

Images in Infectious Diseases

Bedside ultrasonography for rapid detection of splenic abscess in melioidosis

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A 35-year-old farmer presented with a 3-week history of intermittent fever and malaise. Physical examination showed stable vital signs and no other abnormalities. Bedside ultrasonography performed for investigation of pyrexia of unknown origin revealed a small splenic microabscess measuring 0.8 cm × 0.8 cm (**Figure 1**). Chest radiography and transthoracic echocardiography findings were normal. The patient was empirically treated for melioidosis using intravenous ceftazidime, and blood culture results were positive for *Burkholderia pseudomallei*, which confirmed the diagnosis. The patient received 4-week treatment with intravenous ceftazidime, followed by a 3-month course of oral trimethoprim-sulfamethoxazole, which led to resolution of the splenic abscess.

Melioidosis is a potentially fatal disease caused by the *B. pseudomallei* bacterium, endemic to Southeast Asia and Northern Australia. Melioidosis is commonly complicated by the development of liver or splenic abscesses, which can be difficult to diagnose because of nonspecific symptoms¹. The Darwin melioidosis study reported that internal organ abscesses, including prostatic (20%), splenic (5%), and liver abscesses (3%) were common in this patient population². Bedside ultrasonography is noninvasive, readily available, and has high sensitivity and specificity; therefore, this modality has emerged as a valuable tool for diagnosis of melioidosis-induced liver/splenic abscesses. A recent study in Laos reported that abscesses had a positive predictive value of 93% (88–96%) for melioidosis³. Therefore, bedside ultrasonography is a useful method for detection of visceral abscesses in febrile patients in endemic areas and facilitates initiation of prompt empirical antibiotic therapy for melioidosis while awaiting confirmation of culture results.

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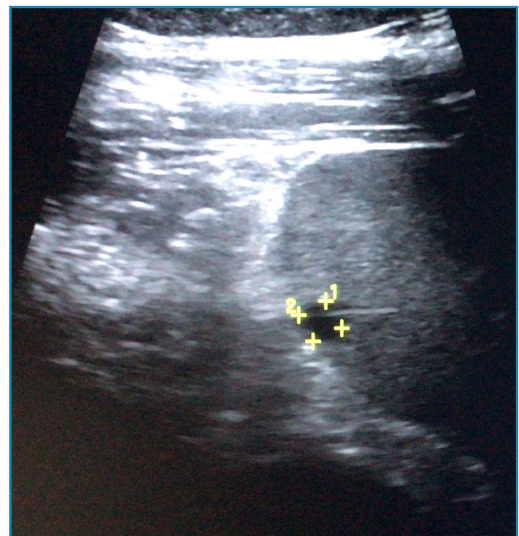


FIGURE 1: Abdominal ultrasound scan showing a hypoechoic splenic lesion measuring 0.8 cm × 0.8 cm, indicative of an abscess.

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