



# Multifocal Gastrointestinal Complications of Systemic Amyloidosis: A Rare Surgical Challenge

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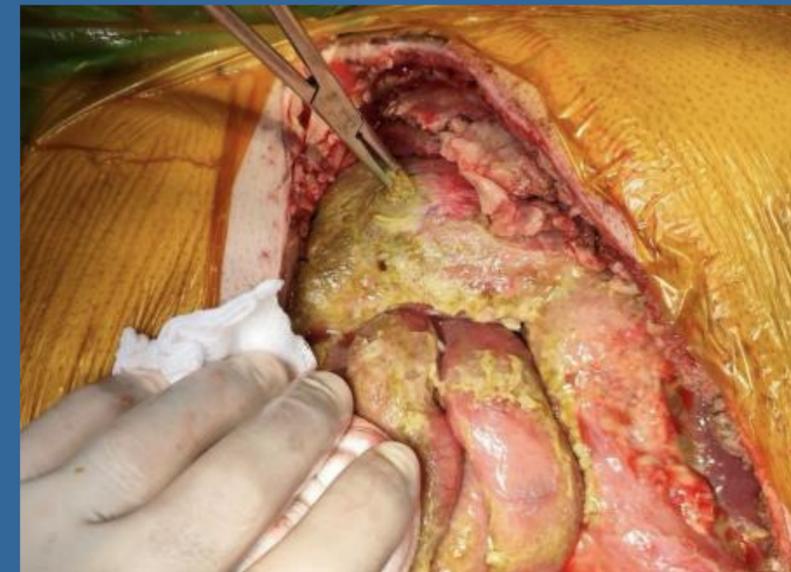
## INTRODUCTION

Amyloidosis is characterized by the extracellular deposition of fibrillar proteins (amyloid) in various organs and tissues. Gastrointestinal (GI) involvement occurs in approximately 3% of cases, with about 80% representing systemic disease and 20% limited to the GI tract. Its manifestations are diverse, ranging from functional disturbances to life-threatening complications, and may present as acute surgical emergencies.



## CASE PRESENTATION

A 55-year-old male presented with bowel obstruction, severe malnutrition, and rapid weight loss of 15 kg within one month. Upper GI endoscopy demonstrated duodenal narrowing with ulcerated mucosa and high-grade dysplasia, and the patient underwent a pancreaticoduodenectomy (Whipple procedure) for presumed malignancy. On postoperative day (POD) 4, he developed massive upper GI bleeding due to suspected vascular erosion, requiring emergency reoperation. Because of friable pancreatic tissue and uncontrolled hemorrhage, a completion pancreatectomy with splenectomy was performed. Despite initial stabilization, on POD 16 the patient developed diffuse peritonitis. Re-laparotomy revealed feculent contamination and a large transmural perforation of the ascending colon with adjacent necrosis, for which a right hemicolectomy with primary ileocolic anastomosis was performed. Despite aggressive resuscitation and intensive care, the patient succumbed to multi-organ failure three days later. Histopathological examination demonstrated extensive AL-type λ amyloid deposition throughout the resected specimens, including the duodenal wall, pancreas, lymph nodes, bile duct, and gallbladder. The colonic specimen revealed transmural amyloid infiltration at the site of perforation, confirming systemic amyloidosis with gastrointestinal involvement as the underlying etiology of the patient's catastrophic course.



## CONCLUSIONS

Gastrointestinal amyloidosis is a rare but devastating entity that may mimic malignancy and present with multifocal life-threatening complications such as obstruction, hemorrhage, and perforation. This case underscores the importance of early suspicion, histopathologic confirmation, and multidisciplinary management in atypical gastrointestinal presentations to ensure timely diagnosis and optimize patient outcomes.

