

# Implicit Bias Contributing to Delayed Diagnosis in a Rare Case of Biopsy Proven Gastrointestinal Amyloidosis

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## Introduction

- Amyloidosis describes a rare group of diseases which are characterized by abnormal deposition of fibrillar proteins (amyloid) in various tissues of the body.<sup>1</sup>
- Intestinal involvement is exceedingly rare with only 1-8% of patients with GI involvement in AL amyloidosis.<sup>2</sup>
- Implicit bias leads to narrow workups which results in misdiagnosis of rare diseases.

## Case Presentation

- 67-year-old woman presenting with abdominal pain.
- PMHx of abdominal aortic aneurysm (AAA), substance use disorder in remission, and chronic malnutrition.
- Workup (including serology, several CECTs, and MRIs) over the course of eight prior ED visits for abdominal pain was unremarkable. Her pain was attributed to functional pain or opioid withdrawal.
- On this presentation, expanding AAA size noted on CT prompted surgical consult. The surgical team expressed concern that she would not tolerate an open repair with a BMI of 13.9; TPN was started.

## REFERENCES

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## Case Continued

- GI recommended endoscopy to assess for a malabsorptive process. Unfortunately, the procedure was delayed 22 days as the patient felt her pain was not validated by the care team.
- After many care conferences, she agreed to upper endoscopy which showed flattening of the villi of the duodenum (Fig. 1). Microscopic testing from biopsies showed extensive amyloidosis (Fig. 2). Amyloidosis resulting in intestinal ischemia was thought to be the cause of her pain and malnutrition.



Figure 1: Duodenal bulb on EGD showing flattening of the villi.

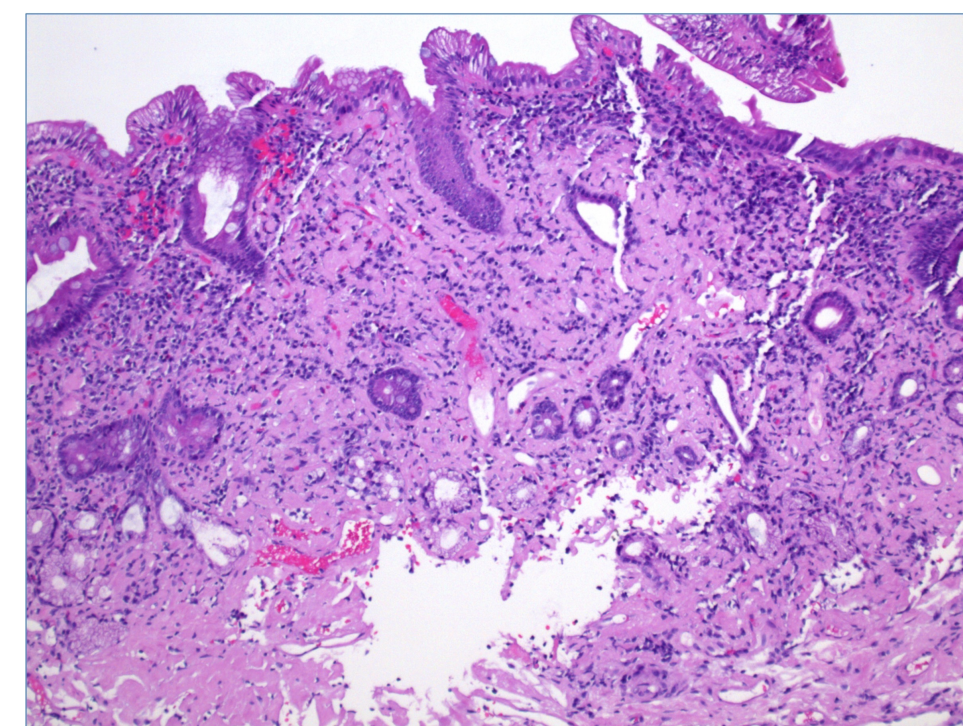


Figure 2: Duodenal biopsy - extensive amyloidosis, involving mucosa and submucosa, perivascular regions. Pictomicrographs obtained by Lawrence J. Burgart.

