

Diverticulitis of the Small Bowel: Case Report and Review of the Literature

İnce Barsak Divertikülitisi: Olgu Sunumu ve Literatürün Gözden Geçirilmesi

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ABSTRACT In contrast with their colonic equivalents, noncolonic diverticula of the gastrointestinal tract are much rarer and an uncommon site of inflammation. Symptoms and signs are generally nonspecific and the diagnosis is not easy unless diverticulitis of the small bowel is kept in mind, in the differential diagnosis of the acute abdominal pain. Here we report a case of acute-onset abdominal pain, which turned out to be rooting from duodenojejunal diverticulitis; and was treated successfully with medical measures. The point is that, we do not think of the possibility of a small bowel diverticular complication in case of upper abdominal pain; our sense of diverticular disease and its complications is limited to the colonic (frequently sigmoidal) ones. On the basis of our case; we discuss and review the prevalence, physiopathology, symptoms and complications of the diverticula of the duodenum and jejunum.

Key Words: Abdomen, acute; diverticulitis

ÖZET Kolondaki benzerlerinin aksine, gastrointestinal sistemin kolon-dışı divertikülleri çok daha nadir ve sıra dışı inflamasyon odaklarıdır. Semptom ve bulgular özgün olmadığından ve akut karın ağrısının ayırıcı tanısında sık akla gelen bir sebep olmadığından; tanı daha güçtür. Bu vaka sunumunda; akut başlangıçlı karın ağrısı olan ve takipte sebebin duodenojejunal divertikülit olduğu tespit edilen, sonrasında da medikal tedavi ile sağlığına kavuşan bir hastayı bildiriyoruz. Üst batın ağrılarını değerlendirirken, ince barsak divertikülit ihtimalini pek aklımıza getirmeyiz zira çoğumuzun divertikülitten anladığı veya hatırladığı, kolonik özellikle de sigmoidde yerleşik olanlardır. Bu noktayı özellikle vurgulamaya gayret ettik. Vakamız üzerinden; duodenum ve jejunum divertiküllerinin sıklığı, fizyopatolojisi, semptomları ve komplikasyonlarını inceledik.

Anahtar Kelimeler: Karın, akut; divertikülit

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In contrast with their colonic equivalents, noncolonic diverticula of the gastrointestinal tract are much rarer and an uncommon site of inflammation.

The incidence in the gastrointestinal tract, in order of decreasing frequency, is as follows: Duodenum, pharynx and esophagus, stomach, jejunum and finally ileum.¹

The complications of such pseudodiverticula are rare (6-13%); 'diverticulitis' being the most popular one, resulting from the bacterial pollution

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within the diverticular pouch and resulting in non-specific acute or subacute abdominal pain syndrome; mimicking numerous other more familiar causes like appendicitis, colonic diverticulitis, cholecystitis.²⁻⁴ The remaining possible complications are; perforation, intestinal obstruction and hemorrhage.⁵

Here we report a case of acute-onset abdominal pain, which turned out to be rooting from duodenojejunal diverticulitis; and was treated successfully with medical measures.

CASE REPORT

A 52-year old male patient admitted to our Gastroenterology outpatient clinic, with complaints of spasming upper abdominal pain, since 3 days. In his medical history; he had been operated of varicocele and was treated successfully for tuberculous lymphadenitis.

Physical examination revealed nothing more than a vague tenderness on the upper abdomen with slightly increased bowel sounds. His blood tests displayed leucocytosis and a markedly elevated C reactive protein (CRP) value.

An abdominal ultrasonography (USG) was performed; reporting closed perforation or infection of possible colonic diverticules. The location being atypical for colonic diverticules; we performed a whole abdominal computed tomography (CT) with contrast, on suspect.

The CT report revealed multiple duodenal and jejunal diverticules, with marked inflammation (Figure 1).

After 2 weeks of medical therapy (metronidazole 1 g/day, ciprofloxacin 1 g/day, analgesics); the patient was totally healed. Then we performed an elective gastroduodenoscopy; displaying a big (3 cm) and some smaller diverticules on the third portion of the duodenum, without sign of inflammation; and a normal ileocolonoscopy (Figure 2).

