



Case Report

Perforated Jejunal Diverticulitis in an Elderly Patient: A Case Report

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Abstract

The diverticular disease of the digestive tract is common. It is commoner in the large bowel, affecting half of the population at the age of 60. It may occur anywhere from the proximal oesophagus to the rectum, but it is uncommon in the proximal jejunum. Jejunoileal diverticulosis (JD) is a rare entity usually asymptomatic, therefore underdiagnosed. We report a case of a 83 year old lady presenting with a blocked perforated diverticulitis of the proximal jejunum. Since perforated jejunal diverticulitis is a rare and potentially fatal entity we discuss its diagnosis and treatment.

Keywords: Diverticular Diseases; Diverticulitis; Jejunal Diverticulitis

Introduction

Although diverticular disease is common in the digestive tract, it is rarely found in the small bowel. Jejunoileal diverticulitis was first reported in 1794 by Sommering, as cited by Cantão et al. [1]. The physiopathology of JD is associated with structural weakness due to vasa recta penetration in the bowel wall [2]. They are pseudo diverticula of pulsion type, thin walled on the mesenteric side of the jejunum. This entity is commoner in the elderly and usually asymptomatic, but it may present with non-

specific upper abdominal symptoms. Since it is uncommon, there is no consensus regarding its management.

Case Report

We report a case of a 83 year old Caucasian female patient who presented to the hospital complaining of abdominal pain, mainly in the upper left quadrant of her abdomen. Also, she mentioned a long standing diarrhoea.

Urgent white cells count revealed 14.700 leucocytes, elevated creatinine (3,68 mg/dL), reactive C protein of 111,5 mg/dL, while other blood tests were normal. CT scan revealed multiple jejunal diverticula and air inside a blocked abscess (Figures 1 and 2).

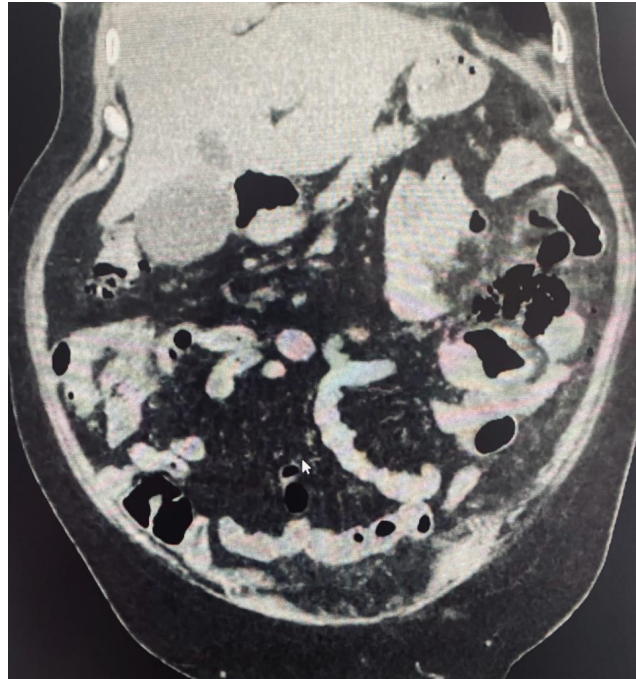


Figure 1: Coronal abdominal CT revealing multiple jejunal diverticula.

