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Situs Inversus Associated with Perforated Small Intestine Diverticulum - Case Report

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Introduction: Situs Inversus (SI) is a rare congenital anomaly that affects 1:10,000 to 1:20,000 people. It is characterized by the mirror image of the abdominal and thoracic viscera. Situs Inversus Incompletus (SII) is an abdominal heterotaxis associated with levocardia. It is a much rarer condition and accounts for 1 in 2,000,000 of the general population. Small bowel diverticulum is a rare condition, in which most patients are asymptomatic. In this report, we present a patient with IBS with an acute abdomen due to a perforated jejunal diverticulum, treated at the Hospital de Base of São José do Rio Preto, Brazil.

Keywords: Situs Inversus, Jejunoileal diverticular disease, Exploratory laparotomy

Case Report: A 78-year-old female patient admitted to our service with diffuse abdominal pain for 3 days, distention, vomiting, diarrhea and hyporexia. She had dehydration, tachycardia, hypotension and diffuse abdominal pain on palpation, without peritonitis. Measures for sepsis with volume expansion and antibiotic therapy were initiated. An abdominal CT was performed with IBS, presence of free fluid in the cavity and pneumoperitoneum (Image 1), with a possible point of perforation in the jejunum. Exploratory laparotomy was indicated. Intraoperatively, SI was observed in association with absence of Treitz angle, moderate amount of purulent fluid in the cavity, diffuse distention of the small intestine and perforated diverticulum in the proximal jejunum (Image 2). It was decided to perform a 15 cm small intestine enterectomy, encompassing a perforated diverticulum with end-to-end enteroanastomosis in 2 levels. The patient referred to ICU bed maintaining hemodynamic stability. Enteral diet was started on the 3rd postoperative day, with good acceptance. She evolved with fever, worsening of infectious parameters and culture of abdominal fluid with growth of Candida glabrata, and the antibiotic therapy was scheduled. On the 6th postoperative day, the patient presented higher blood pressure, acute pulmonary edema and convulsive crisis, with improvement after clinical measures. The patient evolved well clinically, with improvement in infectious parameters and without new episodes of seizures. She was discharged from the ICU on the 11th postoperative day and discharged from the hospital 20 days after the surgery.

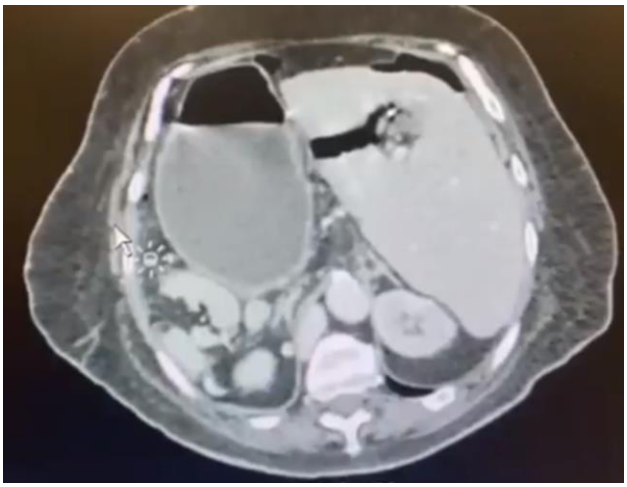

Image 1

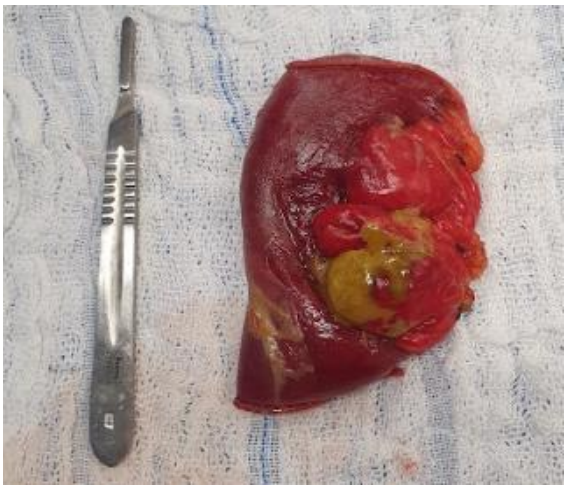

Image 2

Discussion: SI totalis is a rare and generally asymptomatic congenital condition, with a probable etiology related to alterations in the factors that determine intestinal rotation during embryogenesis.

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Jejunoileal diverticular disease is most common during the 6th and 7th decades of life. Formed only by the mucosa and submucosa, jejunal diverticula is pseudodiverticula. It may relate to symptoms of postprandial fullness and abdominal pain, and complicate with inflammation, bleeding, or perforation. The association of small intestine and SI diverticulum is extremely rare and surgery is usually indicated due to diverticulosis complications. When surgical treatment is indicated, the best option is enterectomy of the affected segment. Late diagnosis, advanced age and patient comorbidities also influence in a worse outcome.

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