

Small Bowel Diverticulitis: A Unique Urinary Presentation

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Introduction

- Diverticulosis are commonly found in the colon but can rarely be found in the small intestine.
- Small bowel diverticula (SBD) are usually asymptomatic but can have complications including micro-perforation leading to diverticulitis, obstruction and perforation.

Case Description

 A healthy 54-year-old female presented to her PCP with crampy suprapubic abdominal pain with associated gross hematuria and dysuria. Physical examination demonstrated suprapubic tenderness upon palpation. A urinalysis and urine culture were unremarkable. Concern for UTI remained, and patient was started on Cephalexin 500mg BID for 14 days. She returned to her PCP two days later with worsening symptoms associated with nausea, vomiting, and a fever of 100.4F. A CT abd/pelvis (Figure 1) was obtained which showed severe acute small bowel diverticulitis located immediately adjacent to the dome of the urinary bladder. Patient did not wish for surgical evaluation and was started on Ciprofloxacin 500 mg PO BID and Metronidazole 500 mg PO TID for 10 days and sent to GI clinic. In the GI clinic, patient had continued abdominal pain. She was re-treated with Metronidazole 500 mg PO TID and Bactrim DS 800/160 mg BID for another 14 days. Repeat CT abd/pelvis (Figure 2) was obtained after completion of extended antibiotic treatment which showed near complete resolution of the inflammatory changes and wall thickening. Patient reported returning to her baseline health.



FIGURE 1: CT ABD AND PELVIS W/CONTRAST SHOWING: LARGE INFLAMED DIVERTICULUM MEASURING ~ 2.1 cm (20.5 mm)



FIGURE 2: MARKED IMPROVEMENT OF THE INFLAMMATORY FEATURES OF SMALL BOWEL DIVERTICULITIS INVOLVING THE DISTAL ILEAL LOOP AS COMPARED TO PRIOR CT (FIG. 1) WITH NEAR COMPLETE RESOLUTION OF THE INFLAMMATORY CHANGES AND WALL THICKENING.

Discussion

- Small bowel diverticula may result from intestinal dysmotility and high intraluminal pressure.
- Diverticulitis can occur if diverticula become obstructed with fecal material.
- Complications include perforation and fistula (e.g., enterovesical fistula)
- No established guidelines exist for SBD and colonic diverticulitis treatment is used as a guide.
 - Asymptomatic patients: no intervention
 - Uncomplicated symptomatic patients: diet modification and PO antibiotics
 - Complicated symptomatic patients: surgical evaluation

Conclusion

- This case demonstrates that small bowel diverticulitis may present with non-GI symptoms, depending on location and extent of local inflammation.
- With advancement in imaging quality, the detection of small bowel diverticulitis will also increase.
- Using established treatment strategies for colonic diverticulitis can serve as a good guide for treatment of small bowel diverticulitis.

References

- Transue, D.L., Hanna, T.N., Shekhani, H. *et al.* Small bowel diverticulitis: an imaging review of an uncommon entity. *Emerg Radiol* **24**, 195–205 (2017).
- Ferreira-Aparicio FE, Gutierrez-Vega R, Galvez-Molina Y, Ontiveros-Nevares P, Athie-Gutierrez C, Montalvo-Jave EE (2012) Diverticular disease of the small bowel. Case Rep Gastroenterol 6(3):668–676
- Costa Simoes V, Santos B, Magalhaes S, Faria G, Sousa Silva D, Davide J (2014) Perforated duodenal diverticulum: surgical treatment and literature review. International journal of surgery case reports 5(8):547–550
- Veen M, Hornstra BJ, Clemens CH, Stigter H, Vree R (2009) Small bowel diverticulitis as a cause of acute abdomen. Eur J Gastroenterol Hepatol 21(1):123–125