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Acute Diverticulitis: A Rare Complication of Dengue Fever

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A 30-year-old man, who was previously well, presented in August 2019 to the Department of General Medicine, Sarawak General Hospital, Malaysian Borneo with a two-day history of fever, headache, and myalgia. Upon presentation, he was alert, febrile, and hemodynamically stable. Initial blood investigations were within normal limits except for thrombocytopenia (platelet count, 124×10^3/mL; hematocrit, 39%). The liver transaminases were as follows: ALT, 28 U/L; AST, 40 U/L. Hence, the diagnosis of dengue fever was considered and later confirmed by positive a dengue NS-1 antigen assay. Since admission, his condition was improving until day 6 of illness where he had multiple episodes of rectal bleeding and abdominal pain along with signs of localized peritonism. An abdominal CT was urgently undertaken and showed multiple outpouchings of the colon at the hepatic flexure which suggested acute diverticulitis (Fig. 1). There was no intraabdominal collection. The blood culture revealed pan-sensitive *Escherichia coli*. He was treated with intravenous ceftriaxone 2 g, once daily, for 1 week. He made a good recovery and was subsequently discharged well. One month later, he was well upon review at the outpatient clinic.

Dengue virus is a mosquito-borne flavivirus and the cause of dengue fever, an endemic viral disease affecting tropical and subtropical regions around the world.[1] The incidence of acute abdomen was 4.3% in a study conducted in Taiwan involving 328 patients with dengue fever/dengue shock syndrome. In that study, presumptive diagnoses of acute cholecystitis were made in 10 patients, non-specific peritonitis in 3 patients, and acute appendicitis in 1 patient.[2] Similarly, in Pakistan, acute cholecystitis was found to be the common cause of acute abdomen in patients with dengue fever. There was a total of 26 cases of acute cholecystitis, 7 cases of acute appendicitis and non-specific peritonitis respectively, and 3 cases of acute pancreatitis.[3] Acute abdomen occurring in dengue infection is not uncommon and can mimic surgical emergencies including cholecystitis, appendicitis, and pancreatitis. Diagnosis of acute abdomen in dengue infection is challenging and warrants further investigation to determine the specific cause. A case of diverticulitis associated with dengue infection was reported in a patient admitted to the Intensive Care Unit in Brazil.[4] The exact mechanism by which dengue causing diverticulitis remains unclear, while thrombocytopenia could have exacerbated the bleeding in this case. Clinicians should have a high clinical suspicion of diverticulitis in dengue patients presenting with acute abdomen and lower gastrointestinal tract bleeding.

CONFLICT OF INTEREST STATEMENT

None declared.

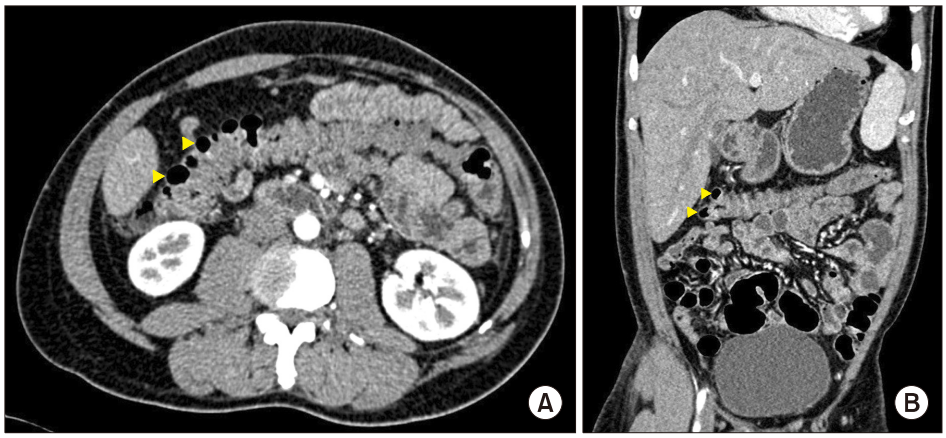

FIG. 1. Computed tomography of the abdomen (A) axial view, (B) coronal view showing multiple outpouchings of colon (indicated by yellow arrows) at the hepatic flexure.

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