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CASE REPORT

Multiple Large Splenic Abscesses Managed with Computed Tomography-guided Percutaneous Catheter Drainage in Children

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Splenic abscess is a rare finding in children. Splenectomy combined with broad-spectrum antibiotics has been the treatment of choice for multiple splenic abscesses. Herein, we report the case of a 14-year-old girl with multiple large splenic abscesses that were successfully managed after two image-guided percutaneous drainage procedures and administration of intravenous antibiotics. Initially, an abscess located at the periphery in the lower pole of the spleen was aspirated under ultrasound guidance. Finally, another abscess located near the hilum of the spleen was drained under computed tomography guidance. To the best of our knowledge, this is the first report of multiple large splenic abscesses treated with computed tomography-guided percutaneous drainage.

1. Introduction

Splenic abscess is a rare but potentially life-threatening condition in children. The most common organisms

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obtained from the abscess tissue culture are aerobic microbes, particularly staphylococci, streptococci, *Salmonella*, and *Escherichia coli*.[1] Normally, antibiotics are effective in clearing bacteremia; however, the organisms in the abscess were not eradicated, as evidenced by the traces still found in the culture.[2] Therefore, the treatment strategy for splenic abscess has been splenectomy combined with a broad-spectrum antibiotic therapy.[1,3]

However, recent advances in radiology have affected the diagnosis and management of splenic abscess, and

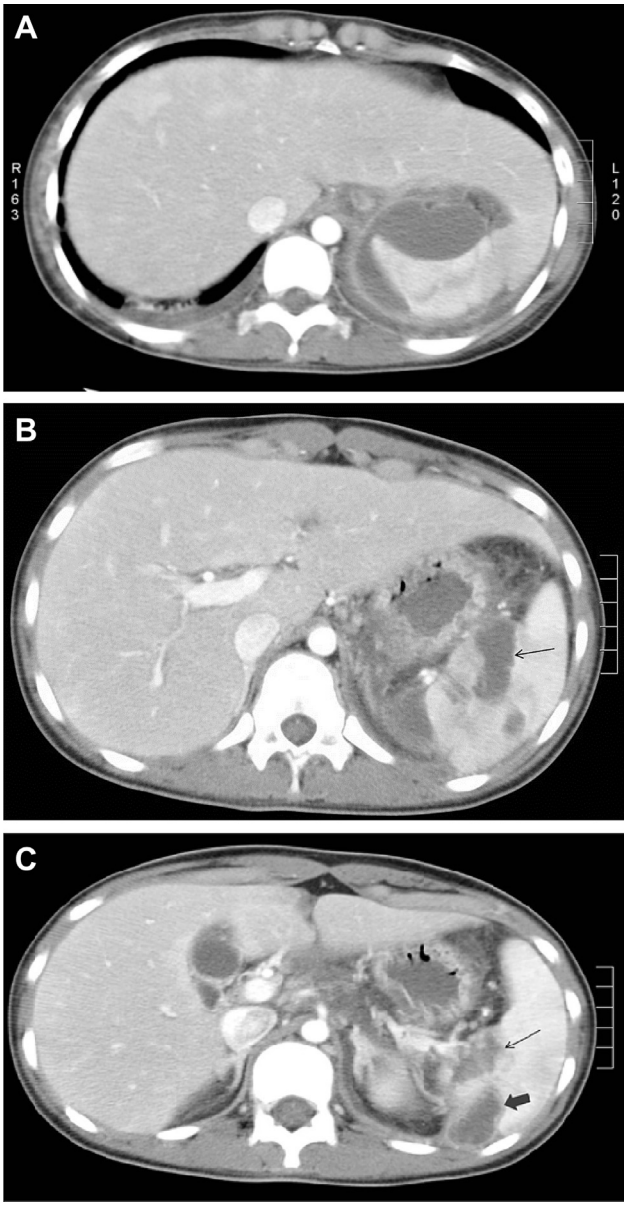

Figure 1 Contrast-enhanced computed tomography images of the abdomen revealing multiple splenic abscesses and a perisplenic abscess. (A) A large amount of perisplenic abscess enveloped posterior to the medial portion of the upper pole of the spleen and (B,C) finally communicated with the abscess located adjacent to the hilum of the spleen (3.5 cm; thin arrow in B and C). Ring enhancement was found in the abscess near the posterior chest wall (4.0 cm; thick arrow in C).

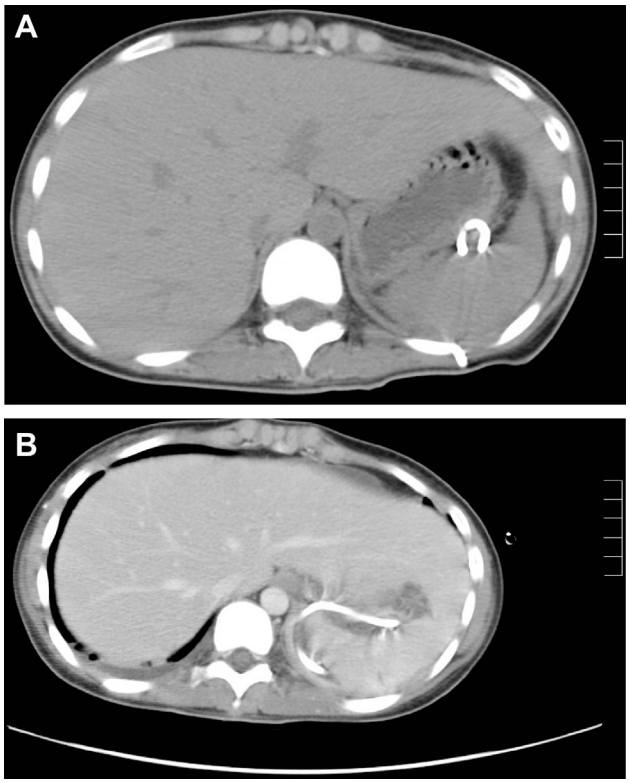

Figure 2 Follow-up abdominal computed tomography scan showing the inserted percutaneous drainage catheter in the abscess of the spleen; the sizes of the abscesses are decreased compared with those seen in the previous computed tomography scan.

percutaneous drainage of splenic abscess is considered a reliable technique, with a high therapeutic success rate and low costs compared with surgery.[4–6] The most straightforward imaging guidance modality for abscess drainage in children is ultrasonography (US), which has the advantages of providing real-time guidance and no radiation hazard. As compared with US, computed tomography (CT) may offer more precise localization of the abscess, better delineation of adjacent vital structures, and visualization of the needle or catheter tip, [4,5] which is important when the abscess is adjacent to major vessels or the bowel.[7]

In this article, we report the case of multiple splenic abscesses in a 14-year-old girl, managed with image-guided percutaneous drainage and antibiotics. An abscess located adjacent to the splenic hilum was successfully drained under CT guidance.

2. Case Report

A 14-year-old girl presented with high-grade fever, chills, diffuse abdominal pain, and bilious vomiting. She was previously healthy and had no history of trauma, jaundice, or other associated illnesses.

On the day of admission, the following vital signs were recorded: body weight, 40.9 kg; height, 158.8 cm; blood pressure, 80/60 mmHg; pulse rate, 88/minute; respiration