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SMALL BOWEL DIVERTICULOSIS

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Key-word: Intestines, diverticula

Background: A 60-year-old male patient presented with upper abdominal pain, which started as a epigastric cramp at night. He had no fever, nor changes in stool habits and he didn't had to vomit. Physical examination of the abdomen revealed rebound tenderness in the left hypochondric region and left lumbar region.
Laboratory results showed increased inflammatory parameters (leukocytosis 10200/µl and CRP 7,6 mg/l).

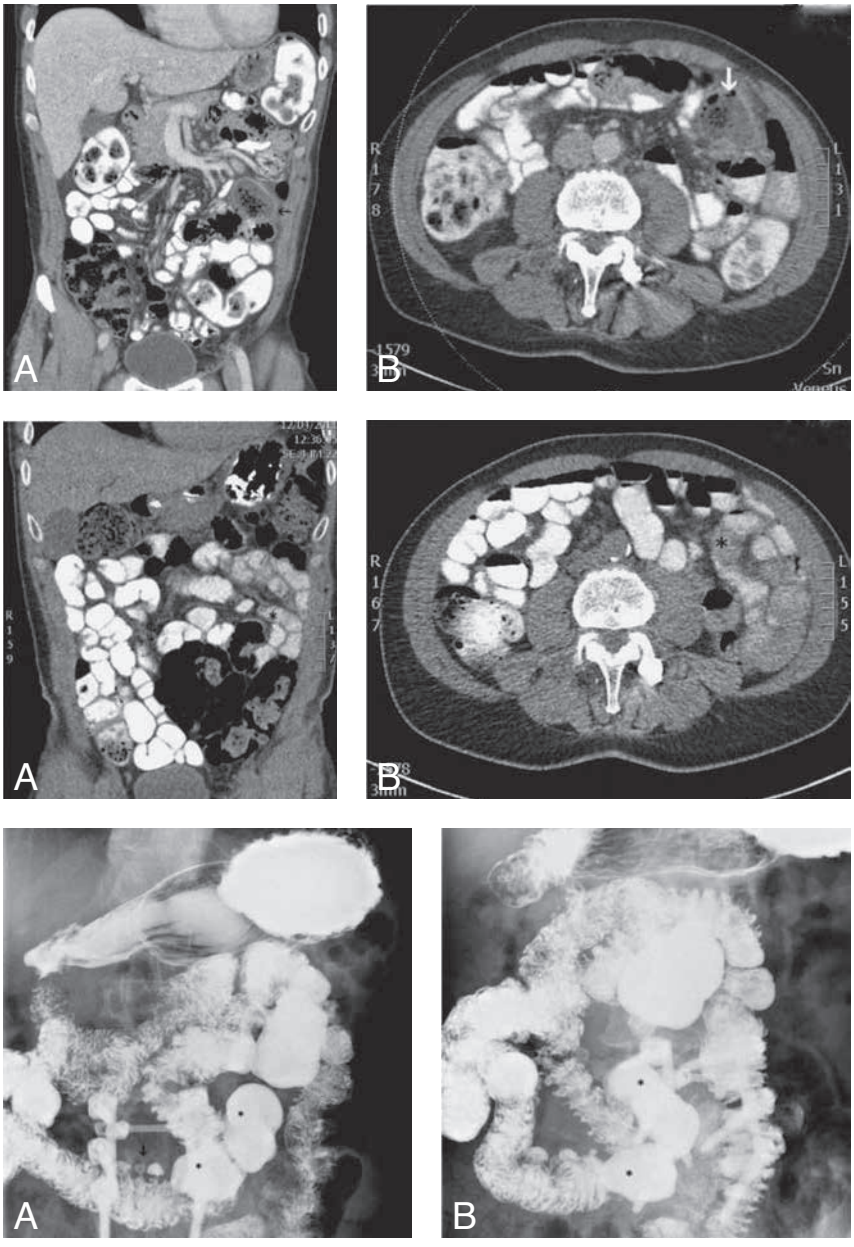

Fig. 1A 1B 2A 2B 3A 3B

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Work-up

Dual energy CT scan of the abdomen was performed (Fig. 1) on admission. Coronal reformatted (A) and axial (B) image of the abdomen show a cyst-like, expansile mass in the left mesogastrium with enclosed air densities (black and white arrows). The lesion has a diameter of 4.7 cm. Diffuse thickened and enhancing wall of the lesion and infiltration of the surrounding fat tissue is noticed.

Low dose CT scan was used during follow-up (Fig. 2). On coronal reformatted (A) and axial (B) images of the abdomen the cystic mass in the left mesogastrium is no longer observed after treatment (asterix).

Conventional small bowel follow through was carried out to confirm the diagnosis (Fig. 3). At jejunal level (A,B), multiple diverticula of various size (big lesions: asterix, smaller ones: arrow) are diagnosed.

Radiological diagnosis

Based on the imaging findings the patient was diagnosed with *colon diverticulosis, small bowel diverticulosis and diverticulitis.* The patient was treated with antibiotics and, as shown, responded well to the treatment.

Discussion

Small bowel diverticulosis is a disorder with special characteristics as it usually remains silent.

The site of protrusion is found at the entry points of the bowel vascular supply through the mesentery. This anatomical preference often makes them difficult to detect as they are located in the mesenteric leaves.

Small intestinal diverticula are far less common than colonic diverticula: the prevalence of jejunoileal diverticula on autopsy ranges from 0.06% to 1.3%. Coexistent diverticula are found in the colon (20%-70%), duodenum (10%-40%), and esophagus and stomach (2%). The prevalence increases with age, peaking at the sixth and seventh decades.

As stated above small intestinal diverticulosis usually remains silent until it presents itself with complications. Symptoms are vague and chronic abdominal pain of varying intensity, epigastric or periumbilical in location, with a bloating sensation after food intake. This may be one of the first symptoms. Acute complications include intestinal obstruction, bleeding, inflammation and perforation. In general the clinical presentation of small bowel diverticulitis is that of an acute abdomen.

Upper gastrointestinal contrast series with small bowel follow-through examination and mainly enteroclysis are the two main diagnostic methods. In selected cases (mainly complicated jejuno-ileal diverticular disease (JID)), other diagnostic techniques, such as ultrasonography, CT scan, endoscopy, intraoperative endoscopy, laparoscopy, radiotagged erythrocyte bleeding scans, and selective mesenteric arteriography are helpful. Laparotomy remains the gold standard for definite diagnosis of asymptomatic and complicated diverticula.

Small bowel diverticula do not require surgical treatment unless refractory symptoms or complications occur. When complications occur, partial enterectomy and primary anastomosis should be performed. It is reasonable to conclude that asymptomatic diverticula incidentally discovered on routine contrast studies or at laparotomy do not need resection.

Bibliography

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