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Case Report

Acute Abdomen Secondary to Giant Cecal Diverticulum

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Abstract:

Cecal diverticulum presenting with acute abdomen is a rare entity, representing for surgeons a challenging preoperatory diagnosis, due to its low incidence and similarity with other frequent etiologies for abdominal pain. This is a case of a patient presenting to the emergency room with acute abdomen and absence of the risk factors described for this disease, with a successful management and outcome.

Keywords: acute abdomen, cecal diverticulum, diverticulitis, abdominal pain

Introduction

Cecal diverticulum is defined as a chronic diverticulum greater than 4 cm diameter which affects mainly to population over 50 years-old with history of diverticular disease[1-7]. At present less than 200 publications about giant diverticulum have been reported[2,3,5], being sigmoid colon the most frequent localization in 90% of cases[2,7]. This is a case of an elder woman who came to the emergency room with complaints of pain in right lower quadrant of 24-hour evolution.

Clinical Case

A 79-year-old female without relevant background presented to the emergency room with 24-hour evolution of pain in right lower quadrant, self-medicated with no specificized medicine, without improvement, with posterior appearance of nausea, vomit and worsening of pain. At physical examination presented normal vital signs, generalized abdominal pain, and von Blumberg and McBurney signs. Laboratory data showed elevated white blood cells ($15.89x10^3$/uL), and computed tomography reporting multiple pericecal mesenteric ganglia with inflammatory characteristics, associated to pericecal striated fat with no visibility of appendix, and no complicated diverticular disease in transverse colon (figure 1-2). Acute appendicitis diagnosis was stablished, and open appendectomy was performed, finding inflammatory fluid and anterior cecal diverticulum with 4x4 cm dimension, with necrosis and fibrine plaques (figure 3), performing right hemicolectomy and ileo-transverse anastomosis (figure 4 and 5). She cursed with an adequate clinical evolution and had hospital discharge within 5 days.

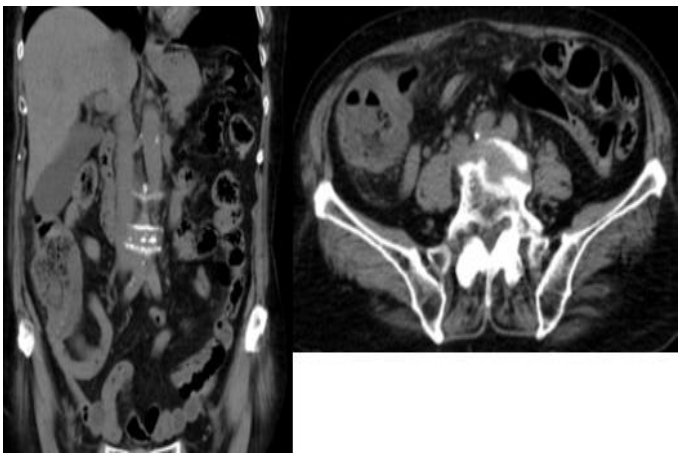

Figure 1-2: CT scan showing inflammatory process at right lower quadrant

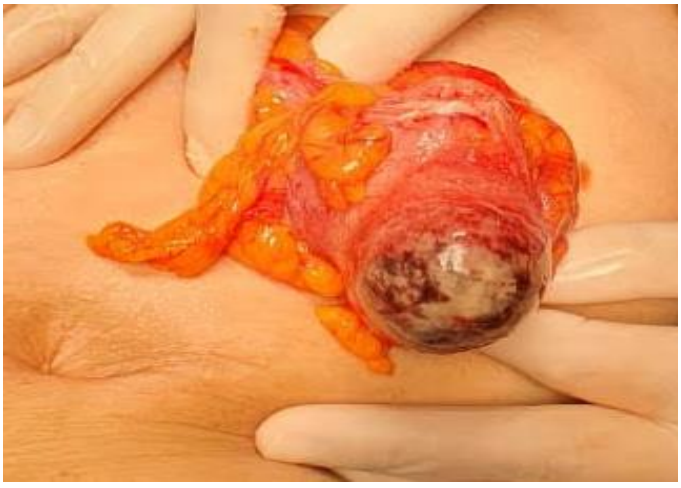

Figure 2: Necrosed giant cecal diverticulum

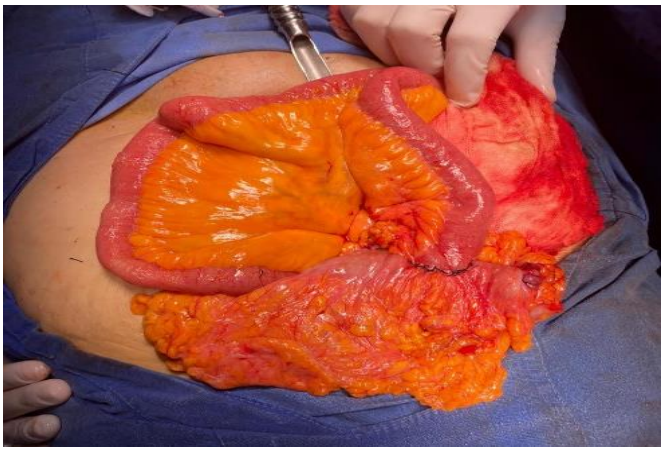

Figure 3: Ileo-transverse anastomosis

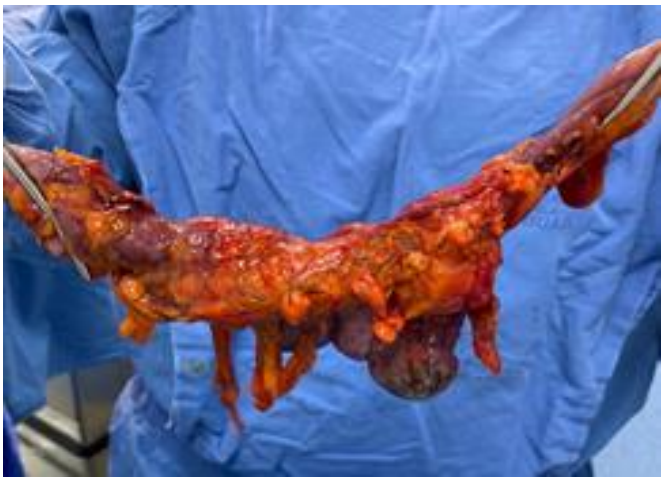

Figure 4: Product of right hemicholectomy

Discussion

Cecal diverticulum consists in a congenital real diverticulum, described in 1-3% of diverticular disease in right colon, being anterior cecum wall the localization in 80% of cases[8-10]. The most common presentation age is 40 to 50 years old, predominant in male population[8]. Preoperatory diagnosis has been stablished only in 6% of patients[10], representing a challenge to physicians due to the clinical presentation's similarity with other frequent entities cursing with abdominal pain, such as appendicitis, cholecystitis, ureteral colic, etc[8-9]. CT scan and ultrasound have been useful, nevertheless, a swollen diverticulum appears indistinguishable from a cecal tumor[9]. Antibiotics have been described as conservative management, with recurrence in 15% of cases[8-10]. Right hemicolectomy remains the most frequent surgical treatment in patients with risk factors and suspect of malignancy[9,10]. In this case, as described, it was not possible to stablish the correct preoperatory diagnosis, instead it was a transoperatory finding. Right hemicolectomy was indicated because of risk factors for colorectal cancer, which was discarded successfully. This case contributes for the few available data of this entity, presenting a patient with age and gender different to described in literature. More case reports and series are still needed to accurately describe the clinical presentation to make an opportune diagnosis and management, thus improving the morbimortality.

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