A control CT was taken, reporting findings of duodenojejunal diverticules and with complete regression of the inflammatory changes, reported in the previous CT (Figure 3).

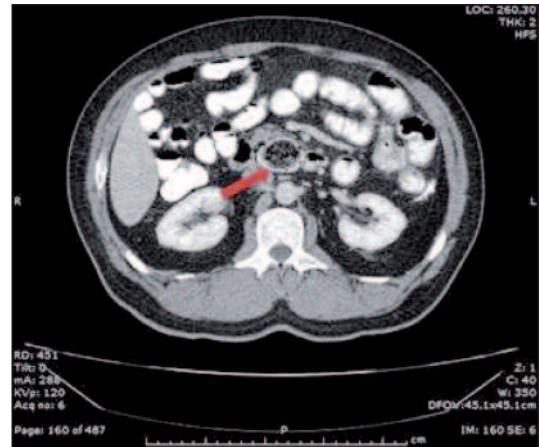


FIGURE 1: Jejunal diverticulitis (diameter 3 cm) with thick walls and neighbouring mesenteric inflammation.



FIGURE 2: Endoscopic view of a duodenal diverticule.

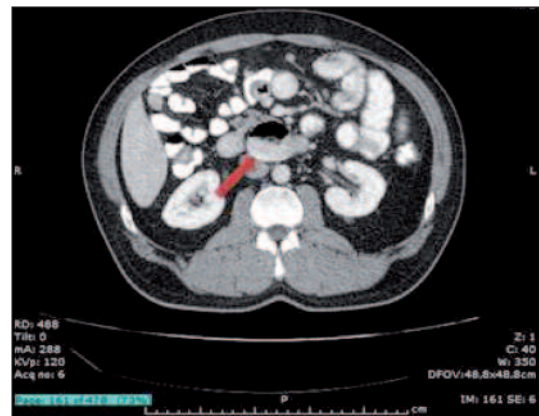


FIGURE 3: Jejunal diverticule after the medical therapy.

Now the patient is keeping on well, with regular Gastroenterology outpatient clinic follow-up.

DISCUSSION

True diverticula containing all three gut layers, are congenital entities essentially represented by the common vermiform appendix of the caecum and the Meckel's diverticulum that is found in only 2-3% of individuals.^{2,3}

All other diverticula are acquired "pseudodiverticula" consisting of thin walled mucosal herniations, through gaps in muscular layers and generally extending along the pathway of supplying blood vessels.⁵

The most common localization of the acquired diverticules, is the large bowel. The duodenum is the second most frequent location for diverticula.⁶

Acquired diverticula of the jejunum and ileum have a very much rarer reported incidence, that varies from 0.06% to 2.3%.^{2,4,7} They are found almost exclusively in patients over the age of 40 and twice as frequently in males.⁸

Most are considered as incidental and asymptomatic findings. In contrast with colonic diverticula, they are an uncommon site of inflammation, probably because of the larger size and better intraluminal flow of the relative sterile, liquid content of the small bowel.^{6,9,10}

Nevertheless, complications may occur and do not differ from those occurring in the mucosa of any part of the alimentary tract; 5% of patients with duodenal diverticula will develop clinical symptoms because of acute diverticulitis with or without free perforation in the peritoneum or retroperitoneum; abscess formation or fistula (to the colon, the gallbladder or the aorta), obstruction of the common bile duct (predisposing to development of gallstones, obstructive jaundice, cholangitis or pancreatitis).⁹

In our case, the patient turned out to be intestinal diverticulitis and was treated successfully by medical means and the diagnosis was confirmed by abdominal CT and endoscopy.

Repeating attacks of diverticulitis can as well be treated with surgical means (limited resection and end-to-end anastomosis).

The point is that, we do not think of the possibility of a small bowel diverticular complication in case of upper abdominal pain; our sense of diverticular disease and its complications is limited to the colonic (frequently sigmoidal) ones.

We hope this case report will help our colleagues to keep this possibility in the list of the differential diagnosis for acute abdominal pain.

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