JEJUNAL DİVERTİKÜLOZ PERFORASYONU: NADİR BİR AKUT KARIN NEDENİ

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JEJUNAL DİVERTİCULOSİS PERFORATİON: A RARE CAUSE OF ACUTE ABDOMEN

ÖZET

Jejunal divertikülozis tanısı zor konabilen, yüksek morbidite ve mortaliteye neden olabilen nadir lezyonlardır.

Genellikle asemptomatiktir, ancak bazen ishal, kronik karın ağrısı, şişkinlik, akut divertikülit, kanama, bağırsak tıkanıklığı ve delinme ile kendini gösterir.

Bu yazıda jejunumda divertikül perforasyonu sonucu akut karın gelişen ve opere edilen bir hasta sunuldu.

Acil servise ani başlayan karın ağrısı, ateş ve çarpıntı şikayetleri ile başvuran 67 yaşında kadın hastanın fizik muayenesinde yaygın karın hassasiyeti, defans ve rebound mevcuttu.

Kan testlerinde WBC 15.480/ml, CRP 36 mg/l idi. Batın BT'de karında barsak ansları arasında serbest hava kesecikleri, jejunumda divertikül, diffüz kolon divertikülü, peritoneal kontaminasyon izlendi.

İki ameliyat yaptık.Önce diagnostik laparaoskopi ile teşhis konarak konservatif tedavi yapıldı. Fakat iki hafta sonra karın içi apse oluştu.Tanısal laparatomi yaptık ve divertikülozisli jejunal ansı rezeke ettik.

Hasta postoperatif 7. gün taburcu edildi.

Anahtar Kelimeler: Jejunal divertikülozis,akut batın

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ABSTRACT

Jejunal diverticula are rare lesions that can be difficult to diagnose and can cause high morbidity and mortality

It is usually asymptomatic,but it sometime presentation diarrhea, chronic abdominal pain, bloating, acute diverticulitis, bleeding, intestinal obstruction, and perforation.

In thise article, we present a patient who was operated on for acute abdomen due to diverticulum perforation in the jejunum

A 67-year-old female patient, who presented to the emergency clinic with sudden onset of abdominal pain, fever, and palpitation had widespread abdominal tenderness, abdominal defense and rebound on physical examination.

There is some abnormal blood tests. WBC was 15.480/ml, C-reactive protein was 36 mg/l.Free air sacs between the bowel loops in the abdomen, diverticula in the jejunum, diffuse colon diverticula,peritoneal contamination were observed in the abdominal CT.

We made two operation.Firsly,we made diagnos and decide conservative aproch.But two weeks later,intraabdominal abscess occurred.We made diagnostic laparatomi and resected the jejunal part with jejunal divertikülozis.

The patient was discharged on the 7th postoperative day.

***Keywords**: jejunal diverticulosis,acut abdomen*

INTRODUCTION

Jejunal diverticula are rare lesions that can be difficult to diagnose and can cause high morbidity and mortality when there is a delay in establishing a diagnosis (1). It is usually asymptomatic, and in symptomatic patients, nonspecific findings such as diarrhea, chronic abdominal pain, and bloating are observed, whereas in a group of patients it may cause acute diverticulitis, bleeding, intestinal obstruction, and perforation (2,3,4). In our article, we present a patient who was operated on for acute abdomen and had diverticulum perforation in the jejunum.

CASE PRESENTATION

A 67-year-old female patient, who presented to the emergency clinic with sudden onset of abdominal pain, fever, and palpitation had widespread abdominal tenderness, abdominal defense and rebound on physical examination. The patient's medical history was unremarkable except for constipation and hysterectomy 30 years ago. In diagnostic laboratory tests, WBC was 15.480/ml, C-reactive protein was 36 mg/l, and glucose was 212 mg/dl. In imaging examinations, air-fluid levels were observed in direct abdominal X-ray, apparent free fluid was observed in lower abdominal quadrants in abdominal ultrasonography. Free air sacs between the bowel loops in the abdomen, diverticula in the jejunum, diffuse colon diverticula, contamination in small intestine and colon mesos were observed in the abdominal computerized tomography (Figure 1). Diagnostic laparoscopy was performed with a pre-diagnosis of hollow organ perforation. On exploration, a small amount of seropurulent free fluid in the abdomen, gato-covered small bowel loops in the left upper quadrant and diffuse diverticulosis in the entire colon were observed. When the jejunal loops were opened, it was found that there were rows of diverticula on the mesenteric side and the perforation of these diverticula was covered with a fibrous pseudomembrane and there was no leakage. The abdomen was washed with saline, and the procedure was terminated by placing drains in the perforation area and the Douglas space.

