



Concurrent CMV Colitis and GI Amyloidosis as Initial Presentation of Multiple Myeloma: A Case Report

Pranusha Atuluru BS¹, Chunsu Jiang MD^{1,2}, Turkey Alkathery MD³, Emory Manten MD^{1,2}, Shria Kumar MD, MSCE^{1,2}

¹University of Miami, Miller School of Medicine, ²Division of Digestive Health and Liver Diseases University of Miami, ³Department of Pathology University of Miami

INTRODUCTION

- Amyloidosis: prevalence of 5.8/100,000 in the United States.
 - 3% of usual patients have GI tract involvement
- CMV colitis: generally diagnosed in immunosuppressed patients & rare with immunocompetent.
- GI amyloidosis with CMV colitis together is rarely reported
 - Should be considered more readily in the hospital.

CASE PRESENTATION

- Presenting: 67-year-old Venezuelan male with history of HTN and benign prostatic hyperplasia
- Presents with bilateral DVTs 8 days after transurethral resection of prostate.
- Anticoagulation was started with IVC filter.

Physical Exam: T: 37.2°C, HR 82, BP 118/71, spO2: 99%

Laboratory:

132	100	13	108	7.6	11.3	372
4.4	27	0.8				

- Protein: 3.7 g/dL
- Calcium: 7.3 mg/dL
- C. diff: negative toxin
- Negative glutamate dehydrogenase

Imaging:

- **CT abdomen and pelvis:** Acute colitis with diffuse colonic wall thickening.
- **Echo:** longitudinal strain pattern indicative of apical sparing, which can be seen in cardiac amyloid.
- **Technetium pyrophosphate scan:** negative.
- **Colonoscopy w/ biopsy:** friable mucosa with loss of vascular pattern through the entire colon (Figure 2)
- **Histology:** Reactive epithelial changes and lymphoid aggregates. Further, revealed positive Congo red stain with apple green birefringence in the terminal ileum and colon and cytomegalovirus inclusions in the colon. (Figure 1)

FIGURES

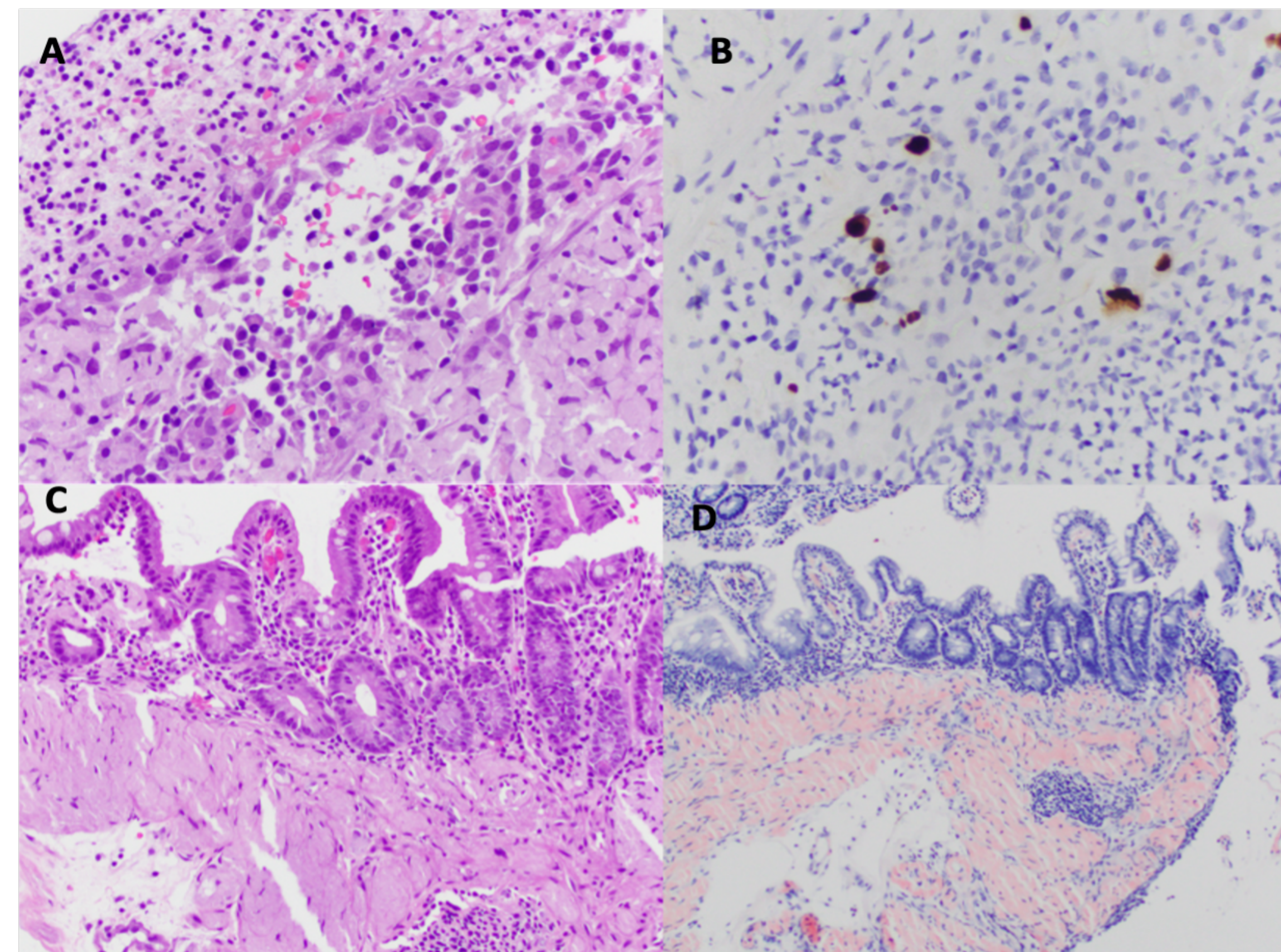


Figure 1: A) H&E stain of colonic epithelium with CMV colitis B) Immunohistochemistry for CMV highlights viral inclusions C) Colonic epithelium with amyloidosis D) Congo red stain showing salmon pink color amyloid deposits.

