

Letters to the Editor

Right-sided paraduodenal hernia: Rare cause of recurrent abdominal pain

Key words: Paraduodenal hernia. Internal hernia. Intestinal obstruction.

Dear Editor,

Right-sided paraduodenal hernia (PH) is a rare congenital malformation that arises due to a defect in the rotation of the middle intestine during embryogenesis. Though it is usually an incidental finding on autopsy or during laparotomy, it can be responsible for episodes of recurring abdominal pain or even acute abdomen (1,2). A search of the literature only revealed three cases of right-sided PH diagnosed by computed tomography (CT) (3-5).

Case report

We present the case of a 52-year-old male, no prior history of abdominal surgery, with a several-month history of self-limiting episodes of colicky-type periumbilical abdominal pain associated with nausea. The patient came in due to a new episode of abdominal pain with rebound tenderness to deep palpation. Ultrasound and laboratory studies were unremarkable. Contrast CT of the abdomen revealed: "Displacement and bundling of the first loops of the jejunum towards the right flank with poster-inferior displacement of the colon suggestive of right-sided PH; no signs of intestinal obstruction or vascular compromise" (Fig. 1). Intestinal transit: "bundling of the loops of the jejunum in the right flank, no signs of obstruction." Given the recurrent nature of the case, the patient underwent a scheduled exploratory laparotomy that revealed a hernial sac with small intestine loops in its interior

located on the right side, lateral and inferior to the descending portion of the duodenum. Surgery consisted of reduction of the intestinal loops in the hernial sac and subsequent repair of the defect. Four months later, the patient remained asymptomatic.

Discussion

Right-sided PH is the primary variant of internal hernias. These only make up 1-2 % of all abdominal hernias. It is a very uncommon entity that involves herniation of the all or part of the small intestine through a normal or anomalous foramen in the peritoneal cavity (3,6). There are two types: left-sided, which is more common (75 %), and right sided, which is very uncommon. This involves Waldeyer's fossa (a defect in the first part of the mesentery of the jejunum, located behind the superior mesenteric artery (SMA) and inferior to the 3rd portion of the duodenum), the existence of which is normal in 1 % of the population (3).



Fig. 1. Displacement of jejunal loops in the right flank, suggestive of right-sided PH.

PH can go unnoticed and is often found inadvertently. As in our case, it is usually diagnosed between the 4th and 5th decades of life in patients with a prior history of chronic abdominal pain and/or periodic abdominal distention caused by a partial intestinal obstruction that is occasionally attributed to a biliary condition, gastritis or signs and symptoms of gastroesophageal reflux (7,8). The intermittent character of the symptoms makes it difficult to diagnose. Although a barium study may suggest the existence of a right-sided PH by demonstrating an anomalous conglomeration of jejunal loops in the right quadrant, often displacing the adjacent organs such as the colon and SMA, CT is the most reliable procedure for preoperative diagnosis (9,10). There is an associated risk of strangulation and intestinal infarction for more than 50 % over the course of a lifetime, making it necessary to investigate radiological signs of hypoperfusion and intestinal ischemia (6). The high rate of mortality associated with these complications make early identification indispensable and justifies the role of abdominal CT in the early preoperative diagnosis of PH. Given the associated risk of strangulation, surgical treatment is recommended. Surgery can be performed in cases that lack intestinal necrosis or severe dilation.

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