

Fellows' Corner

An Unusual Cause of Acute Pancreatitis

by Josephine Ni, Octavia Pickett-Blakely

A 19-year-old man with one previous episode of pancreatitis presented with abdominal pain, nausea and vomiting for two days. He presented one month previously with similar symptoms to another institution and was diagnosed with acute pancreatitis based on an abdominal CT scan and an elevated lipase. He was managed conservatively with NPO, analgesia and IV fluids and ultimately discharged. Two days prior to the current admission he developed constant epigastric pain with radiation to the back. This was accompanied by nausea and non-bloody, non-bilious vomiting. He denied diarrhea, melena, or hematochezia. He endorsed drinking five drinks per weekend in the past, but stated that his last drink was 3 months prior to admission.

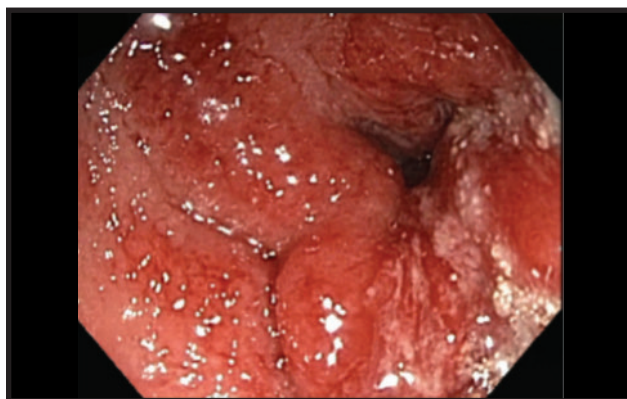
Laboratory studies were significant for a lipase of 209 U/L with normal liver-associated enzymes tests, and a normal white blood cell count. Triglycerides, ANA, and IgG-4 were all within normal limits.

CT scan of the abdomen and pelvis with contrast showed mild stranding and fluid adjacent to the pancreas consistent with mild uncomplicated pancreatitis. The gallbladder was unremarkable without findings of cholecystitis or cholelithiasis.

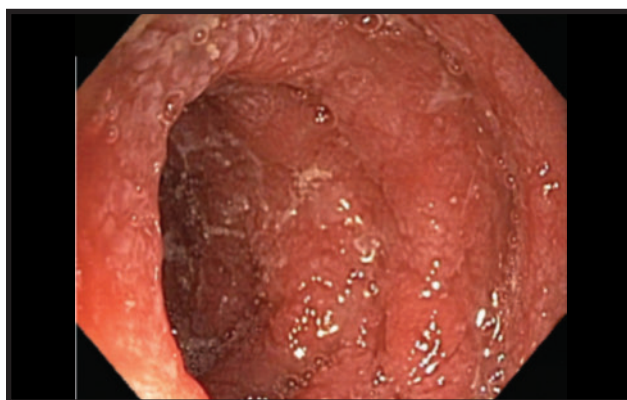
An MRCP was then performed and showed a normal pancreas and bile ducts; however, there was new mild segmental dilation of the proximal jejunum with suggestion of segmental mild wall thickening distally.

An anterograde push enteroscopy was performed to evaluate the abnormal small bowel seen on MRCP and showed severe, circumferential erythema, edema, friability, and ulcerated mucosa with exudate extending circumferentially from the duodenal bulb to the proximal-mid jejunum. Multiple biopsies were taken of the small bowel and stomach.

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1. Bulb



1. Duodenum

QUESTIONS

1. What is the differential diagnosis?
2. Are there associations between this condition and pancreatitis?
3. What are the causes of pancreatitis in patients with this condition?
4. How would you treat this condition in this patient?

DISCUSSION

The pathology from the small bowel biopsies showed small bowel mucosa with severe acute and chronic inflammation consistent with Crohn's disease, and his episodes of acute pancreatitis were thought to be due to peri-pancreatic duct inflammation caused by Crohn's involvement of the duodenum.

Although extraintestinal manifestations of IBD are well described and relatively common, acute pancreatitis is a rare extraintestinal manifestation. In a retrospective cohort study, the prevalence of pediatric and adult patients with acute pancreatitis as the initial presenting symptom of IBD was 2.17% (10 of 460 pediatric patients) and 0.06% (2 of 3500 patients), respectively. (1) The most common etiologies of pancreatitis in patients with Crohn's disease are gallstones, alcohol, and purine analogs. (2) However, Crohn's disease of the duodenum was found in a retrospective cohort study of 48 patients to be a risk factor for acute pancreatitis in 7 patients (15% of the cases of pancreatitis). (2) Although the pathophysiology of duodenal Crohn's

causing acute pancreatitis has not been well-studied, it has been theorized that small bowel inflammation can cause both papillitis and the reflux of pancreatic contents into the pancreatic duct. (3) Thus, Crohn's disease of the duodenum should be considered in the differential diagnosis in individuals with acute pancreatitis, particularly in younger patients whose work-up has otherwise been unrevealing.

This patient is currently doing well on a steroid taper with plans to initiate infliximab therapy at his next clinic visit. ■

References

1. Broide E, Dotan I, Weiss B, et al. Idiopathic pancreatitis preceding the diagnosis of inflammatory bowel disease is more frequent in pediatric patients. *J Pediatr Gastroenterol Nutr.* 2011 Jun;52(6):714-7.
2. Moolsintong P, Loftus EV Jr, Chari ST, et al. Acute pancreatitis in patients with Crohn's disease: clinical features and outcomes. *Inflamm Bowel Dis.* 2005 Dec;11(12):1080-4.
3. Pitchumoni CS, Rubin A, and Das K. Pancreatitis in Inflammatory Bowel Disease. *J Clin Gastroenterol.* 2010 Apr;44(4):246-53.

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- Send in a brief case report.
- No more than one double-spaced page.
- One or two illustrations, up to four questions and answers and a three-quarter to one-page discussion of the case.
- Case to include no more than two authors.

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