

JEJUNAL DIVERTICULAR PERFORATION, RARE BUT A SERIOUS ENTITY IN THE ELDERLY POPULATION

General Surgery

**Dr. Sai Sampath
Kumar Vasantham***

DNB General Surgery Resident, Apollo Hospitals Chennai. *Corresponding Author

Dr. Raghunath K J

MBBS, MS , FRCS, FRCS, FRCS ; Consultant Gastrointestinal, Laparoscopic And Transplant Surgeon , Apollo Hospitals Chennai.

ABSTRACT

Compared to colonic diverticula, the jejunum has significantly less of a tendency to develop diverticulitis because to the diverticulum's bigger size, better intraluminal flow, and relatively sterile jejunal content . Acute intestinal obstruction, diverticular bleeding , and most commonly perforation with mesenteric abscess, localized or global peritonitis are complications of jejunal diverticulitis. Multidetector row computed tomography is now the best diagnostic imaging for small bowel diverticulitis as well as its complications [1]. Treatment depends on the symptomatology of patients, can be non surgical or surgical. Advanced age, concomitant comorbidities , delayed diagnosis , and primarily the gap between perforation and surgery are poor prognostic factors[1]. We present an elderly gentleman whose diagnosis was not made till he had his laparotomy.

KEYWORDS

INTRODUCTION

When older individuals complain of nausea and abdominal pain, jejunal diverticulitis , which has a low reported incidence rate , is frequently disregarded . There is a chance of intestinal obstruction, bleeding and perforation if diagnosis and treatment are delayed [2]. Jejunal diverticulitis has a low annual reported prevalence of 0.3%-2.3% and is uncommon in hospital settings, with most instances occurring in male patients between the ages of 50 and 70 years [3]. Asymptomatic jejunal diverticulosis are more common . The small bowel outpouchings are typically discovered by chance on CT imaging [3]. It is believed that aberrant contractions caused by smooth muscle motor dysfunction underlie the etiology of jejunoileal diverticulosis. Due to the increased intraluminal pressure brought on by this motor failure , the mucosa and submucosa of the bowel's mesenteric side can herniate[4]. These diverticula have the potentiality to get inflamed and cause complications like intestinal obstruction, bleeding , inflammation and perforation.

CASE REPORT

An 80 year old male , came to the outpatient department with complaints of vague crampy abdominal pain for four months and worsening abdominal pain for 15 days. It was localized to the epigastrium, with associated loss of appetite, no fever, nausea or vomiting , no abdominal distention , no hematemesis or melena . On examining the patient , he was lean , with normal body mass index, Afebrile , Heart rate at 74 bpm, Normotensive at 110/90 mmhg and systemically unremarkable . On examining the abdomen was scaphoid , with normoactive bowel sounds , dull on percussion over the elevation and tympanic on the rest of the abdomen , on palpation abdomen was non tender, vague fullness to the right of umbilicus palpable mass over the epigastrium which is mobile with respiration and no visible peristalsis observed . Investigations showed Hb of 12.5mg/dl; wbc count of 7.5 , Serum amylase and serum lipase within the normal range , slightly elevated levels of C- reactive protein , other blood parameters being within the range.

Upper gastrointestinal endoscopy was normal . CECT of the abdomen revealed asymmetrical short segment circumferential wall thickening involving mid jejunal loop and associated induration of adjacent mesentery with a lesion measuring 3.2* 2.8cm which shows mild enhancement , jejunal diverticula or perforation was not mentioned . We entertained a clinical suspicion of a small bowel tumor , because there were multiple enlarged mesenteric lymph nodes. It was decided to pursue surgical treatment with diagnostic laparoscopy with small bowel resection , which revealed conglomerate loops of small bowel which were densely adherent . On opening the abdomen there were adherent small bowel loops to transverse colon , adhesiolysis was performed and upon separating small bowel loops an abscess cavity was opened with 50 ml of thick pus . Bowel walk was done starting from the ligament of treitz . After the first jejunal loop, a 30 cm segment of jejunum had multiple diverticula , which included the site of pathology . The remaining small bowel was normal . Resection of the

involved segment of the bowel performed followed by an end to end jejunojejunal anastomosis, abdomen was closed with 24f chest drain insitu . Patient tolerated the procedure well , postoperatively ERAS protocol was initiated , patient recovered well and was discharged once tolerated oral soft feeds on POD 5.

