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A RARE CASE OF ACUTE RIGHT-SIDED COLONIC DIVERTICULITIS PRESENTING AS PANCREATITIS

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□ **Abstract—Background: This case report highlights the clinical presentation, radiologic findings, and medical management of a case of right colonic diverticulitis (RCD) with concomitant pancreatitis, a rare and easily missed entity in the emergency department (ED) of Western hemisphere countries. In our report, we present and discuss a case of RCD that led to pancreatitis in a female Asian patient. We review the epidemiology, diagnosis, and management of this disorder, and also discuss some complications associated with RCD. The importance of considering this pathologic entity within the ED differential even in those patients presumed to be at low risk for this condition is also explained, as this can prevent inappropriate surgical intervention for this presentation. Case Report: We describe a 40-year-old Asian woman presenting for evaluation of epigastric pain and vomiting. She was initially thought to have cholecystitis or food poisoning, but had a normal ultrasound evaluation and ultimately had co-presenting RCD and pancreatitis diagnosed after computed tomography scanning. The patient was admitted and made a full recovery after receiving medical therapy and maintaining bowel rest. This is, to our knowledge, the first reported case of RCD and concomitant pancreatitis found in the modern literature. Why Should an Emergency Physician Be Aware of This?: Severe epigastric pain in young Asian patients with minimal risk factors may be RCD. This condition presents much like appendicitis, cholecystitis, or food poisoning, but must be considered among early differential diagnoses and evaluated appropriately in order to prevent unnecessary interventions.** © **2017 Elsevier Inc. All rights reserved.**

□ **Keywords—diverticulitis; right colonic diverticulitis; acute pancreatitis; abdominal pain; emergency**

INTRODUCTION

One in 12 emergency department (ED) presentations of abdominal pain will result in a diagnosis of acute diverticulitis or acute pancreatitis (1). Diverticulitis occurs in about 4% of individuals with diverticulosis, and of those who experience diverticulitis, about 15% will suffer a complicated disease course (2).

In Western countries, left colonic diverticulitis (LCD) accounts for > 90% of acute diverticulitis, while in Asian countries right colonic diverticulitis (RCD) is more common, with some centers reporting ≥ 75% cases as right-sided (3–7). Traditional Western LCD tends to be more common in the elderly, has a roughly equal sex distribution, and is more common in those with a low-fiber diet. In contrast, RCD has been suggested as manifesting in younger, primarily female patients and may not have as strong a dietary link as previously reported (7–10).

The greatest diagnostic dilemma in patients ultimately diagnosed with RCD is the possibility of appendicitis. Most RCD patients will present with right lower quadrant (RLQ) pain and the associated nonspecific constitutional signs and symptoms of nausea, loss of appetite, and low-

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grade fever that are common to both entities. These complaints tend to be less severe in RCD but the clinical differences are not great enough to easily separate the two. Patients with RCD will generally not present with the typical migratory progression of complaints commonly seen with appendicitis. White blood cell (WBC) count elevations are also more muted in patients with RCD compared with appendicitis but, once again, the difference is not sufficient to establish a definitive diagnosis.

RCD involving the colon near the hepatic flexure and transverse colon may present with symptoms similar to that of cholecystitis, pancreatitis, or peptic ulcer disease. The presenting symptoms of abdominal pain, nausea, vomiting, and malaise are highly nonspecific symptoms and tend to overlap significantly (6,11–13). We report a case of co-occurring acute diverticulitis and acute pancreatitis in a young woman of Asian descent presenting to a California ED.

CASE REPORT

A 40-year-old Vietnamese female with no medical history presented to the ED with an acute episode of severe abdominal pain. The pain occurred while she was asleep, was sharp in quality with no radiation, not associated with a recent meal, and similar to a self-resolved episode similar to this one that occurred approximately 1 year earlier. The patient denied taking any medications, history of alcohol or tobacco use, recent trauma or illnesses, recent hospitalizations or treatments, personal or family history of gallbladder disease, autoimmune disease, or pancreatitis. The patient did report an episode of bilious vomiting and graded the pain as 9 on a scale of 1 to 10. The patient was normotensive, tachycardic to rate of 110 beats/min, and afebrile on presentation. Pertinent findings on physical examination included minimally active bowel sounds and moderate epigastric tenderness without rebound or guarding.

