# Image of the Month

# Jejunal Wall Thickening and Ulceration in a Patient With Amyloid Light-chain (AL) Amyloidosis

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A 75-year-old man presented to our emergency department with 24 hours of nausea and vomiting 3 days post coronary artery stenting for unstable angina. He had undergone total gastrectomy with esophago-jejunal anastomosis and chemotherapy for gastrointestinal stromal tumour 11 years previously. He also suffered from atrial fibrillation, sicca, carpal tunnel syndrome, calcium pyrophosphate crystal deposition disease (CPPD) arthropathy, and renal nephrolithiasis. His medications included apixaban, aspirin, clopidogrel, iron sulfate, and decreasing doses of prednisone following a CPPD flare.

Abdominal CT demonstrated distension and marked wall thickening in the proximal jejunum (Figure 1). A naso-gastric tube returned minimal red blood prompting upper endoscopy (Figure 2A–C) whereupon biopsies of a shallow jejunal ulcer were taken. Pantoprazole was added, and aspirin was discontinued. The patient was discharged 5 days later.

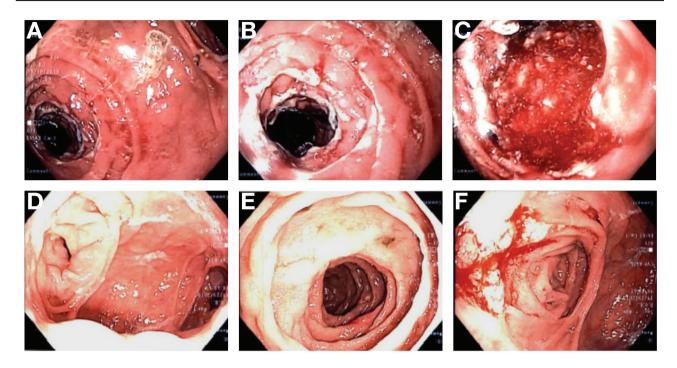
Four days after discharge he returned to the emergency department with weakness and melena. His hemoglobin had fallen from 104 to 72 g/L. Repeat upper endoscopy demonstrated friable jejunal mucosa, but healing of the ulcer (Figure 2D–F). Apixaban was discontinued and his hemoglobin stabilized. Echocardiography revealed concentric ventricular hypertrophy typical of amyloidosis. The



Figure 1. Focal jejunal wall thickening and sub-occlusion in a patient with jejunal AL amyloidosis.

jejunal ulcer biopsies returned positive for amyloid lightchain (AL) amyloidosis, kappa type.

This case demonstrates clinical and endoscopic features of jejunal AL amyloidosis. Amyloid may weaken tissues, which might have caused hemorrhage within the jejunal wall and subsequent sub-occlusion and ulceration (1,2). Amyloidosis should be considered as a potential cause of small bowel ulceration and sub-occlusion in patients with known plasma cell dyscrasias or otherwise unexplained hypertrophic cardiomyopathy.



**Figure 2.** First- and second-look upper endoscopic findings in jejunal AL amyloidosis. (A) First-look jejunal findings at the esophageal-jejunal anastomosis. (B) Endoscopy was pursued towards a region of proximal jejunal distention. (C) Atypical ulceration was discovered, and biopsies taken. Second-look findings in the same patient 9 days later (D–F) revealed friable mucosa and thickened valvulae conniventes, but no ulceration.

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