Case Report

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Jejunal Diverticulosis Perforation: A Rare Cause of Acute Abdomen

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Abstract

Introduction: Small bowel diverticulosis is a rare pathology; in contrast to colonic diverticular disease. It usually remains asymptomatic and undiscovered, until severe complications such as diverticulitis or even perforation occurs. We present a rare cause of acute abdominal pain with a case of jejunal diverticulitis complicated with perforation.

Case report: We report the case of an 84-year-old woman, who was admitted to the emergency department for the management of jejunal diverticulitis with perforation, who underwent immediate surgery after confirmation on abdominal CT-scan.

Conclusion: Jejunal diverticulitisis a rare entity that may lead to chronic non-specific abdominal symptoms. However, it can also present as an acute complication, one of its form being intestinal perforation, which may require immediate surgical intervention.

Keywords: Jejunal diverticulitis; Perforation; Intestinal resection

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Introduction

Jejunal diverticula represent 1% of digestive diverticular disease, and the jejunum is the least frequent location. Jejunal diverticulitisis usually not suspected clinically as symptoms are often vague and nonspecific (chronic abdominal pain and/or malabsorption) [1], and can present complications such as bleeding, perforation and intestinal obstruction, which require urgent surgical treatment.

Case Report

We report the case of an 84-year-old woman, admitted on 15/03/2020, who complains from a painful abdominal mass in the left flank, and constipation, she had noticed in the previous week. The patient had a significant medical history as she was treated for type 2 diabetes and ischemic heart failure. No known history of colonic diverticulosis or any previous surgery. On physical examination the patient was febrile, and the abdominal examination revealed a round, tender, elastic mass in the left flank, measuring approximately 10 × 5 cm, with associated tenderness, but without rebound tenderness or other signs of peritonitis. CT scan of the abdomen and pelvis 15/03/2020 revealed a thin-walled, cavitated lesion with an air-fluid level in the left flank, limited by thickened small bowel loops and apparently with luminal continuity with at least one segment. There was no evidence of intraperitoneal free air or fluid **(Figure 1).**

The patient underwent a laparotomy which macroscopically revealed the diagnosis of perforated Jejunal diverticula. Multiple Jejunal diverticula were revealed, of which at least one was perforated. A segmental (20 cm) resection of the affected jejunum was carried out with evacuation of the parietal abscess, followed by a side-to-side hand-sewn primary anastomosis **(Figure 2).** The post-operative period was simple, and the patient was discharged on 23/03/2020.

Discussion

Jejunal diverticula are pseudo diverticula resulting from a mucosal

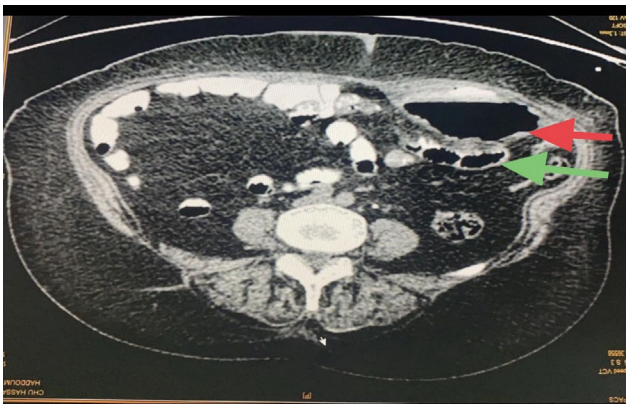

Figure 1 CT scan showed cavitated lesion with an air-fluid level in the left flank(red arrow) , limited by thickened small bowel loops and apparently with luminal continuity(green arrow).

