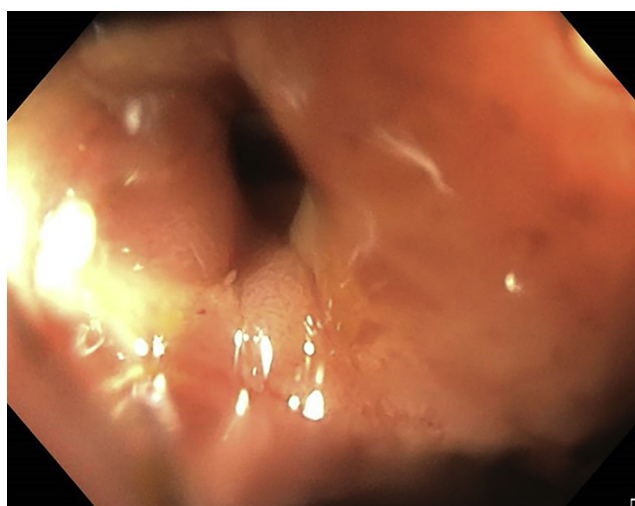


**Figure 1.** A, Longitudinal abdominal ultrasonographic view of the thickened (up to 8 mm) walls of the terminal ileum (double-sided arrow), adjacent to the thickened wall of the cecum (star). B, Longitudinal abdominal ultrasonographic view of the full-length, normal appendix (white arrows).



**Figure 2.** Colonoscopic view of the edematous and narrowed ileocecal valve.

[Ann Emerg Med. 2022;80:467.]

A healthy, 25-year-old woman presented to the emergency department complaining of abdominal pain and a low-grade fever for 5 days. A physical examination demonstrated a temperature of 37.8 °C and tenderness in the right lower quadrant. Blood test results included a white blood cell count of 13,000 cells/ $\mu$ L and a C-reactive protein level of 5 mg/dL. The emergency physician performed a point-of-care ultrasound examination, which demonstrated the marked thickening (up to 8 mm) of the terminal ileum adjacent to the ileocecal valve. The appendix had a normal diameter of 6 mm (Figure 1).

*For the diagnosis and teaching points, see page 478.*

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## IMAGES IN EMERGENCY MEDICINE

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### DIAGNOSIS:

*Terminal ileitis.* This inflammatory process has several etiologies, particularly infections and inflammatory bowel disease.<sup>1</sup> It is essential to differentiate the terminal ileum (which normally has a thickness of 3 mm or less) from the appendix (which has a blind end and no peristalsis).<sup>2</sup>

The patient was treated with fluids and antibiotics and colonoscopically diagnosed with Crohn's disease at 2 months (Figure 2).

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## IMAGES IN EMERGENCY MEDICINE

(continued from p. 468)

### DIAGNOSIS:

*Emphysematous liver abscess.* The patient was admitted to the hospital and underwent percutaneous abscess drainage. Multidrug-resistant *Klebsiella pneumoniae* and *Escherichia coli* were isolated from the abscess culture. After completing a 1-month course of appropriate antibiotics, the patient was discharged uneventfully.

Defined as liver abscess with gas formation, emphysematous liver abscess accounts for 6% to 24% of all pyogenic liver abscesses and more commonly occurs in patients with poorly controlled diabetes. It is typically accompanied with higher rates of abscess rupture, septic shock, and mortality compared with abscess without gas formation.<sup>1</sup> *K pneumoniae* is the most common causative pathogen.<sup>1,2</sup> With limited sensitivity, plain radiography may detect an abnormal gas pattern or air-fluid level under the diaphragm, which sometimes may be mistaken as bowel gas or pneumoperitoneum.<sup>2,3</sup> Computed tomography is the most sensitive diagnostic testing modality.<sup>1,3</sup> Appropriate antibiotics, glucose control, and abscess drainage are the mainstays of treatment.<sup>1,2</sup>

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