Benign cecal ulcer

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Summary. Benign cecal ulceration, generally presenting as a right lower abdominal mass or lower gastrointestinal bleeding in older patients, is often associated with typhoid fever, cytomegalovirus, and ingestion of nonsteroidal anti-inflammatory drugs. Diagnosis is generally made during surgery, but conservative treatment often leads to complete healing. In elective patients, repeated X-ray examinations of the colon, especially with air contrast barium enema and colonoscopy, are recommended to distinguish benign cecal ulceration from a malignancy.

Key words: Cecal ulceration — Abdominal mass — Gastrointestinal bleeding — Typhoid fever — Cytomegalovirus — Nonsteroidal anti-inflammatory drugs.

Case report

In December 1987, Mr. A. O., 64-year-old man, presented to his family physician with right lower abdominal pain of at least 3 weeks' duration. He was then admitted to hospital with the presumptive diagnosis of acute appendicitis. Because of severe cardiac disease, surgery was delayed for 12 h. The following morning, the patient showed signs of improvement; surgery was therefore cancelled. During the next several days, the patient's condition seemed to improve so much that he was discharged. Owing to persistent minimal right lower abdominal pain and tenderness, Mr. A. O. revisited his family phys-

Fig. 1. Barium enema demonstrates an ulcer of the cecum
Fig. 2. Colonoscopic visualization of the cecum

Fig. 3. Repeat barium enema demonstrates healing of the cecal ulcer

A barium enema was then carried out. Results were suggestive of an ulcer of the cecum (Fig. 1). The radiologic diagnosis was ulcerative carcinoma.

A repeat barium enema done two weeks later demonstrated the same finding — a malignant cecal ulcer. Because of severe cardiac disease, the patient's family physician referred him for colonoscopy to confirm the cecal pathology. Colonoscopy 5 weeks after the second barium enema did not reveal any lesion of the cecum (Fig. 2). A repeat barium enema several days later also demonstrated no lesion of the cecum (Fig. 3).

A 3-month follow-up revealed no tenderness in the lower abdomen. A follow-up colonoscopy 6 months later did not reveal any abnormality of the cecum.

Discussion

Cecal ulcers are rare benign lesions of the lower gastrointestinal tract. The cecum is the most common location in the colon for these nonspecific ulcers [10]. The symptoms associated with cecal ulcers are of three types: right lower abdominal pain, rectal bleeding, or perforation. Lospinuso et al. [9] documented a case of a 64-year-old man, who presented with symptoms of lower gastrointestinal bleeding. At laparotomy, a thickening on the antimesenteric border of the cecum was found, and a right hemicolectomy was carried out. The open specimen revealed a large 2 x 3 cm ulcer, extending into the deeper layers of the colon.

Last and Lavery [8] reported the case of a 63-year-old women who had chronic renal failure. This patient began to exhibit significant bright red rectal bleeding 5 days after parathyroidectomy. Angiography demonstrated a bleeding site at the cecum. Vasopressin infusion stopped the bleeding. Three days later, the patient developed acute peritonitis. Laparotomy demonstrated a perforation of the apex of the cecum; ileocecal resection was subsequently undertaken. Pathological examination revealed a cecal ulcer. Janusz [7] published the case of a 29-year-old woman, who had abdominal pains, fever and an abdominal mass. At laparotomy, a right hemicolectomy was carried out. The pathological specimen contained a large mucosal cecal ulcer with perforation.

Delmarre et al. [6] chronicled a patient with a bleeding typhoid cecal ulcer. Laparotomy, cecotomy, and oversewing of a bleeding cecal ulcer was subsequently carried out. Ona et al. [11] reported seven cases of ulcers of the colon. One case was a 63-year-old women with right lower abdominal pain and tenderness. Barium enema studies suggested a cecal neoplasm. Laparotomy and cecal resection demonstrated a cecal ulcer. Shallman et al. [14] demonstrated six cases of benign cecal ulcers. Examinations in three of the patients revealed an inflammatory mass in the right lower quadrant of the abdomen. One patient had a perforated cecal ulcer, and one patient presented with lower gastrointestinal bleeding. Colonoscopy showed a cecal ulcer. Three months later, repeat colonoscopy demonstrated complete healing of the cecal ulcer.

From the aforementioned publications, one can see that cecal ulcers are usually found in older individuals. Cecal ulcers present with one of three clinical features: right lower-quadrant inflammatory mass, significant lower gastrointestinal bleeding, or acute perforation. The etiology of these lesions is unclear. Cytomegalovirus has been found to cause cecal ulcers in immunocompromised patients [12, 13]. Nonsteroidal anti-inflammatory