

Cecal Diverticulitis

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A 56-year-old Hispanic male presented to the emergency department (ED) complaining of right lower quadrant abdominal pain for two days. The pain was gradual in onset with a throbbing, burning quality, and 10 out of 10 severity. He reported diarrhea but denied fever, chills, nausea or vomiting. In the ED the patient was afebrile with normal vital signs, and his abdomen was soft and mildly tender in the right lower quadrant with normal bowel sounds. Computed Tomography (CT) of the pelvis with oral and intravenous contrast showed a thickened cecal wall with radiographic findings consistent with appendicitis (Figure 1). The patient went to the operating room for laparoscopic appendectomy and was found to have right-sided colonic diverticulitis involving the cecum, as well as a normal appendix.

Right-sided colonic diverticulitis was first described in 1912 by Potier.¹ Right-sided diverticulae are true, involving all layers of the intestinal wall, in contrast to left-sided which are false, only involving the mucosa and submucosa; however, the pathological mechanism that leads to diverticulitis is the same throughout the colon.² In a majority of cases the underlying cause is secondary to obstruction by a faecolith.³ This pathologic mechanism mimics appendicitis and as such, the clinical presentation of right-sided diverticulitis is identical.⁴ Diverticulitis is initially managed non-operatively with antibiotics, unlike appendicitis which mandates surgical intervention. This difference underscores the importance of radiographic evidence along with a high index of suspicion for correctly identifying this uncommon diagnosis.

Despite its low incidence, right-sided colonic diverticulitis remains an important differential diagnosis to consider in the presentation of an older patient with acute right lower quadrant pain. CT for acute appendicitis is good but not perfect. A systematic review showed CT to be 94 percent sensitive and 95 percent specific.⁵ Therefore, correct radiographic diagnosis, coupled with astute clinical judgment, may avoid unnecessary laparotomy.

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Figure 1. CT of the pelvis with oral and intravenous contrast showing inflammatory changes with a dilated 2 cm blind-ending tubular structure arising from the cecum inferior to the ileocecal valve.

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