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Clinical Features: Diverticular Disease is on the Rise

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ABSTRACT

Diverticulosis refers to the presence of diverticula, or herniations of the intestinal mucosa and submucosa, most often in the sigmoid colon. More than one half of patients over age 50 have incidental colonic diverticula. Diverticulitis is the most common complication of diverticulosis, occurring in up to 20% of patients, and results from a microperforation of a diverticulum from inspissated fecal material that often becomes a phlegmon, or a pericolic or intra - abdominal abscess. The presented clinical case is about diverticular disease (Diverticulosis). It generally affects older patients. It is produced by herniation of the mucosa and submucosa through the muscular layer of the colon.

KEYWORDS: Bowel conditions, Diverticular disease, Diverticulitis, Pathogenesis, Diagnosis, Treatment, Evidence-based medicine.

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CASE PRESENTATION

An 80-year-old woman with chronic constipation reports pain in the lower left quadrant of the abdomen that is physical or emotional, vague and not very intense. Grade 7/10 for referred pain. It is accompanied by mild fever and nausea for four days. Upon admission to the emergency room, the criteria for occult blood in feces were positive.

A colonoscopy performed 7 months previously revealed sigmoid diverticular disease. On physical examination, a 2x2 cm hypersensitive mass was found in the left lower quadrant. Normal intestinal sounds.

Computed tomography with contrast of the abdomen and pelvis was indicated with comprehensive clinical surveillance at her age; countermeasures for contrast nephropathy in which the patient had normal kidney function. There is a result evaluated by general surgery and radiologist which describes pericolic fat striae, without evidence of an abscess. The clinical diagnosis was determining.

Antibiotic therapy and intravenous fluid replacement were indicated, pain control before medical management. After 4 days of evolution, the patient described a significant reduction in symptoms. General surgery and Family Medicine followed the clinical case intra-hospital and extra-hospital.

Favorable results were obtained for the patient in her clinical control for one year, without relapses and with good tolerance to her medication. The patient tolerated a soft diet, presented systematic symptoms, without significant peritoneal signs, where in-hospital treatment was given for the first 72 hours, subsequently outpatient management was indicated with a fluoroquinolone plus metronidazole.

INTRODUCTION

Diverticulosis refers to the presence of diverticula, or herniations of the intestinal mucosa and submucosa, most often in the sigmoid colon (1-3). More than one half of patients over age 50 have incidental colonic diverticula (1-4). The initial assessment of the patient with suspected diverticulitis should include a thorough history and physical examination (1,2), including abdominal, rectal, and pelvic examinations (1,3).

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The majority of patients will have Left lower quadrant pain (93% - 100%) / Left lower quadrant pain is a frequent indication for imaging in the emergency department (Most causes of pain originate from the colon, including diverticulitis (2,4), colitis, fecal impaction, and epiploic appendagitis) (3,4).

The majority of patients will have fever (57% - 100%), and leukocytosis (69% - 83%) (2,4,5). Other associated features include nausea, vomiting, constipation, diarrhea, dysuria, and urinary frequency (4,5).

The differential diagnosis includes irritable bowel syndrome, inflammatory bowel disease, colon cancer, ischemic colitis, bowel obstruction, and gynecologic and urologic disorders (5,6).

Initial evaluation of the patient with abdominal pain and suspected diverticulitis includes complete blood count, urinalysis, and flat and upright abdominal radiographs (1-4).

GENERAL ADVICE

No one knows exactly what causes these pouches to form. For many years, it was thought that eating a low-fiber diet may play a role (6,7). Not eating enough fiber can cause constipation (hard stools). Straining to pass stools (feces) increases the pressure in the colon or intestines (7,8). Common causes associated with: smoking, being overweight or obese, having a history of constipation, use of non-steroidal anti-inflammatory drugs (NSAIDs) painkillers, such as ibuprofen or naproxen, having a close relative with diverticular disease, especially if they developed it under the age of 50 (7).

DIAGNOSIS

Criteria for the diagnosis of diverticulitis on water- soluble contrast enema include presence of diverticula, mass effect, intramural mass, sinus tract, and extravasation of contrast (7-9). Ultrasound may reveal bowel wall thickening, abscess, and rigid hyperechogenicity of the colon caused by inflammation and may be helpful in female patients to exclude pelvic or gynecologic pathology (7,8).

A computed tomography scan (CT scan; formerly called computed axial tomography scan or CAT scan) with oral and IV contrast is increasingly used as the initial imaging test for patients with suspected diverticulitis, particularly if disease of moderate severity or abscess in anticipated (7,8).

Endoscopy is usually avoided in the setting of acute diverticulitis because of the risk or perforating the inflamed colon, either whit the instrument itself or by insufflation of air. When the diagnosis of acute colonic diverticulitis is uncertain, limited flexible sigmoidoscopy with minimum insufflation of air may be performed to exclude other diagnoses (7,8).

MEDICAL MANAGEMENT

Conservative medical management of complicated diverticulitis without associated abscess, fistula, obstruction, or perforation includes bowel rest and IV fluoroquinolones or extended spectrum penicillin's (9,10). If the patient does not improve after several days, an abscess should be suspected and diagnostic imaging considered (10,11). Conservative treatment results in resolution in 70% to 100% of cases (8-11).

DISCUSSION

After recovery from an initial episode of diverticulitis, when the inflammation has subsided, the patient should be reevaluated. Appropriate examinations include a combination flexible sigmoidoscopy and single contrast or double contrast barium enema or colonoscopy (12,13).

Eventual resumption of a high fiber diet is recommended after cute inflammation resolves (14,15); long term fiber supplementation after the first episode of diverticulitis has been shown to prevent recurrence in more than 70% of patients followed up for more than 5 years (13,14).

TREATMENT/ GENERAL ADVICE

Patients who can tolerate a diet and do not have systematic symptoms or significant peritoneal signs may be treated as outpatients with Trimethoprim (TMP) - Sulfamethoxazole (SMX) or a fluoroquinolone plus, metronidazole (15).

a) Surgery may be necessary in some patients both in uncomplicated and complicated diverticulitis and should be individualized (15).

CONCLUSIONS

Despite the significant epidemiological burden and the consequent impact on health services of this condition, there are no major studies in European countries/ Latin America that evaluate its impact.

The complexity of this multifactorial condition has so far not been accompanied by guidelines that explain causal pathways and management paths.

The goal must be to act as secondary prevention, with respect to early management to avoid complications, and as tertiary prevention, to reduce the overall burden of residual disability, especially after invasive interventions.

Ethical Statements: According to Colombiana law, case reports do not need to be approved by the Ethics Committee; however, the work complies with the ethical guidelines of the Helsinki declaration and the Oviedo convention, as well as the ethical standards of the University (Pontificia Universidad Javeriana de Cali- Colombia).

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