



Figure 1. Point-of-care ultrasonography showing a cystic lesion near the spleen (arrow). Doppler study demonstrated swirling of the blood flow.



Figure 2. CT of the abdomen confirming a splenic artery aneurysm (arrow) with hemoperitoneum (asterisks).

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A healthy 59-year-old man presented to the emergency department with sudden onset of diffuse abdominal pain while sleeping 1 hour before arrival. His initial vital signs were temperature 34.6°C (94.3°F), pulse rate 117 beats/min, and blood pressure 89/54 mm Hg. His abdomen was diffusely tender and muscle guarding was pronounced in the left hypochondrium. The emergency physician performed bedside point-of-care ultrasonography that demonstrated bidirectional blood flow within a pulsatile cystic lesion near the spleen on Doppler study (Figure 1 and Video E1), and the diagnosis was confirmed by abdominal computed tomography (CT) (Figure 2).

*For the diagnosis and teaching points, see page e18.
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IMAGES IN EMERGENCY MEDICINE

*(continued from p. e17)***DIAGNOSIS:**

Spontaneous splenic artery aneurysm rupture with hemoperitoneum. These aneurysms are usually asymptomatic and incidentally found on routine imaging. The risk of rupture is approximately 5%.¹ Although CT is diagnostic for rupture,² unstable patients may benefit from bedside ultrasonography: on Doppler ultrasonography, the swirling of blood flow, also known as yin-yang or Pepsi sign,³ can be diagnostic for an aneurysm.

The patient received emergency transarterial embolization and was discharged uneventfully after 10 days.

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