



IDIOPATHIC COLONIC PERFORATION IN ELDERLY—A RARE CASE

General Surgery

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KEYWORDS

Perforation peritonitis is one of the most common emergencies presenting to surgeons, and they are life threatening if not diagnosed and treated early. Perforation of the colon and rectum without etiology such as injury, malignant tumor, iatrogenic, diverticulitis, and inflammatory disease is defined as the idiopathic perforation of the colon and rectum. Spontaneous perforation of colon (SPC) is defined as sudden perforation of apparently healthy colon in absence of diseases or injury^{1,2}. SPC is an uncommon clinical entity which is seldom reported in literature, less than 100 cases have been reported³. It is more common at the extremes of age especially elderly & premature infants but no age is exempted^{4,5}. It results in severe peritonitis with high mortality which should be considered in differential diagnosis of acute peritonitis with free air under diaphragm. It was described first by Brodie in 1827, a case of middle aged women whose rectum was spontaneously ruptured. We present a case of spontaneous perforation of colon in an elderly male patient.

CASE REPORT

A 60-year-old man present to us with acute abdomen since morning. Pain started paraumbilically with sudden onset and then became generalized with increasing intensity. It was associated with nausea and vomiting. He was known constipated and did not pass stool for two days. There was no history of bleeding per rectum. There was no history of anorexia, fever and weight loss. On general examination, he was conscious, alert. His vital signs: afebrile, pulse: 102/m, B.P: 130/70, local examination showed generalized abdominal distention, tenderness & guarding with no bowel sound. P.R. exam showed blood stain on gloves, no masses or fecal mater felt. On investigation total counts were 13000 cumm , rest all hematology and biochemistry were normal. X-ray chest PA view showed huge air under diaphragm . Intravenous (I.V) antibiotics in the form of cefuroxime & metronidazole were started. Patient was taken for exploratory laparotomy, during which a rounded perforation 3 × 1 cm in diameter at the anterior surface of sigmoid was found. Seropurulent fluid was freely present in the peritoneal cavity with no fecal content. Rest of abdomen was normal. There were no adhesions and inter bowel collections in the abdomen. Edge biopsy of the perforation was taken and primary closure of the perforation was done in two layers and proximal colostomy was done . The post operative period was uneventful and patient was discharged on post operative day 7. The histological examination of the biopsy showed no specific disease responsible for perforation. In postoperative period, patient was enquired for any bowel complaints, foreign body insertion, trauma, etc. After thorough history and examination also the cause of perforation could not be detected.

DISCUSSION

Colon perforation is a rather uncommon event usually caused by malignancy, amoebic colitis, diverticular disease, spontaneous perforation, stercoral ulceration, steroid therapy, NSAIDs, trauma and ulcerative colitis². Several reports of large bowel perforations have been associated with chronic use of non-steroidal anti-inflammatory drugs and chronic constipation³. These two factors may exert their deleterious effects on lower gastrointestinal tract through local and systemic actions. Several untreated chronic constipation may, on rare occasion, cause free perforation of the sigmoid colon, and much less frequently of the caecum^{1,4}.

Two hypotheses have been proposed to explain idiopathic spontaneous perforations. The first is the vascular theory, which suggests that a combination of hypoperfusion of colonic tissue and some form of parietal suffering results in a constitutional weakness of the bowel

wall, leading to perforation. Another hypothesized cause is intraluminal hypertension, which can result from intestinal hernias, rectal prolapse, or abnormal depth of pouch of Douglas.

The clinical presentation of cases with colonic perforation differs in terms of the area affected and peritoneal irritation. Abdominal pain and distention are the most common symptoms. Diagnostic direct X-rays may show pneumoperitoneum in more than 70%. Computerized tomography is gold standard^{5,6}. Computed tomography using triple or dual contrast media can be used to monitor patients, especially those who are being followed without surgery.⁷ There is a lack of consensus regarding the treatment of patients with pneumoperitoneum and suspected colonic perforation. Clinician experience and site of perforation are important when monitoring treatment in these cases. They can be managed both operatively and nonoperatively.^{8,9} Although treatment of colonic perforations traditionally required open surgery, in recent years there has been a trend toward nonoperative follow-up in selected cases with laparoscopic interventions as necessary.¹⁰ The patient discussed here presented to the emergency department with clinical picture of acute abdominal syndrome. Because he did not give sufficient information about the events leading to his condition, the clinical findings were evaluated as upper gastrointestinal system perforation. This case illustrates the need to obtain a more detailed history in the emergency department, especially in patients with psychological problems and clinical presentation of acute abdomen.

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