

Emphysematous Liver Abscess Caused by Salmonella Enteritidis

Mei-Hua Wang¹ · Shu-Yu Shih¹ · Wen-Chia Chung¹ · Chien-Ming Chao²

¹ Department of Emergency Medicine, Chi Mei Medical Center, Liouying, Tainan, Taiwan

² Department of Intensive Care Medicine, Chi Mei Medical Center, Liouying, Tainan, Taiwan

Keywords: Emphysematous liver abscess, Salmonella Enteritidis, emergency

Dear Editor,

An 81-year-old male presented to emergency department with fever off and on for more than one month. He had the medical history of malignant poorly differentiated neuroendocrine tumors, hypertension and type-2 diabetes mellitus. One month ago, he was admitted for fever and diarrhea. Infectious diarrhea due to Salmonella enteritidis was diagnosed according to the positive culture result of blood and stool. After antibiotic treatment with flomoxef according to antibiotic susceptibility test, his clinical condition gradually improved, and was discharged uneventfully. However, he suffered from abdominal pain over right upper quadrant (RUQ) and low grade fever again one week later after discharge. At emergency department, his vital signs were a body temperature of 37.7 °C, pulse rate of 100/min, respiratory rate of

16/min and blood pressure of 147/75 mmHg. Physical examinations were unremarkable except for abdominal tenderness over RUQ. The results of laboratory examinations were as follows: white blood cell count, 17900 cells/mm³, and C-reactive protein, 106.9 mg/L (reference value, <5 mg/L). Radiography of the abdomen revealed mottled gas collection over RUQ (Figure 1, arrow). The abdomen computed tomography (CT) showed that a mass with gaseous content and size of 5.8×5.2 cm over S6 (Figure-2, arrow). Emphysematous liver abscess by S. enteritidis was impressed. Therefore, he received percutaneous drainage and antibiotic with ceftriaxone for liver abscess. Follow-up of abdominal echo showed gradually shrinkage of liver abscess, and the percutaneous drainage was smoothly removed.

Corresponding Author: Chien-Ming Chao, Department of Intensive Care Medicine, Chi Mei Medical Center, Liouying, Tainan, Taiwan

E-mail: ccm870958@yahoo.com.tw

Received: Sep 7, 2018 **Accepted:** Sep 19, 2018

Published: Dec 29, 2018

This is an Open Access Article distributed under the terms of Creative Commons Attribution Non-Commercial License which permits unrestricted non-commercial use, distribution, and reproduction in any area, original work is properly cited.

The Ulutas Medical Journal © 2018



Finally, he received a total antibiotic course of four weeks included an initial parenteral ceftriaxone and further oral moxifloxacin.



Figure 1. Radiography of the abdomen revealed mottled gas collection (arrow) over the right upper quadrant abdomen

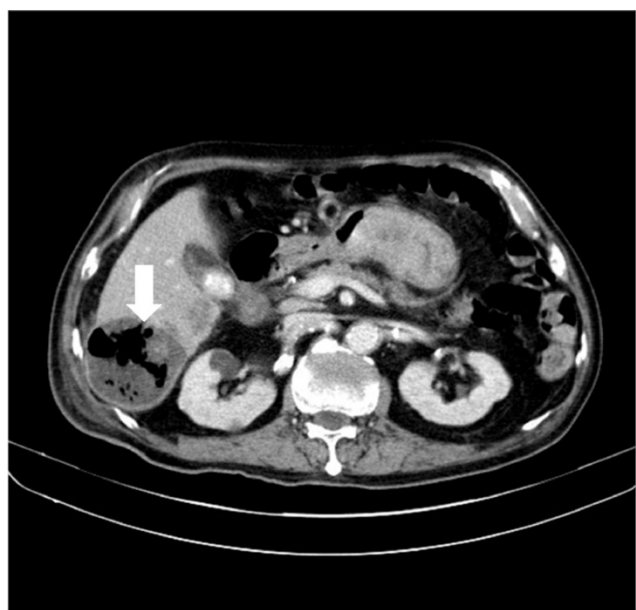


Figure 2. Abdomen computed tomography showed that a mass (arrow) with gaseous content and size of 5.8×5.2 cm over S₆

Most cases of *S. enteritidis* infection is mainly limited to the intestinal tract, but sometimes *S. enteritidis* may cross the mucosal barrier to disseminate (1). Localized infection of the liver is a rare complication of salmonella (1, 2). Prompt drainage and appropriate antibiotic treatment are essential for the treatment of liver abscess. However, the clinical manifestation of liver abscess may be non-specific, and lead to delayed diagnosis. In most of the time, CT or ultrasound is the choice of diagnostic method. Sometimes plain radiography may provide useful information for diagnosis, such as shown in our case (Figure-1).

Conflict of Interests

The authors declare that they have no conflict of interest in the letter.

Reference

1. Mahajan RK, Sharma S1, Madan P, Duggal N. Pyogenic liver abscess caused by *Salmonella enteritidis*: a rare case report. *Indian J Pathol Microbiol* 2014;57:632-4.
2. Kamatani T, Okada T, Iguchi H, Takahashi Y, Yokomori H. Liver abscess caused by *Salmonella choleraesuis*. *Int J Gen Med* 2015;8:155-6

How to cite?

Chao CM, Tu CL, Lin WT. Emphysematous Liver Abscess Caused by *Salmonella Enteritidis*. *Ulutas Med J*. 2018; 4(4):204-205

DOI: [10.5455/umj.20180707053749](https://doi.org/10.5455/umj.20180707053749)