



Case report: spontaneous colonic perforation

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Abstract:

Herein I report a case of middle-aged man with spontaneous perforation of the colon without any identifiable systemic cause (on screening the patient pre & postoperatively), who was operated upon and we found a perforation in the sigmoid colon without finding a local cause.

Key words: colonic perforation, Peritonitis.

The case report

A 55-years old male presented to Emergency Room complaining a sudden onset lower left abdominal pain when he tried to pass a bowel motion. The pain was severe described by the patient (as something has exploded inside his abdomen), associated with one attack of vomiting containing what he ate in the previous few hours. He had received analgesics in a district hospital, but the pain didn't relieve. He came to the main Emergency Room after that. He has history of constipation and didn't pass motion 3 days prior to incident. Past surgical history included only Haemorrhoidectomy 3 times in the past, the last one in 2018. Past medical history: had hypertension on amlodipine 5mg & Ischemic heart disease. He was neither smoker nor alcoholic & was athletic. No any other chronic drug uses.

Physical examination; generally revealed that the patient was dehydrated, thin body build, No shortness of breath and mild fever. On abdominal examination; there were both guarding & tenderness but the tenderness was not localized to any specific area. Pulse Rate was 80 bpm, Temperature: 38 degree centigrade, Blood Pressure 140/95 mmHg, Random Blood Sugar 110 mg/dl, complete blood count, blood film and routine biochemical tests including renal functions and liver chemistries were all normal. Chest radiography was normal except for gas under the right diaphragm suggesting perforated subdiaphragmatic viscus. Abdominal ultrasound examination reported to be completely normal. Computerized tomography of the abdomen showed only pneumoperitoneum.

Laparotomy was done through midline incision under general anaesthesia, there was about 200 ml free fluid, with a lemon seed was found in the pelvic. The omentum was in the pelvic. There was 1*1 cm perforation in the antimesenteric border of distal sigmoid colon, No mass & no any diverticulosis was seen and the colonic wall was normal without any stercoral ulcers or masses. Bowel wall biopsies of the perforated site was taken & sent for histopathological examination, but was normal. Repair was done by interrupted sutures. Loop ileostomy done and bowel washing done by 3000cc warm normal saline. The skin was sutured in layers. The patient improved and his vital signs were stabilized which allowed the patient to be discharged home uneventfully.



Discussion:

Spontaneous perforation of the colon in the absence of a contributing factor, such as disease of the bowel, or hernia, is an occurrence of extreme rarity. The first published case was reported in 1937 by Wilensky and Kaufman (1,2) as sudden perforation of the intestine following the lifting of a 150 lb. stone. The presence of an inguinal hernia in their patient, like the current case, was assumed to be the contributing cause. Before this first case, a total of 42 cases reported but all were associated with risk factors: diverticulitis, prolapse of the rectum, intestinal adhesions, carcinoma, tuberculosis of the bowel, typhoid, hernia, or some other pathological conditions. Inguinal hernia was the most frequent accompaniment of spontaneous intestinal perforation (3) & 2 case reports published of SCP due to endometriosis during pregnancy (4). In 1942, Berman and Rosner reported another case of rupture of the intestine following severe abdominal strain (3). In 1944 another case of spontaneous rupture of pelvic colon was reported (5). A seventh case of spontaneous colonic perforation of collagenous colitis worldwide reported in 2019 concluding that spontaneous perforation is a rare complication of collagenous colitis, but it is possible to be diagnosed by symptom of acute abdomen disease (6). The most recent review of 221 cases in 2020 concluded that SCPA is an infrequent and life-threatening disease requiring early surgical intervention & elderly with chronic constipation was a high-risk category and those with histopathology of idiopathic perforation had a more favorable outcome than that of patients with histopathology of stercoral perforation (7). Spontaneous perforation of the colon most commonly occurs to the elderly with chronic debilitating underlying diseases, so the mortality and morbidity rate after surgery are high. Sigmoid colon is the most frequent site of the spontaneous colonic perforation, and characteristically colonic wall defects, massive fecal spillage and extraluminal free air are observed on CT scans (8). Six cases of SRC was reported in previously healthy infants and children (9). In 1984, J.A. Berry classified spontaneous perforations into “stercoral” and “idiopathic”. Stercoral perforation is associated with ulcerative lesion, often in the sigmoid colon or rectum, or rarely in the cecum. The stercoral perforation is a “round” or an “ovoid” hole with necrotic and inflammatory edges. Idiopathic perforation is a linear “tear” with a normal appearance of the colonic wall. Both entities are infrequently diagnosed preoperatively and are associated with a high mortality rate. A high index of suspicion is required for early diagnosis and treatment, but generally, stercoral perforations of the colon may be preventable (10). The condition can be recurrent specially in children (11). Collagen defects like Ehler-Danlos syndrome should be excluded (12). The condition has a bad prognosis and mortality after surgery is high (13).

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