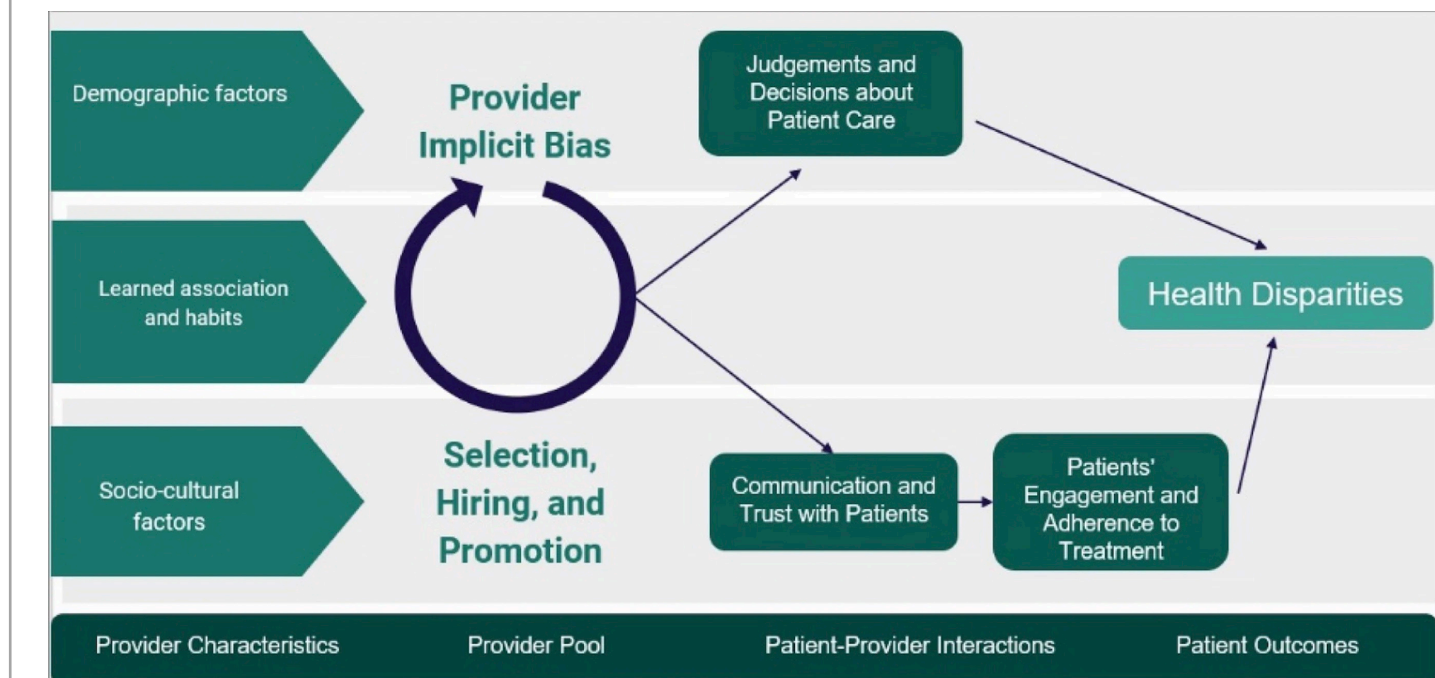


Figure 3: External factors can lead to healthcare provider implicit bias and lead to health disparities. Figure from Lopez, C.M. et al. (3).

## Discussion

- Implicit bias associated with the patient's history of addiction led to anchoring and misdiagnosis.
- The patient's malnutrition was misattributed on previous encounters to complications from substance use despite there being no recorded relapses in the health record.
- Frequent dismissal of symptoms resulted in mistrust leading the patient to decline further workup.
- Implicit bias can negatively affect clinical judgement and decision making<sup>5</sup> and is an under-recognized contributor of healthcare disparities for marginalized communities.<sup>6</sup>
- Recognizing and ultimately mitigating bias allows clinicians to provide more equitable workup and care (Fig. 3).

## Take Home Points

- Implicit bias can negatively guide clinical decision making and lead to delayed diagnosis or suboptimal care, particularly for marginalized communities.
- Recognizing implicit bias allows physicians to deliver more equitable care.