

Title:

Splenic abscess due to Salmonella enterica infection successfully treated with percutaneous drainage

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Splenic abscess due to *Salmonella enterica* infection successfully treated with percutaneous drainage

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Dear editor,

A 66-year-old female with a history of type 2 diabetes, hypertension and no previous hospitalizations or travels presented to the emergency room. She had 1 month with diffuse abdominal pain and diarrhea, in the week before admission, abdominal pain became more intense and the patient also reported fever, nausea and vomiting. At admission she was tachycardic and laboratory tests showed normocytic anemia (HB 10.9 g/dL), leukocytosis (15,800/mm³ and absolute neutrophil count 12,000/mm³) and elevated acute phase reactants (CPR 20.8 mg/dL and CRP 41 mm/hr). An abdominal CT showed an air-fluid collection in the spleen of 9.9 x 6.1 x 6.5 cm, US-guided percutaneous drainage was performed and cultures from the collection reported *Salmonella enterica*. Hemocultures were also positive for *Salmonella enterica*. Antibiotic treatment was

started, and the patient's condition significantly improved. A follow-up abdominal CT performed one month after percutaneous drainage showed complete abscess resolution.

Discussion

Salmonella spp. infection usually develops as a self-limiting acute gastroenteritis and extraintestinal manifestations are uncommon. Some complications from this infection could be life-threatening and early diagnosis is essential. In this context, a splenic abscess could arise after three or four weeks of untreated *Salmonella* infection from a hematologic spread of the primary site of infection. Although this scenario only develops in 0.2-2% of the cases. (1)

Heavy alcohol consumption, infective endocarditis, intravenous drug users and immunosuppression are the most common predisposing factors for splenic abscess (2). In this case, the patient had poor glycemic control, a recognized risk factor for complicated infections.

A high index of clinical suspicion is necessary for early diagnosis as features are often non-specific. Fever, left upper quadrant pain and palpable tender mass are the main symptoms reported (3). Abdominal CT has a sensitivity of 96% and specificity of 90-95% for the diagnosis and is considered the image of choice. (2) Differential diagnoses are complicated cyst, splenic infarct or neoplasm.

Traditionally splenectomy is considered as the standard treatment for splenic abscess (4) but in recent years percutaneous drainage has been described as an effective alternative to avoid surgical management. This approach has a major immunological advantage and is the best treatment in selected cases.

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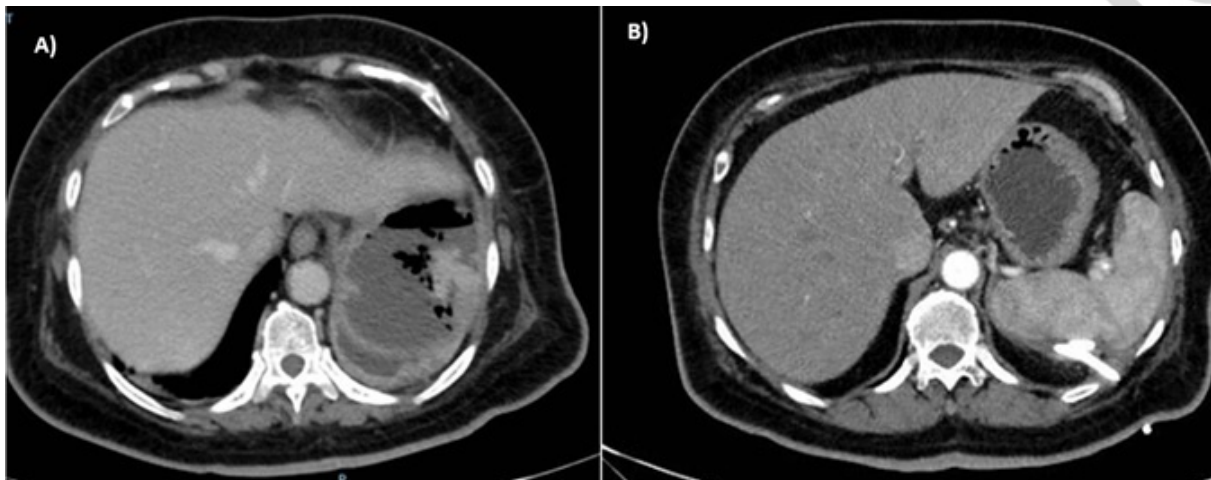


Figure 1. A. Abdominal CT with splenic abscess of 9.9 x 6.1 x 6.5 cm. B. Follow-up abdominal CT one month after percutaneous drainage.