

Diverticular abscess: unusual clinical and radiographic presentation

Cameron J. Hague, BSc;* N. Peter Blair, MD;† Alan T. Kamitakahara, MD;† Andrew K. Tan, MD;‡ John T. Wilson, MD§

The purpose of this report is to describe an unusual case of diverticular abscess in which the physical presen-

tation and radiographic findings were atypical.

Case report

A 73-year-old man presented with bilateral shoulder discomfort. Although the onset of his discomfort seemed to be associated with exertion, there was no chest pain. A month later, a stress test reproduced the shoulder discomfort but again without chest pain. Angiography showed significant coronary artery disease, so the patient was booked for coronary artery bypass grafting 2 months later.

Routine preoperative chest radiography showed free intra-abdominal air, so

the bypass procedure was cancelled pending investigations.

The patient had no complaints of abdominal pain, fever, chills, anorexia, nausea or vomiting. His abdomen was distended and tympanitic, but there was no tenderness or palpable masses.

Abdominal radiography showed a large, central, gas-filled cavity occupying much of the abdomen and displacing the small bowel (Fig. 1).

Subsequently a fever developed (body temperature 38.4°C). The leukocyte count was $17.2 \times 10^9/L$, but no organisms grew on blood culture. Antibiotics were started.

An upper gastrointestinal series with

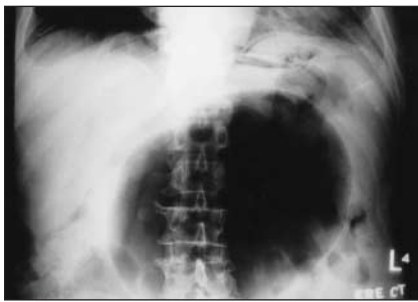


FIG. 1. Radiograph shows a large air-filled cavity occupying much of the abdomen.

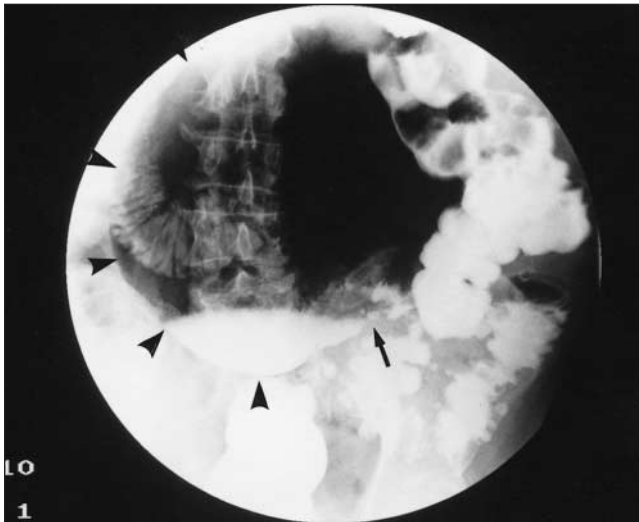


FIG. 2. Abdominal film shows diverticular disease and a large mass (arrowheads) containing contrast medium and displacing the large bowel. The arrow indicates a possible point of communication between the cystic mass and the sigmoid colon.

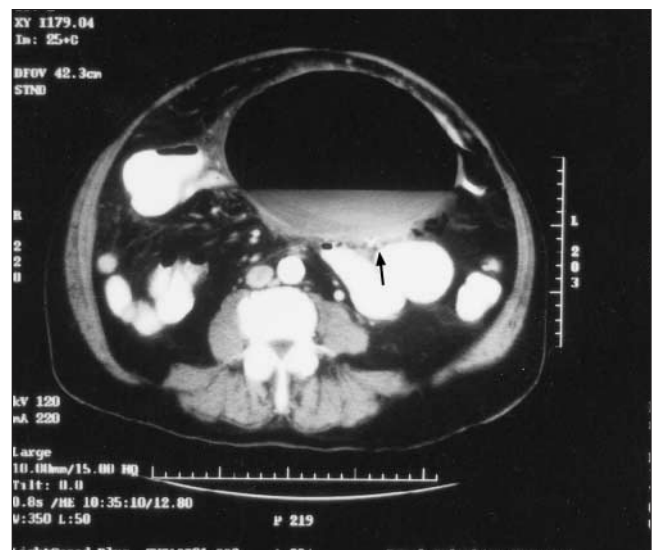


FIG. 3. Computed tomography shows a thin-walled cystic cavity with air-fluid levels and a possible communication with the sigmoid colon (arrow).