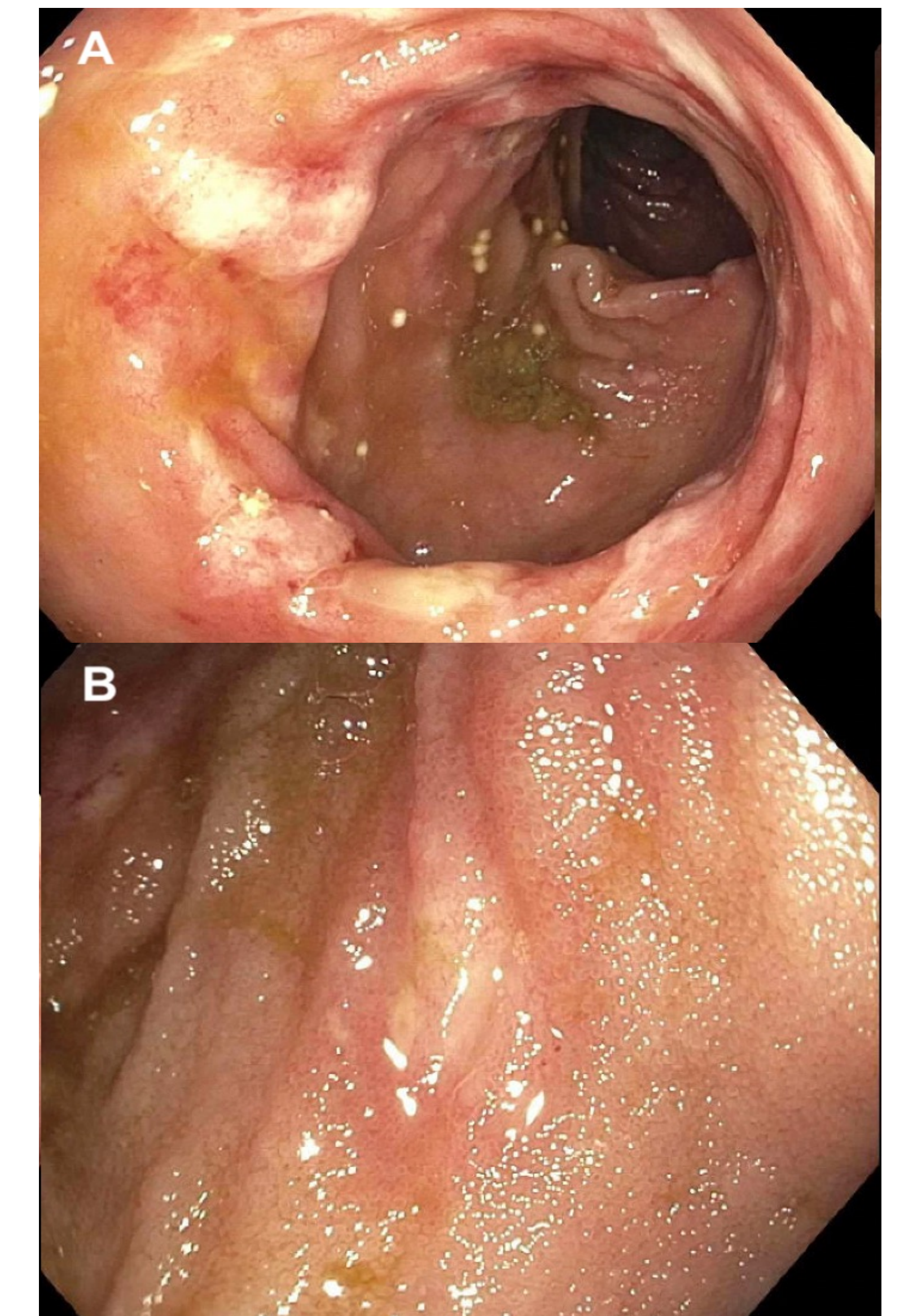


Figure 2: Colonoscopy A) sigmoid colon B) terminal ileum. Ulcerated, erythematous, and friable mucosa.

CASE PRESENTATION CONT...

- Valganciclovir for CMV colitis; showed no improvement in clinical status
- Patient continued to worsen, and expired 40 days after admission from cardiac causes, possibly due to cardiac amyloidosis.

CONCLUSIONS AND FUTURE STEPS

- First case report of concurrent CMV colitis and GI amyloidosis in patients not undergoing immunosuppressive treatments.
- Consider GI amyloidosis on differential diagnosis in patients presenting with non-specific GI symptoms, particularly in the setting of diffuse symptoms.
- Assessing effectiveness of antiviral treatment for CMV in GI amyloidosis is difficult due to symptom overlap between both conditions.
- Patients with GI tract involvement have a worse prognosis --> treatments for GI amyloidosis should be explored.