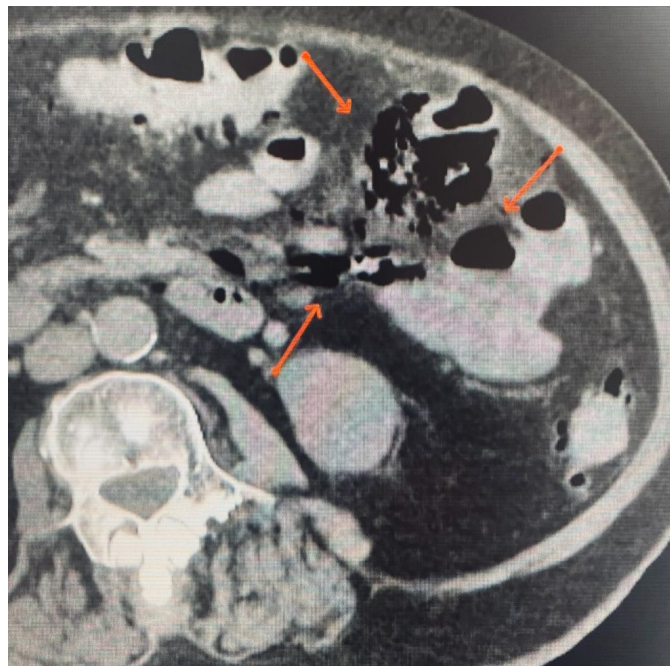


Figure 2: Axial abdominal CT revealing air inside a blocked abscess.

Laparotomy was indicated, and an inflamed proximal jejunum was firmly adhered to the blocked abscess. After a liberation of the adhesion and aspiration of the abscess, a perforated diverticulum was found, surrounded by other diverticula. Then, segmental resection was performed (Figures 3 and 4), removing the diseased segment of the proximal jejunum, using a linear stapling device (proximal and distal). Primary side-to-side jejunal anastomosis was accomplished, using Vicryl 3-0, in two planes.



Figure 3: Proximal jejunum presenting severe inflammation and perforated diverticulum.



Figure 4: Resected proximal jejunum limb segment, with complete removal of diverticulum and abscess.

Our patient made an uneventful recovery and left the hospital on the sixth post-operative day. Five months later she was in a

stable clinical condition, with no new complaints, and related that her previous diarrhoea and abdominal pain had vanished.

Discussion

Diverticulosis of the jejunum (JD) is a relatively rare small-bowel disease. These lesions are formed by a false diverticula with projections of mucosa and serosa without the muscular layer, causing manifestations such as diverticulitis, bleeding, perforation, or obstruction [3]. JD often presents with no symptoms and usually incidentally found in radiological studies. As in the diverticular disease of the large bowel, it is commoner in elderly people and it may have complications such as perforations, haemorrhage, abscess formation, small bowel obstruction and fistulas [4-7]. JD is twice as common in males, usually multiple and larger in the proximal jejunum. Although it is commoner in the proximal jejunum, it may be found in the distal jejunum and ileum [8]. JD was first reported on radiological study in 1915, in a barium contrast exam [9]. Ultrasound is unspecific as it is plain x-ray of the abdomen. It is incidentally discovered during barium meal, laparotomy or autopsy in the majority of cases, but recently we must add CT scan. Contrast-enhanced CT scan of the abdomen is the gold standard exam for providing accurate diagnosis [10]. Double balloon enteroscopy and endoscopic capsule are also important tools used mainly for investigation of symptomatic (bleeding) cases [11,12]. There is no evidence to treat asymptomatic jejunal diverticula. Oligo symptomatic patients have the option to be treated conservatively. Patients with multiple diverticula can have symptoms of bacterial overgrowth and they will benefit from antibiotics treatment [11-14]. Bleeding JD may be treated with selective mesenteric embolization, but surgical resection is the preferred approach because of the high incidence of recurrence. The occurrence of perforated JD with abscess or obstruction puts the affected patients in a group of a high risk. As soon as the diagnosis is confirmed, the patient must be submitted to surgery [11].

Conclusion

Jejunal diverticulosis is an uncommon and potentially life-threatening condition. The diagnosis of JD is usually incidental as the majority of patients are asymptomatic. Contrast-enhanced CT is the gold standard diagnostic tool. Conservative management is adequate in uncomplicated patients. However, in complicated cases like perforation, abscess and obstruction, emergency surgery is mandatory or the mortality rate will be high.

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