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A rare trouble in the small bowel

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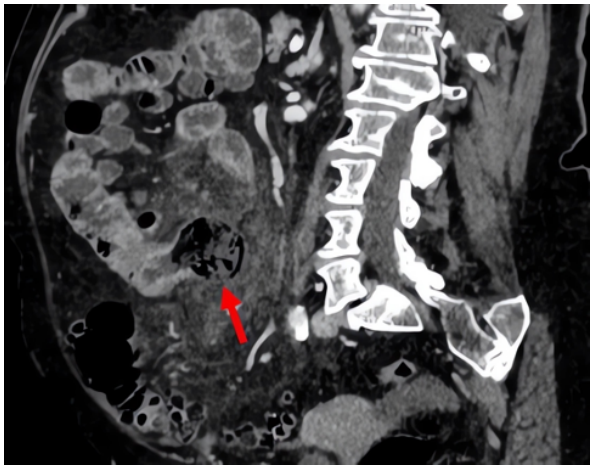

A 69-year-old woman presented to the emergency department with acute lower abdominal pain, peritonism and fever (body temperature 38.5 °C). Her past medical history was unremarkable. Laboratory tests revealed an increase of white blood cells ($18.17x10^9$/L; normal values $3.6\text{-}10.5x10^9$/L), neutrophils ($16.05x10^9$/L; normal values $1.5\text{-}7.7x10^9$/L), C-reactive protein (31.79 mg/dL; normal values <0.5 mg/dL) and lactate dehydrogenase (315 U/L; normal values <248 U/L) levels. Abdominal contrast-enhanced Computed Tomography (CT) scan showed a large outpouching filled by fecaloid material on the mesenteric side of a jejunal loop in the left lumbar region with stranding of adjacent fat (red arrow).

Question

Given the patient's history and CT scan result, which is the most likely diagnosis?

A. Jejunal diverticulitis
B. Jejunal perforation with abscess on the mesenteric side
C. Isolated jejunal Crohn's disease with abscess on the mesenteric side
D. Jejunal perforated neoplasm

Answer

Jejunal diverticulitis is the correct answer.

Acquired jejunoileal non-Meckel diverticula are rare compared to large bowel diverticulosis (0.03-1% of general population).[1] They are more common in males and their prevalence increases with age, peaking at the sixth and seventh decades.[2] They are more frequent in the jejunum (80%), where they tend to be larger and higher in number.[3] They occur in the context of intestinal dyskinesia, which causes an increase of segmental intraluminal pressure, leading to a mucosal and submucosal herniation through the weakest mesenteric site of the bowel wall along the area where the vasa recta and nerves penetrate the mesentery area (so they are properly false diverticula or pseudodiverticula, similarly to large bowel ones).[4] Symptoms are usually absent (70%) or nonspecific (30%; abdominal pain, fever, nausea, vomiting and diarrhea), while complications develop in only 10% of patients (obstruction, bleeding, perforation, fistula or abscess formation).[4,5] CT scan is considered the gold standard for the diagnosis of jejunoileal diverticulitis and its complications.[2,6] Surgery is the preferred treatment option, especially in the presence of complications.[7] Conservative treatment may be attempted in the absence of complications.[8]

In our case, at laparotomy the diverticulum wall was ischemic with focal perforation. Because other not inflamed diverticula were seen in the neighboring jejunal loops both by laparoscopy and CT scan, a wide jejunal resection with isoperistaltic jejunoileal anastomosis was performed. Full recovery was achieved, and the patient was discharged after seven days of hospitalization.

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