Intramesenteric Perforated Diverticulitis, Rectal Stump Hematoma: a case report of a rare finding and literature review

Justine Betzu, M.D.[1], Alexander Hien Vu, M.D.[1], Jessica Chiang, M.D.[1], Aaron Zuckerman, M.D.[1], Preeti Kodavanti Farmah, M.D.[1], Corneliu Vulpe, M.D.[1]
[1]New York University Langone Health, Department of General Surgery

Background

- Colonic diverticulitis remains one of the most common pathologies requiring intervention in surgery.
- Contained intramesenteric abscess from perforated colonic diverticulitis, however, is rare.[1]
- Consequently, the risk of ruptured mesenteric abscess from colonic diverticulitis is even more rare.[2]
- We present a literature review and case report of a perforated mesenteric abscess secondary to sigmoid diverticulitis that resulted in an intra-abdominal disaster.

Case Study

This is a 66-year old male with recurrent episodes of diverticulitis who presented to the hospital with two weeks of diffuse and progressively worsening lower abdominal pain.

- An outpatient CT (Figure 1-2) revealed thickening of the sigmoid colon with contained perforation measuring 7 x 8 x 13 cm in the mesocolon.
- On admission, he was hemodynamically normal, with work-up remarkable for leukocytosis. Patient was initially managed non-operatively with IV antibiotics.
- IR did not have a safe window for image-guided percutaneous drainage.
- Two days later, the patient clinically deteriorated, and a decision was made to proceed to the OR for exploratory laparotomy. Upon entering the abdomen, dense adhesions were encountered and ultimately a window was created to unroof the large mesenteric abscess. However, the cavity was densely adherent to viscera, requiring appendectomy, partial sigmoid colectomy and small bowel resection with end colostomy.

Intramesenteric Perforated Diverticulitis

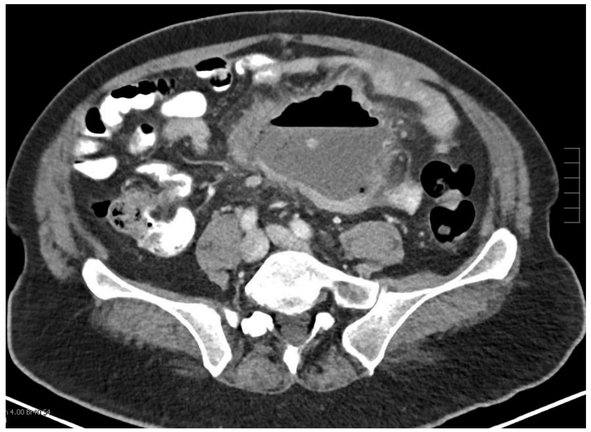


Figure 1. (Top left) CT abdomen and pelvis PO and IV contrast, axial view with intramesenteric abscess

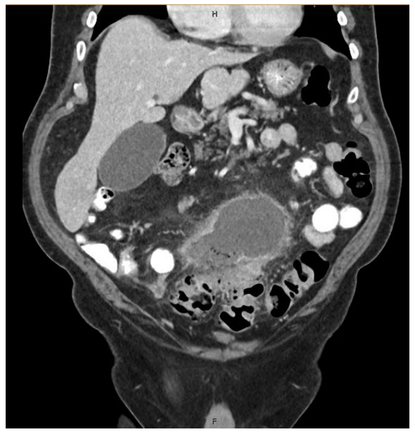


Figure 2. (Bottom left) CT abdomen and pelvis PO and IV contrast, coronal view with perforated diverticulitis, intramesenteric abscess

Case Study (cont.)

- Months later, an attempt at reversal was made, but failed due to rectal stump hematoma and local necrosis and leak with intact anastomosis, requiring creation of end ileostomy and mucous fistula. The patient ultimately underwent a final uncomplicated ileostomy reversal. One year later he has since been doing well.

Discussion

- Intramesenteric abscess remains a poorly understood consequence of colonic diverticulitis.
- We argue that contained intramesenteric abscess from perforated colonic diverticulitis, due to the difficult mesocolic anatomic location, will likely fail nonoperative management.
- Additionally, spread of infection into the retroperitoneum can be clinically misleading due to its associated lack of peritoneal signs.
- Therefore we suggest a lower threshold to proceed surgically for this specific disease process.

References

1. Bell et al. “Intramesenteric Perforation of Colon Diverticulitis”. Arch Surg. 1971.
2. Ashizawa et al.” Intrameso divertic perforation of the sigmoid colon: a report of a case” Acta Med Okayama. 2007.

Appendix

Appendix 1: A comprehensive literature search was employed using the following search strategy on PUBMED: ("Mesentery"[Mesh]) AND "Diverticulitis, Colonic"[Mesh]) OR "mesenteric abscess" OR "intramesenteric abscess". https://pubmed.ncbi.nlm.nih.gov/?term=%28%22Mesentery%22%5BMesh%5D%29+AND+%22Diverticulitis%2C+Colonic%22%5BMesh%5D%29+OR+%22mesenteric+abscess%22+OR+%22intramesenteric+abscess%22 All 53 articles were reviewed and a total of 2 were selected for summarization.

Disclosures

The authors declare that they have no relevant or material financial interests that relate to the research described in this poster