A Rare Case of Localized Colonic Amyloidosis Identified During a Screening Colonoscopy

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Keywords: Colonoscopy, Amyloidosis

Published: 14 December 2023 **Introduction:** Amyloidosis is an abnormal accumulation of amyloid protein in different organs and tissues, which typically results in nephropathy, cardiomegaly, hepatomegaly, and neuropathy. We report a rare case of localized amyloidosis that was identified during a screening colonoscopy.

Case Presentation: A 73-year-old male patient was referred to the gastroenterology clinic for a screening colonoscopy. Past medical history was significant for essential hypertension, type 2 diabetes mellites, gastroesophageal reflux disease (GERD), and myasthenia gravis.

Screening colonoscopy revealed one 12 mm flat polyp in the ascending colon. The polyp was removed with endoscopic mucosal resection (EMR) and retrieved successfully. Biopsy of the polyp showed amorphous deposits in the submucosa, suggestive of amyloid deposits. Congo red stain was performed, and stain was suggestive of amyloidosis. Liquid chromatography tandem mass spectrometry was later performed on the biopsy, which detected a peptide profile consistent with AL (kappa)-type amyloid deposition. In addition, seven other sub-centimeter tubular adenomas were seen in the transverse and sigmoid colons, which were removed with cold snare and cold biopsy forceps.

The patient was referred to hematology to rule out systemic amyloidosis. Workup by hematology was negative for systemic amyloidosis. The only abnormal finding was a slightly elevated kappa/lambda light chain ratio at 1.69. In addition, fat pad biopsy showed no evidence of Congo red/amyloid deposits, cardiac MRI showed no evidence of amyloidosis, and bone marrow biopsy showed no evidence of plasma cell dyscrasia and was negative for amyloid stain. It was concluded that the patient had localized amyloidosis without evidence of systemic disease.

Conclusion: Gastrointestinal amyloidosis is a common finding in systemic amyloidosis, especially AA amyloidosis. However, localized gastrointestinal amyloidosis without evidence of systemic amyloidosis

is uncommon. Management consists of observation or removal of the localized deposition. Patients have a good prognosis and they do not typically transition to systemic amyloidosis.

