

Perforated Jejunal Diverticulitis with a Coloenteric Fistula Misdiagnosed as Gastroenteritis

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Introduction

Diverticular disease is one of the most common pathologies encountered by gastroenterologists. It is estimated that around one half of patients above the age of 60 will have colonic diverticula, and up to 25% will experience a complication such as diverticulitis.

In the small intestine, most diverticula are found in the duodenum (79%). Diverticula of the jejunum and ileum are rather rare, affecting only 0.5%-2.3% of patients. Jejunoileal diverticula is mostly asymptomatic, but 10% of patients can develop complications. Here we present a rare case of a perforated jejunal diverticulitis with a coloenteric fistula that was misdiagnosed as gastroenteritis.

Case description

A 74-year-old female presented to the hospital for 3 weeks of abdominal pain, diarrhea and fever. She had previously presented to an outside hospital with these symptoms, where she was told that she had gastroenteritis and was discharged home on antibiotics. Eventually, her pain became constant and she developed intractable vomiting. On presentation, her vitals were normal and physical exam showed moderate epigastric tenderness. White blood cell count was 21,000 u/L and lactic acid was 2.1 mmol/L. CT scan without contrast showed nonspecific enteritis, for which she was admitted and broad-spectrum antibiotics started.

After 24 hours the abdominal pain worsened despite frequent narcotic administration. A CT enterography was obtained, showing a 3.7cm x 2.8cm outpouching of the jejunum with significant thickening and fat stranding, that was inseparable from the transverse colon (**Figure 1A**).

The Colorectal surgery team completed an exploratory laparotomy and found a ruptured jejunal diverticulitis that was fistulized to the mid transverse colon (**Figure 1B**). The patient underwent a transverse colectomy and a small bowel resection with anastomosis. Her postoperative course was uncomplicated and she was discharged two weeks later.

Discussion

Jejunoileal diverticular disease is often asymptomatic, with most cases found incidentally. However, 10-30% of patients can develop non-specific symptoms like abdominal pain and diarrhea, leading to misdiagnosis. Around 10% of patients present with acute complications.

Although jejunal diverticulitis occurs only in 2-6% of known diverticulosis, these diverticula are more likely to develop complications, such as perforation and abscesses when compared with duodenal diverticula. Its occurrence can be fatal with a mortality rate as high as 24%. There is scarce information in the literature regarding the frequency of fistulization in jejunoileal diverticular disease.

Imaging

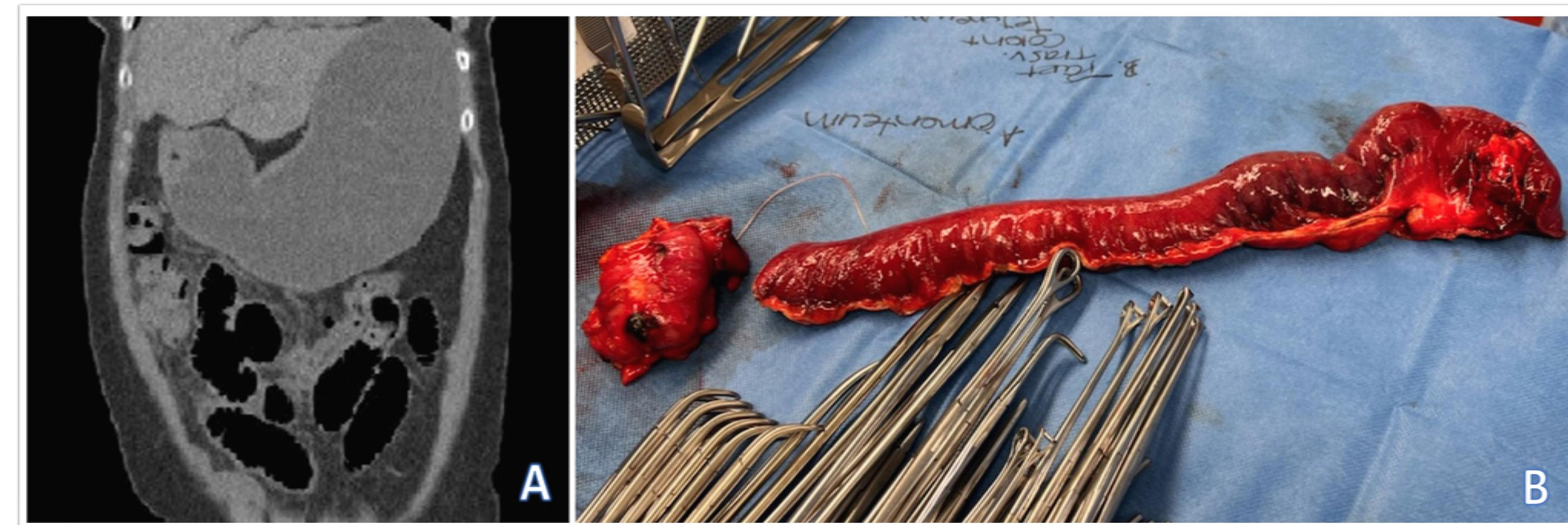


Figure 1:
A. Enterography (coronal view) showing a focal outpouching in the jejunum measuring 3.7 x 2.8 cm, inseparable from adjacent transverse colon

B. Surgical specimen with resected transverse colon (Left) and resected segment of jejunum fistulized into the colon (Right)

Conclusions

Jejunal diverticulitis rarely occurs as a complication of diverticulosis, but it can be fatal. Physical examination and the close evaluation of cross-sectional imaging are integral in its diagnosis, which may become a challenge given its insidious presentation.

References

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