# Unusual Presentation of Immunoglobulin Light Chain (AL) Amyloidosis as A Gastric Subepithelial Lesion

THE UNIVERSITY OF ARIZONA COLLEGE OF MEDICINE TUCSON
Internal Medicine Residency

**Authors:** Richard Trieu M.D., Himabindu Kolli M.D., Kelly Wang M.D., Avin Aggarwal M.D.
**University of Arizona College of Medicine - Tucson**

Banner University Medicine

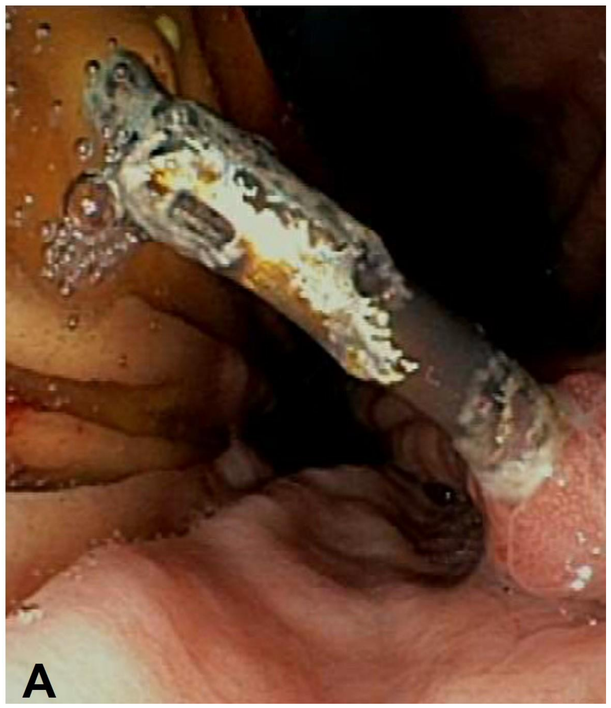
## Introduction

Gastric Amyloidosis is an uncommon manifestation of amyloidosis seen in up to 8% of patients. Immunoglobulin light chain amyloidosis (AL) is rarely associated with chronic lymphocytic leukemia (CLL). We present case of symptomatic gastric AL amyloidosis manifesting as a subepithelial lesion in a patient with CLL

## Case Presentation

- 68-year-old male with past medical history of chronic kidney disease, and chronic lymphocytic leukemia presents with 1 month of melanic stools. 2 weeks prior He was seen at outside hospital for melanic stool where he had Endogastroduodenoscopy (EGD) revealing a gastric body Dieulafoy lesion requiring endoclip placement. He presented with 1 day recurrence of melena with associated fatigue.
- Physical examination: subconjunctival pallor without abdominal tenderness.
- Labs: hemoglobin of 7.4 g/dL, platelets 84 K/uL, Bun 68 mg/dL, and Cr 5.02 mg/dL.
- Flex sigmoidoscopy :showed normal colonic mucosa.
- Upper Endoscopy: Previous endoclip on the anterior wall of the gastric body (Figure 1A) and a single 5 mm red nodular mass in the gastric fundus (Figure 1B). No source of active bleed was identified. The nodule was biopsied.
- Pathology: Random biopsies taken from the stomach and colon revealed normal mucosa. Biopsy from gastric nodule revealed apple-green birefringence and AL amyloid. Diagnosis of AL with kappa light chain was verified with bone marrow biopsy and liquid chromatography with tandem mass spectrometry

## Figures/Pictures



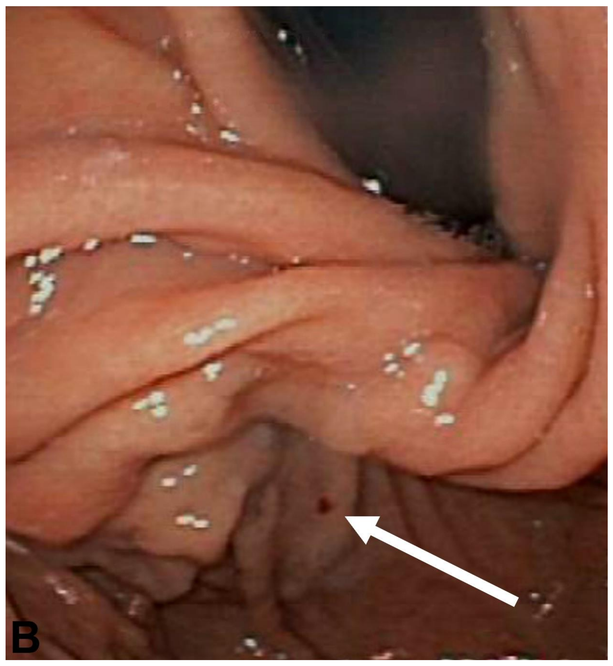




Figure 1: A) previously placed endoclip with no stigmata of recurrence of bleed. B) A single 5 mm mucosal papule (nodule) with no bleeding and no stigmata of recent bleeding was found in the gastric fundus beneath the fold of the fundoplication.

## Hospital Course

- Patient's anemia resolved with transfusion of PRBC and Erythropoietin. No further endoscopic intervention was needed.
- Developed symptomatic bradycardia and was stabilized in the medical intensive critical care unit.
- Hematology oncology was consulted for systemic amyloidosis and patient was tried on CyBorD
- Patient was discharged and chose to forego any further treatment with wishes of wanting to focus on time with family.

## Discussion

- Only 1% of gastric amyloidosis present with symptoms[1].
- Gastric amyloidosis symptoms: malabsorption, diarrhea, GI bleed weight loss, nausea, vomiting, dysphagia, or constipation.
- Endoscopically gastric amyloidosis commonly presents with erosions or erythema. However, up to 44% of patients have endoscopy negative disease[1,2].
- Gold standard diagnosis remains in biopsies revealing the pathognomonic apple green-birefringence by Congo-red staining under polarized light.
- This case highlights a rare presentation of Gastric amyloidosis. He presented with a GI bleed and found to have a submucosal tumor that led to his overall diagnosis of amyloidosis[2].

## References

1. Ebert, Ellen C. M.D.1; Nagar, Michael M.D.2 Gastrointestinal Manifestations of Amyloidosis, American Journal of Gastroenterology: March 2008 - Volume 103 - Issue 3 - p 776-787
2. Iida T, Yamano H, Nakase H. Systemic amyloidosis with gastrointestinal involvement: Diagnosis from endoscopic and histological views. J Gastroenterol Hepatol. 2018 Mar;33(3):583-590. doi: 10.1111/jgh.13996. PMID: 28940821.