A Small Bowel Stricture Revealing Intestinal Lymphoma, a Rare Presentation

BACKGROUND

- Primary non-Hodgkin's lymphoma (PNHL) of the gastrointestinal tract is rare.
- The most involved areas are the stomach, small intestine and ileocecal region.
- Diffuse large B-cell lymphoma (DLBCL) is the most common histological subtype of PNHL.
- Clinical presentation is non-specific and includes hematochezia, melena, abdominal pain, weight loss, nausea, vomiting, and symptoms of bowel obstruction.

CASE PRESENTATION

- 43-year-old male with a history of GERD, sarcoidosis (in remission), and hypertension presented with three months of periumbilical pain, a 30-pound weight loss and emesis.
- Prior outpatient workup including inflammatory bowel disease (IBD) serology, esophagogastroduodenoscopy, and colonoscopy were unrevealing. Video capsule endoscopy (VCE) demonstrated localized inflammation in the ileum. The capsule was unable to pass beyond this point.
- Physical exam was notable for tenderness in the periumbilical area.
- Routine labs and chest radiograph were normal.
- CT abdomen/pelvis revealed a partial small bowel obstruction (image 1,3).
- SBE demonstrated congested mucosa in the proximal ileum, jejunal inflammation and gastritis. Biopsies showed nonspecific chronic inflammation of the ileum and jejunum.
- CT enterography showed a stricture in the midileum (image 2,4). The capsule was lodged at the stricture (image 5) but later passed without intervention.
- ACE levels, calprotectin, and CEA were normal. Stool ova, parasites, and culture for enteric bacteria were negative.
- Small bowel resection with side-to-side anastomosis was performed. Pathology revealed DLBCL of the small bowel and the patient was started on chemotherapy.

Sharon Slomovich MD, Ari Steiner MD, Frank G. Gress MD

Mount Sinai South Nassau

RESULTS



Image 1: CT with positive oral contrast showing obstruction as indicated by the dilated loops of small bowel followed by collapsed bowel. **Contrast material advanced past this point** indicating the presence of partial obstruction.



study.

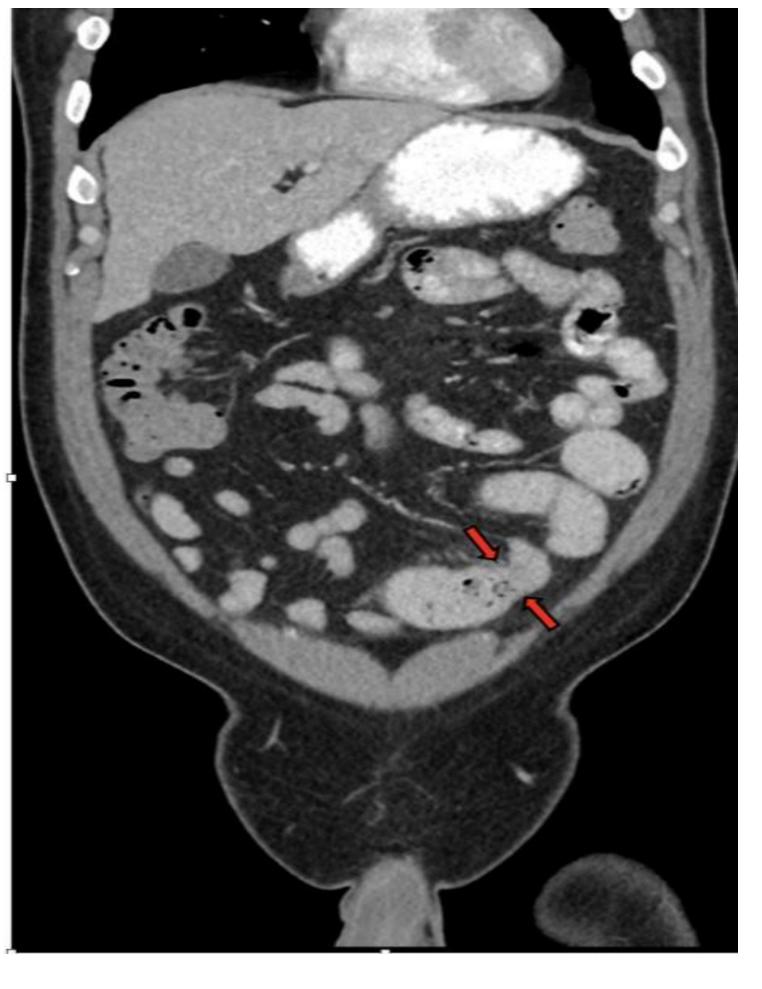


Image 3: CT with positive oral contrast showing wasting in the small bowel (red arrows).

