Beyond digestive pathology: endoscopic study in systemic disease

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Dear Editor,

Amyloidosis is a disease caused by the deposition of misfolded proteins in the extracellular space that causes changes in the morphology and function of the tissue where it is deposited. Gastrointestinal tract involvement is rare and paucisymptomatic, being more common in the setting of primary systemic amyloidosis.

A 77-year-old male patient with a clinical history of heart disease, kidney disease under study, and quiescent multiple myeloma. He presented a 2 years history of progressive dysphagia to solids and liquids, as well as epigastric pain, hyporexia, occasional diarrhea and weight loss. Physical examination revealed a slight edema in the lower limbs.
Gastroscopy showed an angled, tortuous esophagus with no visual lesions. In the gastric body, thickened folds with a nodular appearance and large fibrinated ulcers, with slightly raised edges; as well as some mucosal scars (Figure 1). No lesions were seen in the duodenum, colon, or distal ileum. The initial suspicion was peptic ulcer disease or gastric lymphoma. However, the stomach and rectum biopsies revealed homogeneous thickening of the blood vessel walls. Congo red staining revealed apple-green birefringence in polarized light consistent with amyloidosis. Treatment could not be started because the patient died a month later of refractory shock of unknown origin.

Gastrointestinal amyloidosis, and specifically gastric involvement, is a rare expression of primary systemic amyloidosis, whose frequency is lower than renal and cardiac involvement (1). The most common subtype affecting the stomach is AL amyloidosis, in which light chains of immunoglobulins are deposited mainly in antrum and body (2). The main endoscopic findings are erosions, ulcerations, and nodular mucosa, as well as pseudo-polypoid protrusions. These findings are not specific and can simulate other pathologies such as adenocarcinoma, lymphoma, or peptic ulcer (3). For this reason, it is essential to have a high index of suspicion, especially in patients with symptoms such as gastrointestinal bleeding, epigastric pain, diarrhea, weight loss, nausea, vomiting, dysphagia, or pseudo-occlusive symptoms (4), even more in the context of renal or hematological disease.

Histopathological study is essential for diagnosis, although less than 50% of biopsies are positive (1). The areas with the highest diagnostic yield are the duodenum, followed by the stomach, colon, rectum, and esophagus (5).

For all these reasons, it is important to have knowledge of this pathology in order to reach an early diagnosis that allows us to establish a timely treatment, since, without it, this pathology can have a fatal outcome.

REFERENCES


Fig. 1. Different endoscopic findings in gastroscopy: A. Tortuous esophagus. B and C. Fibrinate gastric ulcers, with raised borders, about 10-20mm, and nodular folds. D. Mucosal scar.