A point-of-care biliary ultrasound demonstrated a normal gallbladder (no gallstones or secondary signs of cholecystitis). Laboratory analysis was remarkable for a serum lipase level of 537 u/L, as normal reference range for lipase is 0–160 u/L, but WBC, transaminase, and triglyceride values were all within normal limits. The patient denied a history of alcohol use after repeated questioning. Because of the unclear cause of the patient's pancreatitis, a computed tomography (CT) scan of the abdomen and pelvis with i.v. contrast was performed and indicated acute diverticulitis of hepatic flexure of the colon. There was no clear pancreatic inflammation, other than the area abutting the inflamed right hepatic flexure of the colon (Figure 1). Thus, i.v. antibiotic therapy with cefoxitin was initiated, and the patient was admitted to the hospital.

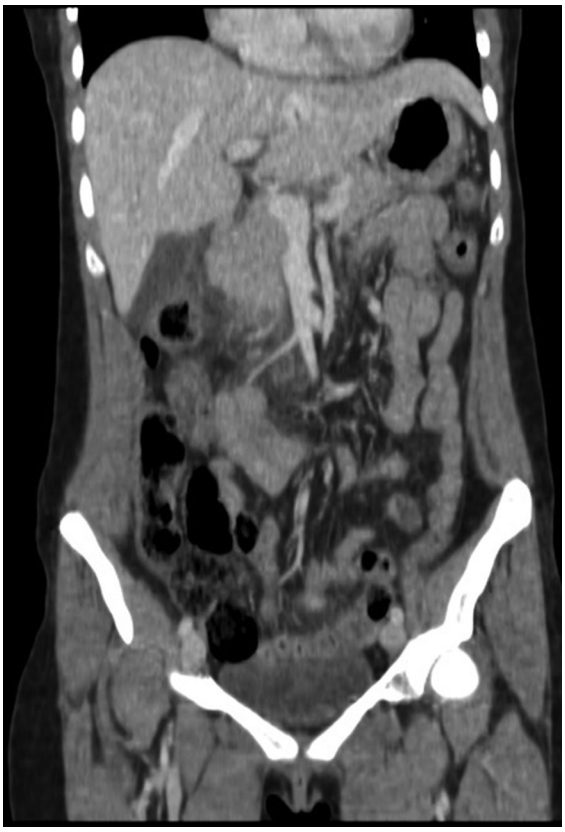

Figure 1. Computed tomography scan of the abdomen and pelvis with contrast, demonstrating pericolonic stranding at the hepatic flexure adjacent to the pancreas.

DISCUSSION

The case discussed in this article is the first known published case of diverticulitis with concomitant pancreatitis found in the modern literature. RCD is extremely rare in the Western hemisphere and LCD is not associated with pancreatitis. In this case, RCD, with its associated inflammation, caused pancreatitis in a patient lacking any of the three major risk factors for pancreatitis: alcohol abuse, gallstones, or hyperlipidemia.

Right- and left-sided diverticulitis share various presenting symptoms, such as abdominal pain that can persist for several days, low-grade fever, nausea, and loss of appetite. Vomiting due to ileus resulting from peritoneal inflammation may be present in more severe cases (14). LCD typically causes pain in the left lower quadrant (LLQ) due to involvement of the sigmoid colon, but can occasionally cause pain in the RLQ or suprapubic area secondary to inflammation of redundant sigmoid colon. Dehydration with hypotension and other symptoms of shock or hemodynamic instability are uncommon. On rare occasions, a palpable mass may be discovered in the LLQ secondary to pericolonic inflammation or a peridiverticular abscess (15).