

Idiopathic Jejunal Diverticulitis: A Rare Case Report

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ABSTRACT

Acquired jejunal diverticulosis often produces few or no symptoms and is generally picked up incidentally on cross-sectional imaging or intra-operatively. Similar to what is observed in colonic diverticulosis, diverticulitis can lead to more complicated clinical presentations including; perforation, gastrointestinal bleeding or obstruction. Acute diverticulitis is the most common presentation, but other complications can occur, mainly perforation, bowel obstruction and hemorrhage. Diagnosis is often difficult and delayed due to its relative rarity and non-specific clinical symptoms which increase the mortality and morbidity of this pathology. Here we discuss a patient who presented with features of intestinal obstruction and on investigations and exploratory laparotomy he was diagnosed as a case of jejunal diverticulitis. He was managed operatively, where after CT scan; exploratory laparotomy was done and proximal milking through NG tube was done without resection and patient had uneventful recovery

Key words: Computed tomography, Exploratory laparotomy, Jejunal diverticulitis.

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Introduction

Jejunal diverticulosis is a rare condition with an estimated annual prevalence of between 0.3 and 2.3%.¹ Acquired jejunal diverticulosis often produces few or no symptoms and is generally picked up incidentally on cross-sectional imaging or intra-operatively. Similar to what is observed in colonic diverticulosis, acute inflammation (diverticulitis) can lead to more complicated clinical

presentations including; perforation, gastrointestinal bleeding or obstruction. Diagnosis is often difficult and delayed due to its relative rarity and non-specific clinical symptoms leading to increased mortality and morbidity.² The diagnosis is challenging and based on radiological findings. Computed tomography (CT) is the gold standard diagnostic modality. However, there is no consensus on therapeutic strategy, and varies from conservative management to surgical resection.³

The diverticular perforation is associated with a high mortality, especially among elderly patients. Nowadays the mortality is reduced because of the improvement of the diagnostics, pharmaceutical and surgical protocols.⁴

We present a case who reported to us with intestinal obstruction and after pre and intra operative investigations it was diagnosed as a case of jejunal diverticulitis.

Case Presentation

A 55 years old male patient presented to us with complaint of pain in abdomen from five days, associated with vomiting, constipation and abdominal distension. Pain involved the whole abdomen, was colicky in nature, intermittent in frequency and gradually increased in intensity. It was associated with multiple episodes of bilious vomiting and patient didn't pass stool and flatus for the past five days. Following these complaints, the patient developed abdominal distension as well. There was no significant medical and surgical history. His systemic review showed unremarkable findings. On abdominal inspection the abdomen was distended with symmetrical appearance and central umbilicus. Palpation showed generalized tense abdomen and was resonant on percussion with sluggish bowel sounds. Rest of the systemic examination was unremarkable. Patient was initially managed conservatively on the lines of intestinal obstruction with resuscitation. Nasogastric tube was passed, his vitals and input/output were monitored. Baseline investigations were within normal range. X-ray abdomen erect film showed multiple air fluid levels. Ultrasound abdomen showed matted fluid filled gut loops with sluggish peristalsis in central abdomen. CT scan abdomen with IV contrast was carried out that reported dilated small bowel loops with mild ascites Fig (1 and 2). As patient didn't respond to conservative management, he was counselled for exploratory laparotomy. Per-operative findings were; 300ml ascitic fluid, dilated small bowel jejunum being more pronounced, inflamed jejunal

diverticuli were seen involving 6 feet of jejunum which were filled with fluid. (Figure 3 & 4).

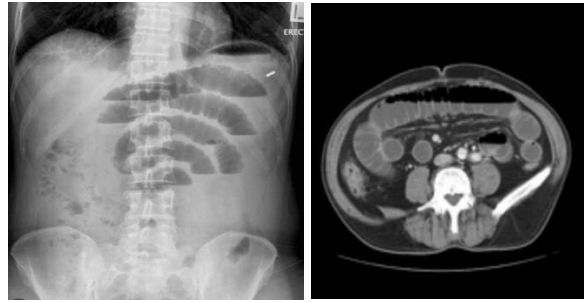


Figure 1 & 2: CT scan abdomen with IV contrast showing dilated small bowel loops

Proximal milking with nasogastric tube suction was done to empty the diverticuli and small bowel. Post-operatively patient was observed for 5 days; he had uneventful recovery and was discharged.

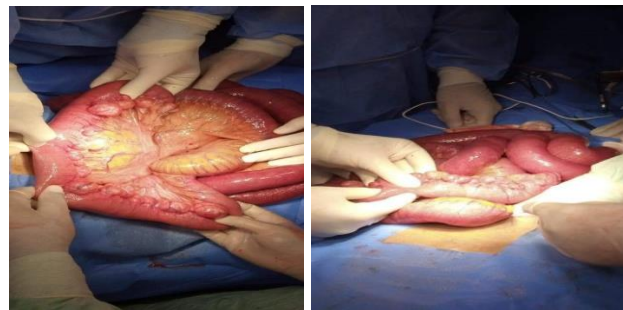


Figure 3 & 4: Per-operative findings, showing dilated small bowel with inflamed jejunal diverticuli

Discussion

Small intestine diverticula other than Meckel are acquired. Pseudo pulsion diverticula, presenting mucosa and serosa in the pouch wall are most commonly found in the jejunum.⁵ Jejunal diverticulitis can occur either by the stasis of the intestinal contents in the diverticulum or by mucosal edema obstructing the neck of the diverticulum favoring intra diverticular microbial growth.⁶ JD often presents with no symptoms, and the diagnosis is coincidental in 70% of patients. Thirty percent of patients present with nonspecific symptoms such as abdominal pain, malabsorption syndrome-related signs and symptoms that arise

from complications such as diverticulitis, perforations with local or generalized peritonitis, obstruction, adhesions, abscess formation, gastrointestinal hemorrhage, and rarely, volvulus.⁶ Given its rarity and specific symptoms, jejunal diverticulitis is easily misdiagnosed as appendicitis, cholecystitis, peptic ulcer, Crohn's disease or colonic diverticulitis. Therefore, clinicians must be aware of this entity to avoid misdiagnosis and treatment delay. Small intestinal diverticulitis presenting with acute abdomen generally requires surgical treatment, whereas in cases with local inflammation, and in the absence of complications such as hemorrhage and perforation, conservative treatment can be the treatment of choice.⁷

The CT scan is now the best diagnostic imaging method especially with the aid of multiplanar reformatted images. The pre-eminent imaging features in JD are peri-diverticular edema and inflammation or diverticular wall thickening.⁷ Non-operative management of uncomplicated small bowel diverticulitis with antibiotic therapy and bowel rest has previously been reported. However, cases of complicated diverticulitis are largely managed by operative management with resection and primary anastomosis the predominant approach.⁹ Because of the high incidence of coexistent colonic diverticula all patients with JD must have routine colonoscopy.

Conclusion

Jejunal diverticulitis is an uncommon cause of abdominal pain especially in the elderly. The diagnosis must be early because the perforation is associated with a high morbidity and mortality. Radiological investigations are the key pre-operative diagnostic modality, preventing

complications and delayed diagnosis. In our case report we followed a patient in similar fashion where after CT scan, exploratory laparotomy was done and proximal milking through NG tube was done without resection. The outcome of this management has shown satisfactory results in general as well.

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