figure 1 Endoscopic views seen during the gastroscopy examinations. The black arrow indicates the 0-IIa (slightly elevated area) and the white arrows indicate the 0-IIc (slightly depressed area).

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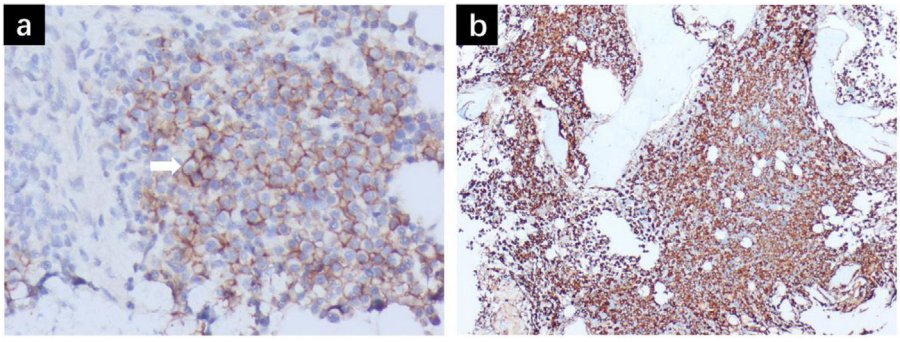

Figure 2 **a**) Bone marrow biopsy showing high CD138 (×400) expression, indicating a significant presence of plasma cells. The cells indicated by the white arrow are identified as plasma cells, which are characteristic of plasma cell disorders. **b**) Bone marrow biopsy showing lambda (×200) light chain expression, supporting the diagnosis of monoclonal plasma cell proliferation, a hallmark of multiple myeloma.

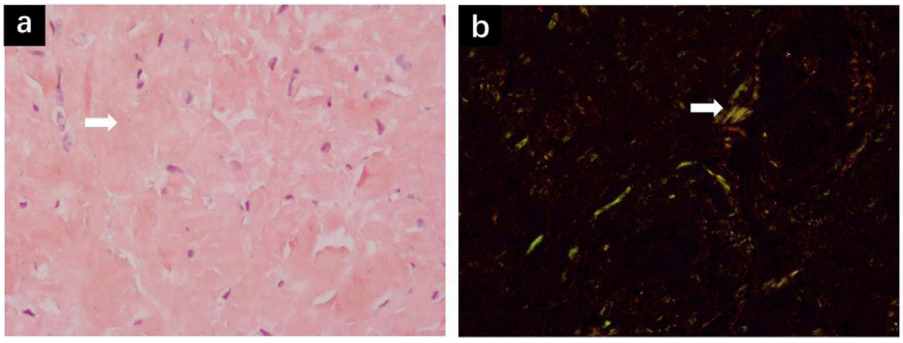

Figure 3 **a**) Gastric tissue biopsy stained with Congo red, indicating amyloid deposition. **b**) Gastric tissue biopsy under polarized light microscopy, displaying apple-green birefringence. Areas of positive reaction are indicated by the white arrows.

Ethical considerations

Informed consent was obtained from the patient for the described treatment and the publication of this case report, including data and images. This work complies with the Declaration of Helsinki and current bioethical research regulations. As this is a case report and not a research study, ethics committee approval was not required. The authors confirm that all identifying information has been omitted, ensuring complete patient anonymity.

Financial disclosure

This study is independent research funded by no grants.

Declaration of competing interest

The authors have no conflicts of interest to declare.