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Jejunal Diverticulitis

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Abstract

Presentation
A 70 year old female presented with a short history of acute onset right sided abdominal pain, and pyrexia. On examination there was localised peritonism in the RLQ in an otherwise soft abdomen.

Diagnosis
Laboratory tests demonstrated an elevated C Reactive Protein and a leucocytosis, CT Abdomen Pelvis demonstrated uncomplicated jejunal diverticulitis alongside duodenal and colonic diverticulosis.

Treatment
Ms X received Intravenous antibiotics, fluids and bowel rest. She responded well to conservative management and was discharged home after a short admission.

Discussion
Jejunal diverticulitis is a rare and difficult to diagnose condition, often seen in older populations it has a high morbidity and mortality. Despite this there is lack of knowledge as well as no clear guidance on its treatment.

Introduction

Intestinal diverticulosis is a condition characterised by the formation of outpouchings in the luminal wall is common in the aging population. The majority of cases involve the colon, with colonic diverticulosis common throughout the globe and becoming more so as diets become more westernised. In Western populations, diverticulosis most commonly affects the descending and sigmoid colon. Conversely, in Asia, diverticulosis often presents on the right, suggesting potential geographic, genetic and dietary influences on the distribution of diverticulosis.[1]

Small bowel diverticulosis, however, is a far less common entity, The duodenum is the most frequently observed portion of the small bowel to harbour diverticula with an estimated incidence of 0.02-6%, disease in the jejunum and ileum are rare with an estimated incidence 0.06%-1%.[2] Acute inflammation and the development of acute diverticulitis in the jejunum or ileum is even rarer, making it an unusual clinical finding.[3]

Case Report

We present the case of a 70-year-old female who was admitted with a one-day history of acute right-sided abdominal pain with associated localised peritonism, pyrexia, and elevated inflammatory markers. Her past medical history includes diabetes and hypertension. A cross-sectional computed tomography (CT) scan of the abdomen and pelvis revealed a jejunal diverticulum on the left side of her abdomen, accompanied by adjacent fat stranding, indicating acute inflammation. Additionally, extensive diverticulosis of the colon was noted, with thickening of the sigmoid colon, suggestive of chronic colonic diverticulosis. An incidental finding of a duodenal diverticulum was also identified.

Intravenous antibiotics treatment was initiated, to which she responded well, experiencing resolution of her abdominal pain and improvement in her inflammatory markers. After four days of treatment, she was discharged home. Follow-up imaging, including an interval CT Abdomen and Pelvis, and colonoscopy is to be conducted six weeks post-discharge.

