Lettersto the Editor

Solitary cecal diverticulum containing enteroliths in a patient undergoing surgery for suspected acute appendicitis

**Key words:** Cecal diverticulitis. Enterolithiasis. Acute appendicitis.

**Dear Editor,**

Solitary diverticulitis of the cecum is a rare condition in the general population (0.17%) (1). In Western countries, diverticular disease occurs mainly in the left colon, with about 2% in the ascending colon (2). Approximately 80% are found on the anterior side of the cecum (3), and men around 40 years of age are predominantly affected. There are 2 types of diverticula: true diverticula, which involve all the intestinal layers and are usually solitary, of congenital origin, and mainly located in the right colon, and false diverticula, which only involve the mucosa or submucosa, tend to be multiple and acquired, and are usually found in the left colon. We present the case of a patient with a solitary diverticulum of the cecum containing an enterolith, found incidentally during an appendectomy performed for suspected acute appendicitis. To our knowledge, this condition has not been previously reported in the literature.

**Case description**

A 22-year-old man came to the emergency room for abdominal pain of 3 days’ duration. Relevant history included penicillin allergy and an episode of abdominal pain 1 year previously, with symptoms similar to the present event.

The pain, which started in the periumbilical region and later radiated to the right iliac fossa, was constant and increased with ambulation. The patient reported nausea and vomiting in the previous days, with no changes in bowel habits or urethral pain syndrome. There was no fever, nausea, or dizziness. On examination, he was afebrile and blood pressure was normal, although his general health status was affected. The abdomen was soft and depressible with no masses or enlarged organs, although painful on palpation in the right iliac fossa and hypogastrium, with guarding and peritonism. The laboratory workup revealed leukocytosis (13,390 x 10³/µL) with neutrophilia (66.7%).

Based on a suspected diagnosis of acute appendicitis, the patient underwent emergency surgery. During the procedure, an inflamed, necrotic diverticulum containing an impacted coprolith was discovered on the anterior wall of the cecum, as well as a hyperemic ileocecal appendix (Fig. 1). Standard appendectomy and diverticulectomy were performed with transversal manual suture using Byosin 2-0 and a Penrose drain was left in place. The patient progressed favorably and was discharged on postoperative day 12 with no symptoms.

Histological study of the surgical specimen revealed an ileocecal appendix, periappendicitis, coprolith of 2.5 cm, and a 2-cm diameter segment of the large intestine with severe acute inflammation.

Fig. 1. Inflammation and necrosis of the cecal diverticulitis. Enterolith.
Discussion

Solitary diverticulitis of the cecum is a relatively uncommon condition in our setting and is usually an incidental finding in laparotomies performed for acute abdomen or other reasons. It is often confused with problems such as acute appendicitis, regional enteritis, neoplasm of the cecum, actinomycosis, intestinal tuberculosis, or Meckel diverticulum. The clinical presentation consists of abdominal pain and signs of peritonism, as well as nausea and vomiting in some cases, which hinders pre-laparotomy diagnosis. Therefore, clinical suspicion and laboratory findings are important to guide the most appropriate imaging examinations, such as computed tomography and sonography.

Treatment of this entity varies according to the surgical findings and diverticulectomy is useful when the diverticulum alone is affected, but not perforated, as in our case (4). On other occasions, more aggressive treatment is required, such as partial cecectomy in the case of a perforated diverticulum. Lastly, when neoplasm of the cecum is suspected, right hemicolectomy can be considered. To our knowledge, the literature contains no references to solitary cecal diverticula containing enteroliths.

References