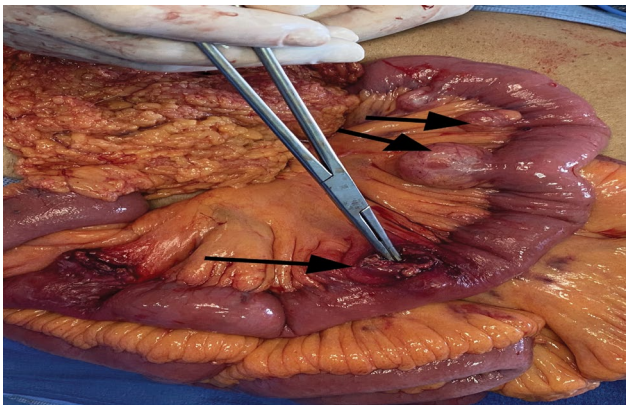

Figure 2 Preoperative image revealed jejunal diverticulosis which one was perforated.

and submucosal herniation through the muscular layer where blood vessel penetrates bowel's wall. Small bowel diverticulosis was first described by Baillie and von Soemmerring in 1794 and Cooper first described jejunal diverticulosis in 1807 [2]. The hypothesis of jejunal diverticula is unknown; this condition is believed to develop from a combination of intestinal motility disorders, focal weakness of the muscularis and high segmental intra-luminal pressures, with diverticulum arising atthe site where mesenteric vessels enter into the muscular layer of the small intestine [3,4]. The diagnosis of a perforated diverticulum is rarely made preoperatively. Typical symptoms are sudden onset of abdominal pain, nausea, and vomiting. Typical physical findings are localized tenderness and rebound tenderness. The most frequent complications reported are malabsorption, obstruction, abscess formation, and rarely, diverticular perforation or hemorrhage (Acute complications occur in 10% - 20% of patients). However, the perforation of Jejunal Diverticula remains rare (2.1 to 7% of diverticulitis) [5].

In the emergency, abdominal CT is the better modality to diagnose this pathology and its complications, with findings that include thickening or inflammation of the jejunum and mesentery, localized abscess formation, air-fluid collection in contiguity with Small Bowel loops, free peritoneal air, and occasionally visualization of the diverticulum [6,7].

The presence of an acute complication may require immediate surgical intervention. Surgery is mandatory for intestinal resection (taking away perforated diverticulum) in 2 situations: failure or infeasibility of percutaneous drainage and generalized peritonitis. Immediate anastomosis should be performed whenever allowed by abdominal and general condition of the patient [8] like in our case. Otherwise, jejunostomy seems reasonable in shocked or high-risk patient.

Conclusion

Perforated jejunal diverticulitis is a rare clinical entity in which clinical presentation is variable; therefore, diagnosis is not necessarily easy. Surgical treatment is required for the management of complications; surgical resection followed by primary anastomosis is the treatment of choice.

References

1 Palder SB, Frey CB (1988) Jejunal diverticulosis. Arch Surg 123: 889-894.

2 Kwak JY, Park EH, Park CS, Kim JH, Han MS, et al. (2016) Uncomplicated jejunal diverticulosis with pneumoperitoneum. Ann Surg Treat Res. 90: 346.

3 Kassir R, Boueil-Bourlier A, Baccot S, Abboud K, Dubois J, et al. (2015) Jejuno–ileal diverticulitis: Etiopathogenicity, diagnosis and management. Int J Surg Case Rep 10: 151-153.

4 Kongara KR, Soffer EE (2000) Intestinal motility in small bowel diverticulosis: a case report and review of the literature. J Clin Gastroenterol 30: 84-86.

5 Benya EC, Ghahremani GG, Brosnan JJ (1991) Diverticulitis of the jejunum: Clinical and radiological features. Gastrointest radiol 16: 24-28.

6 Mansoori B, Delaney CP, Willis JE, Paspulati RM, Ros PR, et al. (2016) Magnetic resonance enterography/enteroclysis in acquired small bowel diverticulitis and small bowel diverticulosis. Eur Radiol 26: 2881-2891.

7 De Peuter B, Box I, Vanheste R, Dymarkowski S (2009) Small-bowel diverticulosis: imaging findings and review of three cases. Gastroenterol Res Pract.

8 Kassahun WT, Fangmann J, Harms J, Bartels M, Hauss J (2007) Complicated small-bowel diverticulosis: a case report and review of the literature. World J Gastroenterol 13: 2240.