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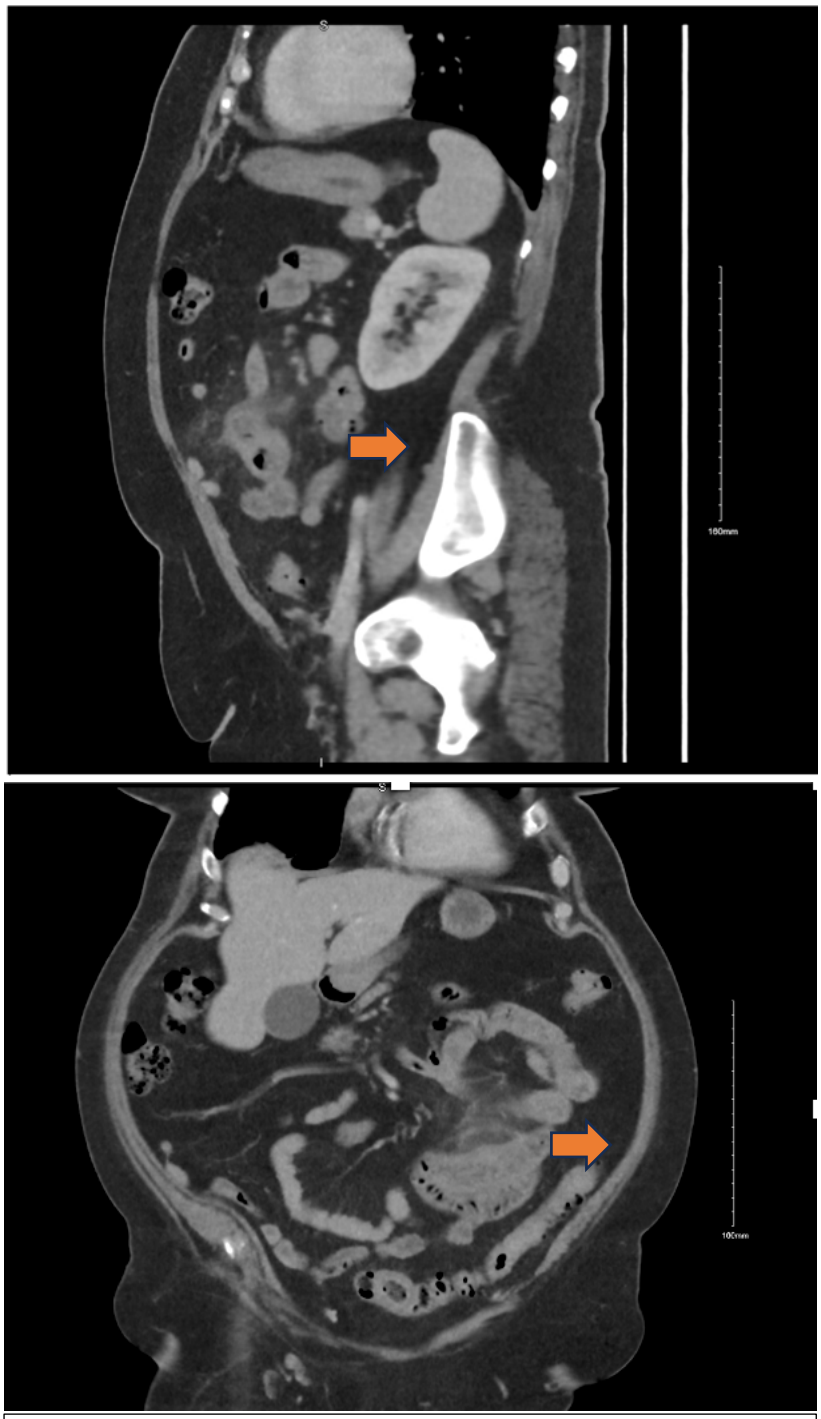

Jejunum with adjacent diverticulum and fat stranding.

Discussion

Jejunal diverticulitis is rare, diagnosis is often challenging. The rarity of jejunal diverticulitis means it is seldom considered in the differential diagnosis of abdominal pain, yet its presence can lead to significant morbidity and mortality with an estimated mortality rate of 24% in complicated cases, compared to 5.4% in complicated colonic disease.[4,5] This is

possibly a result of its rarity, lack of familiarity on the part of the surgical team and an increased incidence in older multimorbid patients.

This case also highlights a consistent trend in the pathology of diverticulosis in that patients with small bowel disease will almost invariably have concomitant colonic disease, possibly reflecting a common pathogenesis.[6]

The management of jejunal diverticulitis, as illustrated in this case is similar to the treatment for colonic diverticulitis, particularly for uncomplicated cases. Our patient responded well to intravenous antibiotics. However, the role for intervention is unclear and given the rarity of jejunal diverticulitis there is a lack of formalised guidelines, indeed management is often on a case by case basis and based on the surgeon's preference and experience.[7]

Surgical intervention be it laparoscopic or laparotomy in the acute phase is often limited to the treatment of acute intestinal perforation necessitating bowel resection with primary anastomosis or diverticulectomy of the index diverticulum. Stomas are rarely useful given the proximal nature of the jejunum and the risk of high output stomas.[8]

In conclusion, this case underscores the importance of considering jejunal diverticulitis in the differential diagnosis of acute abdominal pain in patients despite its rarity. Cross-sectional imaging is essential for accurate diagnosis, and a conservative approach with antibiotics may be successful in uncomplicated cases. Future studies are needed to establish standardized management guidelines for jejunal diverticulitis.

Declarations of Conflicts of Interest:
None declared.

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