During the operation, ceftriaxone was administered intravenously to the patient as a prophylactic antibiotic. Ceftriaxone and metronidazole (twice a day) were administered intravenously to the patient who was taken to the intensive care unit in the postoperative period. The patient, who was transferred to the general surgery service on the postoperative 3rd day, had persistent moderate abdominal pain and tachycardia between 80 and 100 per/minute, although the clinical findings partially regressed. Oral feeding was started on the postoperative 3rd day, and the drain in the Douglas cavity was removed on the 4th postoperative day. In the laboratory tests performed on the same day, WBC was 13.260/ml, CRP was 42.89 mg/l, and subfebrile fever started on the 5th postoperative day. In the abdominal computerized tomography, fluid collections compatible with abscess 40x46mm, 50x44mm, 25x26mm in size, which were thought to be interconnected between the bowel loops in the left upper quadrant, and inflammation in the surrounding tissue were detected. Percutaneous drainage was performed in the interventional radiology unit. Approximately 200 ml of pus was drained. In the tests performed on the postoperative 8th day, WBC was 21.900/ml and CRP was 55.01 mg/l. On the postoperative 9th day, the patient who did not have significant drainage developed aggravated abdominal pain, fever, tachycardia, and vomiting. In the laboratory work-up, WBC was 27.820/ml and in the abdominal computerized tomography, it was determined that the previous fluid collections persisted, although there was a reduction in the diameters of the previous collections, persistence of inflammation, increased diameter in the small intestine loops, suspicion of ileus and increased free fluid between the intestinal loops were observed. Amylase levels of 11.642U/L, lipase 1.491.1 U/L, and LDH 2.208

U/L were found in the sample taken from the intraabdominal fluid, while E. coli and Candida grew in culture.

Diagnostic laparoscopy was performed with these findings. Diffuse pus and generalized peritonitis were detected between the intestinal loops and on their surfaces. In the left upper quadrant, it was observed that there were numerous diverticula in the mesenteric side of the jejunum loops, the largest of which was 3 centimeters in diameter, and significant inflammation developed in this area. In addition, it was observed that abscess foci formed between the small intestine loops made by the intestines and the omentum during exploration, and laparotomy was decided to be the procedure of choice. In the exploration performed, it was determined that there was a 6-7 centimeter long brid extending from the pelvic area to the meso root of the small intestine, compressing the small intestine from the outside and partially narrowing the lumen. Significant enlargement was observed in the small intestine loops in the proximal part. On the mesenteric surface, diverticula were observed in the jejunum loop of approximately 35 cm, starting from Treitz and continuing sequentially (Figure 2). In addition, the jejunum loop of 25 cm from the area without diverticula was resected 10 centimeters from Treitz and an end-to-end anastomosis was performed (Figure 3). No intervention was performed for diverticula located proximally. After the WBC value increased to 32.080/ml and CRP to 248 mg/dl in the early postoperative period, it regressed to normal values. The patient, who had gas discharge on the postoperative 3rd day, was fed orally and was discharged on the 7th postoperative day.

DISCUSSION

With the enteroclysis examination, the incidence of jejunoileal diverticulum was found to be 2-2.3%, 1.3-4.6% in autopsy studies and 2.3% in barium radiographs (3,5). In the small intestine, 75% of the diverticulum is found in the proximal jejunum, 20% in the distal jejunum, and 15% in the ileum (6). The size of the jejunal diverticulum can range from a few millimeters to 10 cm. In the present case, the diverticulum was located in the proximal jejunum, and the perforated diverticulum was about 3 cm in size.

Jejunum diverticula are found in males, in the sixth-seventh decades, and more frequently as multiple diverticula (6). The case we presented was a 67-year-old female patient, and the jejunal diverticula were located at the entrance of the mesenteric arteries in accordance with the literature.

Although the etiology of jejunum diverticula is not fully known, in recent studies, intestinal dyskinesia, irregular contractions in smooth muscles and myenteric plexus, increased intestinal lumen pressure and diverticulum formation at the weakest point of the intestine have been found in these cases (7). In our patient, brid was detected that partially blocked the jejunal passage and increased intraluminal pressure.