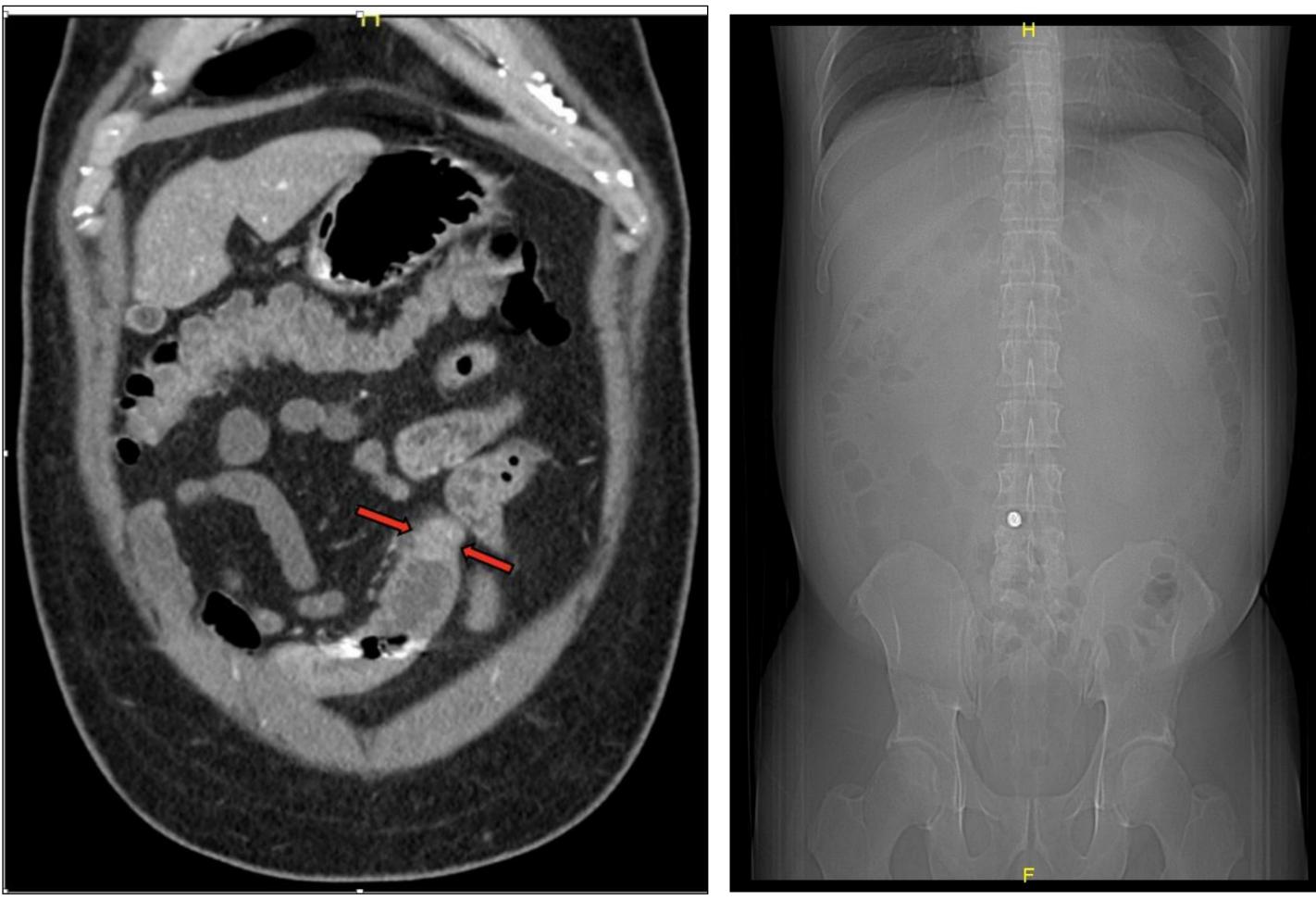


Image 4: CT enterography showing mild hyperenhancement in the narrowed region (red arrows).





Image 2: CT enterography showing mild hyperenhancement in the narrowed region (red arrow) with slight residual caliber change from prior CT

Image 5: CT in scout view showing lodged endoscopic capsule.

- 3873

- 242.

Icahn School of Medicine at Mount Sinai

DISCUSSION

• A small bowel stricture raises suspicion of IBD. • The stricture, in this case, was thought to be inflammatory given the lack of a bulky mass or lymphadenopathy and chronic inflammation on biopsies. However, the inflammatory workup for IBD was negative and sarcoidosis was stable, thus further evaluation was required.

• VCE and SBE with biopsies have improved the evaluation of small intestinal pathologies but were nondiagnostic in this case.

 CT enterography has a high spatial resolution for visualizing the small intestinal wall and surrounding structures, however, no enlarged suspicious lymph nodes or masses were identified in our case.

 Due to the patient's worsening clinical condition and lack of etiology of pathology, more invasive exploration and surgical intervention provided the definitive diagnosis.

CONCLUSION

 Advanced imaging and endoscopic techniques are crucial in the workup of primary intestinal lymphoma.

• Lack of findings on imaging does not rule out primary intestinal lymphoma and persistent evaluation is necessary for this challenging diagnosis.

REFERENCES

Ghimire P, Wu GY, Zhu L. Primary gastrointestinal lymphoma. World Journal of Gastroenterology : WJG. 2011;17(6):697.

Richard Herrmann, Alvin M. Panahon, Maurice P. Barcos, Debra Walsh, Ma Stutzman LS. Gastrointestinal Involvement in Non-Hodgkin's Lymphoma. *Cancer*. 1980;46:215-222.

Koch P, del Valle F, Berdel WE, et al. Primary gastrointestinal non-Hodgkin's lymphoma: I. Anatomic and histologic distribution, clinical features, and survival data of 371 patients registered in the german multicenter study GIT NHL 01/92. Journal of Clinical Oncology. 2001;19(18):3861-

Lo Re G, Federica V, Midiri F, et al. Radiological Features of Gastrointestinal Lymphoma. *Gastroenterology Research and Practice*. 2016;2016:21498143.

Li B, Yuan-Kai AE, Ae S, et al. Primary non-Hodgkin lymphomas in the small and large intestine: clinicopathological characteristics and management of 40 patients. Int J Hematol. 2008;87(4):375-

Thomas SS. Gastrointestinal lymphoma: the new mimic. *BMJ Open Gastro*. 2019;6:320.

Lightner AL, Shannon E, Gibbons MM, Russell MM. Primary Gastrointestinal Non-Hodgkin's Lymphoma of the Small and Large Intestines: a Systematic Review. Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract. 2016;20(4):827-839

Durmush D, Kaffes AJ. Small bowel strictures. Current opinion in gastroenterology. 2019;35(3):235-