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IMAGES IN EMERGENCY MEDICINE

Gastrointestinal

Man with right periumbilical pain

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KEYWORDS
abdominal pain, Acalculous cholecystitis, cholecystectomy, periumbilical pain, Salmonella

1 | PATIENT PRESENTATION

A 29-year-old robust man presented to the emergency department with a 2-day history of right-sided abdominal pain and a 1-month history of intermittent diarrhea. His temperature was 37.6°C, pulse rate was 98 beats/min, and blood pressure was 101/53 mm Hg. On physical examination, the right periumbilical region was tender to palpation. He had a white blood cell (WBC) count of 9300/μL. His liver function, total bilirubin, and lipase levels were normal. The emergency physician performed ultrasonography that revealed a cystic mass with a large donut shape (Figure 1). Computed tomography of the abdomen was obtained (Figure 2).

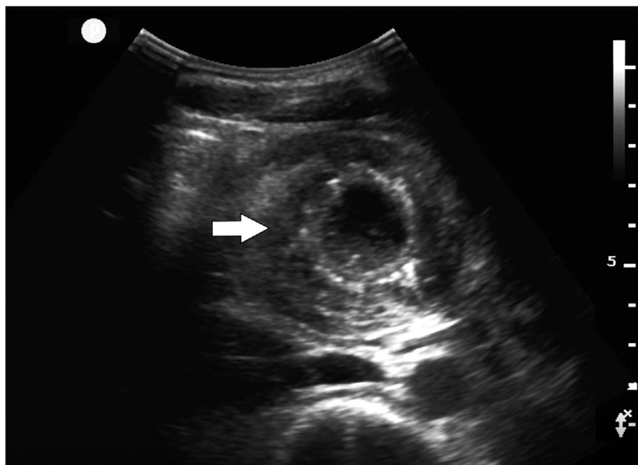

FIGURE 1 Sonographic image of the right periumbilical region in the transverse plane showed a large donut shape lesion (arrow).

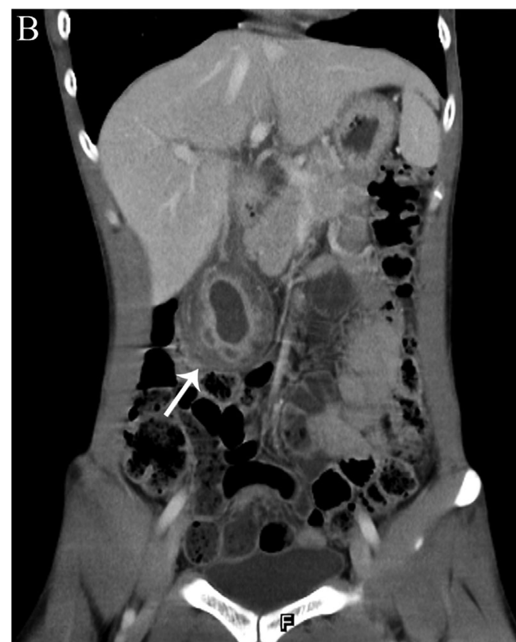

FIGURE 2 Computed tomography image of the abdomen in the axial view with intravenous contrast, demonstrating a large gallbladder with marked wall thickening and pericholecystic fluid without gallstones (arrowhead).

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2 | DIAGNOSIS

2.1 | Acalculous cholecystitis due to Salmonellosis

Computed tomography of the abdomen showed a dilated gallbladder with marked thickening of the gallbladder wall (Figure 2). The patient received antibiotic treatment (Ampicillin plus Sulbactam) and laparoscopic cholecystectomy by a surgeon. The pathology of the resected gall bladder revealed both active inflammatory cell infiltration and chronic cholecystitis pattern. The tissue culture of the gallbladder and blood culture both grew Salmonella serogroup C.

Salmonella infection is a rare cause of acalculous cholecystitis.[1] It can cause acute or chronic inflammation due to chronic carrier but rarely became big and with a wall thickness of the gall bladder without obstruction. Therapeutic management is still controversial. Cholecystectomy or percutaneous cholecystostomy should be considered for symptomatic patients who have a poor prognosis with intravenous antibiotics.[2]

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