From the *Faculty of Medicine, University of British Columbia, Vancouver, BC, the †Division of General Surgery and the ‡Department of Medical Imaging, Royal Columbian Hospital, New Westminster, BC, and §family practice, Coquitlam, BC

Accepted for publication Oct. 22, 2002.

Correspondence to: Dr. Cameron Hague, #209-1424 Walnut St., Vancouver BC V6J 3R3; fax 604 522-1571; cjhague@interchange.ubc.ca

Gastrografin contrast medium appeared normal, but a large-bowel study showed sigmoid diverticular disease with contrast medium in the cavity (Fig. 2). The differential diagnosis was giant diverticulum of the colon or abscess secondary to perforated diverticulitis.

Computed tomography confirmed presence of a large, thin-walled cavity with air–fluid levels (Fig. 3) and a possible

communication with the sigmoid colon.

Laparotomy revealed a 20-cm thick-walled mass adherent to the transverse mesocolon and root of the small-bowel mesentery. It connected to the sigmoid colon and was filled with pus and air. A Hartmann resection was performed. Gram's staining of tissue from the mass was not contributory, but coliform organisms grew on culture. Pathological exami-

nation confirmed that the cyst was an abscess cavity containing vegetable material consistent with intestinal content. The findings in the sigmoid colon were consistent with a perforated diverticulitis.

The patient's shoulder pain on exertion diminished significantly postoperatively. In light of his improved symptoms, the coronary artery bypass procedure was postponed.

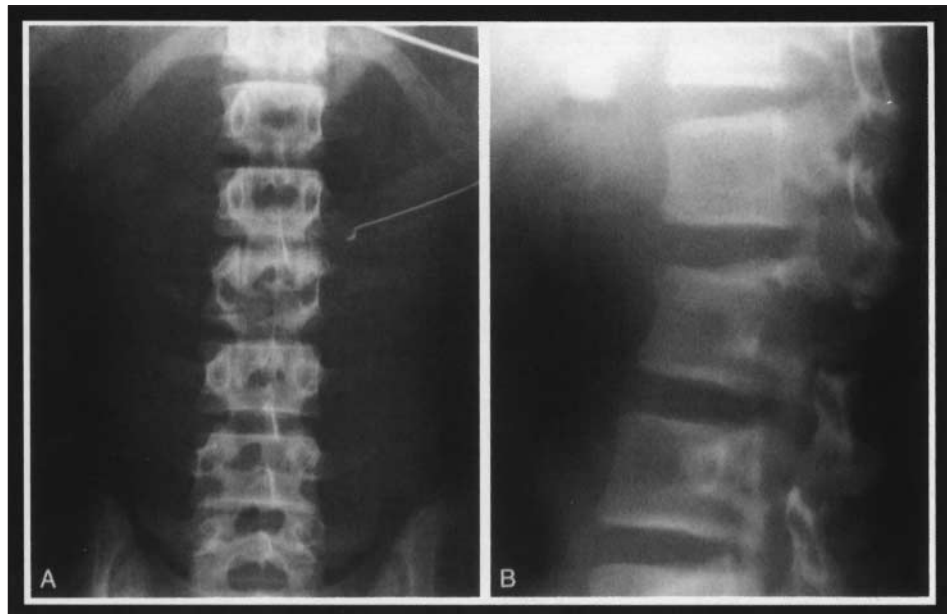
SESAP Question
Question SESAP

Category 6, Item 26

A 20-year-old driver wearing a seatbelt is brought to the emergency department after striking a concrete wall while asleep at the wheel. On arrival he is hemodynamically normal but has severe back pain. Physical examination is unremarkable except for tenderness to palpation over the lumbar spine. Lumbar spine films are shown.

Which of the following is the most likely associated injury?

- (A) Pancreatic injury
- (B) Spinal cord injury
- (C) Hepatic laceration
- (D) Small bowel injury
- (E) Sacral plexus injury



For the question above, select the best lettered answer of the 5 given.

For the answer and a critique of item 26 see page 149.

(Reproduced by permission from *SESAP No. 11 2002–2004 Syllabus*, Volume 1. For enrolment in the Surgical Education and Self-Assessment Program, please apply to the American College of Surgeons, 633 North St. Clair St., Chicago IL 60611-3211, USA; tel 312 202-5000; fax 312 202-5001; email postmaster@facs.org)