Jejunum diverticula are generally considered to be acquired and asymptomatic for a long time. The diagnosis is made only when diverticula are symptomatic or complicated. The most common complications are diverticulitis, bleeding, intestinal obstruction, and perforation (8,9). Jejunum diverticulum perforation is detected in approximately 2.3-6.4% of cases with diverticula.

In our case, it was observed that one of the diverticula was perforated by developing necrosis from the apex.

Free air may not always be detected in the abdominal X-ray in small bowel perforations. Barium intestinal radiography is one of the best diagnostic tests in jejunum diverticulum, but it is contraindicated when diverticulitis or perfroation occurs. In these cases, abdominal computerized

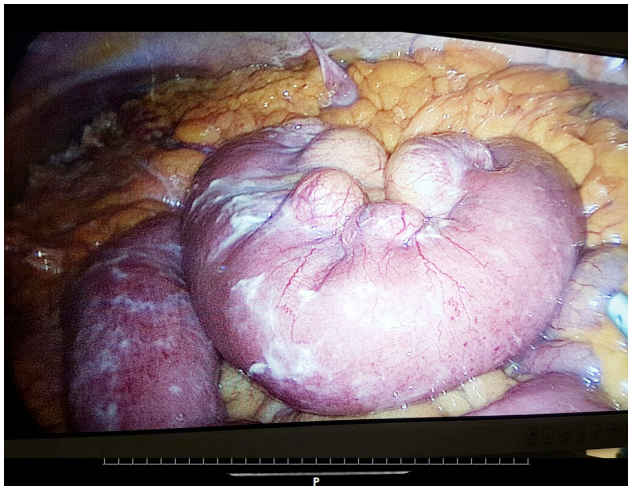
tomography is a good option for diagnosis (10,11). Abdominal tomography is useful in the differential diagnosis especially in cases such as abscess, Crohn's disease, and intestinal obstruction. Although capsule endoscopy is helpful in the diagnosis of single or double balloon enteroscopy, we would like to emphasize that its use in diagnosis is restricted because it is expensive and less accessible, and these examinations are contraindicated when diverticulum complications develop.

In our case, free air was not observed under the diaphragm on direct abdominal radiography. Contrasted abdominal tomography revealed free air sacs and peritonitis in the abdominal cavity of the jejunum perforation. The presence of diffuse colon diverticula in the entire colon at the same time was remarkable.

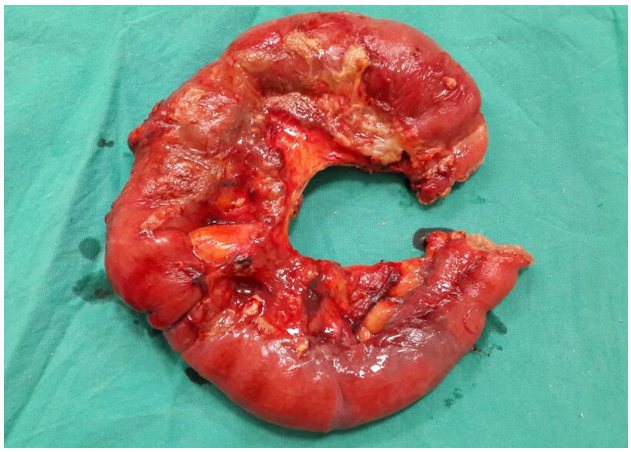
Novak et al. emphasized that the use of intravenous antibiotics is sufficient when localized peritonitis occurs after jejunum diverticulum perforation (12). In another study, cessation of enteral feeding, nasogastric drainage, and treatment with broad-spectrum antibiotherapy are recommended (13). When patients have generalized peritonitis, emergency laparotomy and small bowel resection are recommended (14,15). In our case, diagnostic laparoscopy and drainage procedure, nasogastric drainage procedure and antibiotherapy were performed first. Abscesses that developed during follow-up were drained percutaneously. However, it was seen that there was not enough clinical improvement and laparotomy, resection and anastomosis were performed.

In conclusion, jejunum diverticula are rarely detected and diagnosis is usually made when complications develop. We think that segmental resection is the preferred method of treatment in complicated cases developing after perforation. However, in some selected cases, percutaneous drainage, antibiotherapy, and resection under elective conditions may be preferred.

Fotoğraf 1: Açıklama



Fotoğraf 2: Açıklama



Fotoğraf 3: Açıklama

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