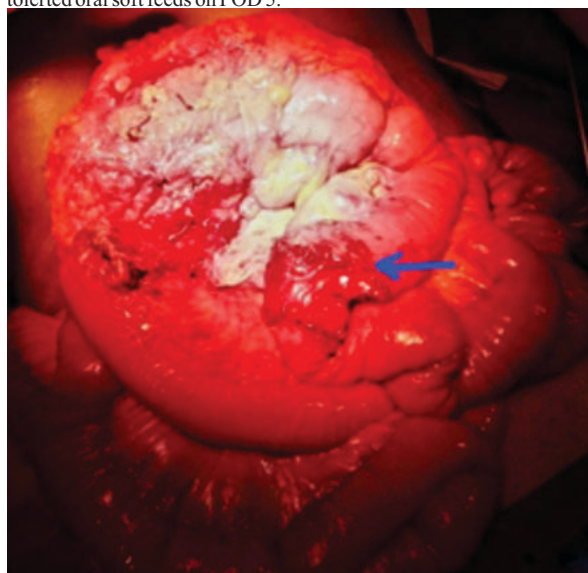


Figure 1: Marked Area With Dense Interbowel Adhesion And Abscess Cavity .



Figure 2: Resected Segment Of Jejunum With Marked Area Of Diverticula .

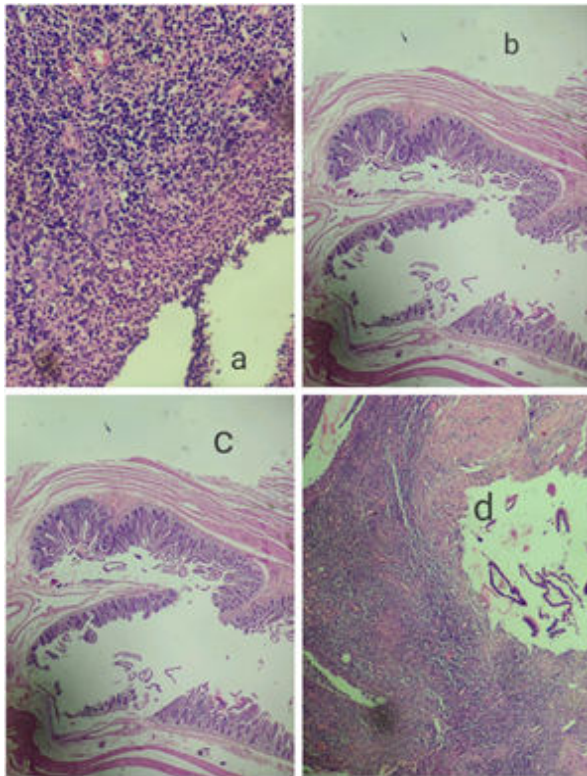


Figure 3:

- a) jejunal wall with inflammatory infiltrates .
 b) ,c) cross section of jejunal diverticula .
 c) cross section of inflamed and perforated jejunal diverticula .

DISCUSSION AND CONCLUSION :

Due to the older age group of the patients who are most usually affected, jejunal diverticulitis is an uncommon condition with a significant morbidity and mortality rate . The aforementioned case demonstrates the symptomatic potential of the disease . According to certain research , jejunal diverticulitis sequelae including gastrointestinal bleeding , perforation, blockage , or peritonitis resulted in surgical intervention in 10-15% of identified cases [5]. In general, asymptomatic small bowel diverticulosis does not require therapy. However , in symptomatic situation, the therapeutic choice is based on the clinical manifestation (antibiotic therapy, restricted diet, and surgical management with open or laparoscopic assisted resection)[6]. Despite its rarity, small intestinal diverticulitis is a complication that healthcare professionals must treat in order to reduce the patients morbidity and death.

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