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BRIEF REPORT

Colonic amyloidosis: Rare endoscopic findings mimicking a depressed neoplastic lesion

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A 77-year-old man with a positive fecal immunochemical test underwent a colonoscopy, which revealed a 2-cm depressed lesion at the splenic flexure (Fig. 1a). The lesion was surrounded by slightly elevated normal mucosa with round pits. Magnifying endoscopy with narrow-band imaging showed different surface and vessel patterns in the depressed area from those of normal mucosa (Fig. 1b). Tubular pits were mainly observed in the depressed area (Fig. 1c). Reticular vessels without a visible surface pattern were also observed in the margin of the lesion (Fig. 1d). The histopathology of biopsy specimens demonstrated eosinophilic deposits mainly in the submucosa. Direct fast scarlet staining proved the deposits to be amyloid (Fig. 1e, f).

The patient had been followed up with a diagnosis of monoclonal gammopathy of undetermined significance for 13 years and was suspected to have progression to smoldering multiple myeloma. Immunohistochemical staining showed the amyloid deposits to be positive for amyloid light-chain (AL) kappa and negative for AL lambda, amyloid A, or amyloid transthyretin.

Amyloid deposits in AL amyloidosis tend to form masses in the muscularis mucosae, submucosa, and muscularis propria, which lead to gross appearances of thickened folds and submucosal tumors. ^{1,2} Depressed lesions, as in this case, are not typical and need to be differentiated from neoplastic lesions. A superficial depressed-type neoplastic lesion of the colon tends to be associated with submucosal invasion and should be treated by en

bloc endoscopic resection. Biopsy of such a lesion is not recommended because it may cause fibrosis in the lesion and make endoscopic resection difficult.³ Tubular pits are frequently seen in colorectal neoplastic lesions, whereas the findings of reticular vessels as found in this case are not typical of them. Thus, we performed a biopsy and consequently obtained the pathological diagnosis of amyloidosis.

Since evaluation for the involvement of other organs such as the heart and skin provided no evidence of amyloid deposition, his disease was diagnosed as gastrointestinal amyloidosis. Because he had no symptoms, he had been under observation for 5 months until the underlying multiple myeloma showed hematologic progression. Since then, he has survived for one and a half years while continuing intermittent chemotherapy.

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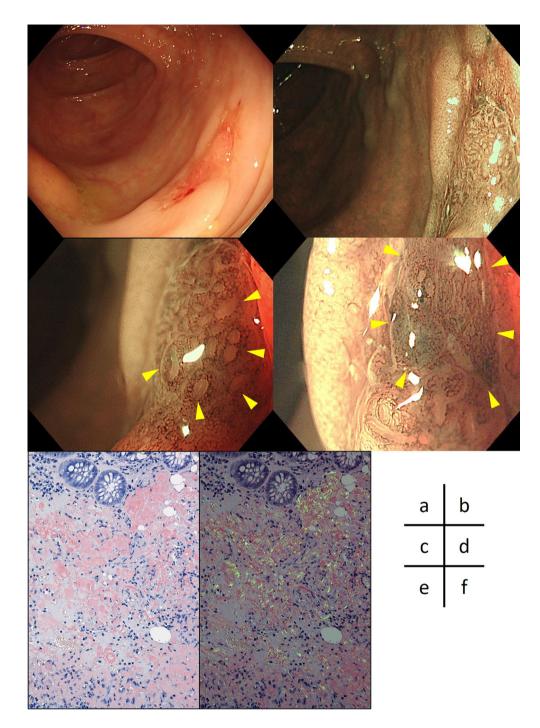


Figure 1 (a) A 2-cm depressed lesion at the splenic flexure. (b) Magnifying endoscopy with narrow-band imaging showed that the surface and vessel patterns in the depressed area were different from those on the surrounding normal mucosa. (c) Tubular pits were mainly observed in the depressed area (arrowheads). (d) Reticular vessels without a visible surface pattern were observed in the margin of the lesion (arrowheads). (e) The histopathology of biopsy specimens demonstrated eosinophilic deposits mainly in the submucosa. The deposits were stained by direct fast scarlet (original magnification ×40). (f) The deposits showed an apple green color under polarized light (original magnification ×200).