CLINICAL PRACTICE

Clinical Images

Gastrointestinal Amyloidosis and Multiple Myeloma

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Figure 1. EGD revealing patchy mucosa with friability and active oozing from the second part of the duodenum (white arrows).

A 74-year-old female was admitted for evaluation of dyspnea at rest. She reported chronic abdominal pain, long-standing diarrhea and weight loss of 30 lbs over the course of the previous two years. Echocardiogram showed restrictive cardiomyopathy with normal ejection fraction. CT abdomen was unremarkable and mesenteric angiography ruled out mesenteric ischemia. Esophagogastroduodenoscopy (EGD) (Fig. 1) revealed friable mucosa of the duodenum and a biopsy demonstrated amyloid deposition (Fig. 2) and a positive Congo red stain (Online Fig. 3). Further lab workup

Figure 2. Duodenal biopsy showing amyloidosis (white arrow) and hyalinization of the thick-walled blood vessels with amyloid deposition (black arrow).

showed elevated serum lambda free light chains and elevated serum β 2-microglobulin. A decision for a bone marrow biopsy was made to exclude other plasmacytic dyscrasias, which revealed multiple myeloma (Online Fig. 4).

Light chain or primary amyloidosis is the most common form of amyloidosis and is associated with plasma cell dyscrasias.¹ Approximately 15 % of these patients have concurrent multiple myeloma, and up to 31 % of them have small bowel amyloidosis on autopsy.² Although the clinical and endoscopic findings in gastrointestinal amyloidosis can be nonspecific, histopathological patterns of amyloid deposition are diagnostic.³ Random gastrointestinal biopsies are more sensitive and are diagnostic in 80 % of the cases.⁴ Major causes of death in these patients are renal failure and restrictive cardiomyopathy.⁵

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