

Wilson Pyle, MD, Cynthia Lodding, MD, Gavin Budhram, MD, Linda Willard, MD

From the Baystate Medical Center, Department of Emergency Medicine, Springfield, MA.

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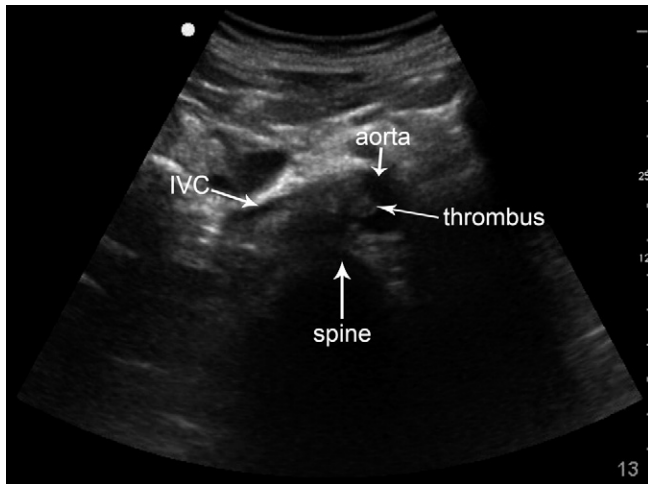


Figure 1. Intraluminal thrombus on transverse view of the aorta.

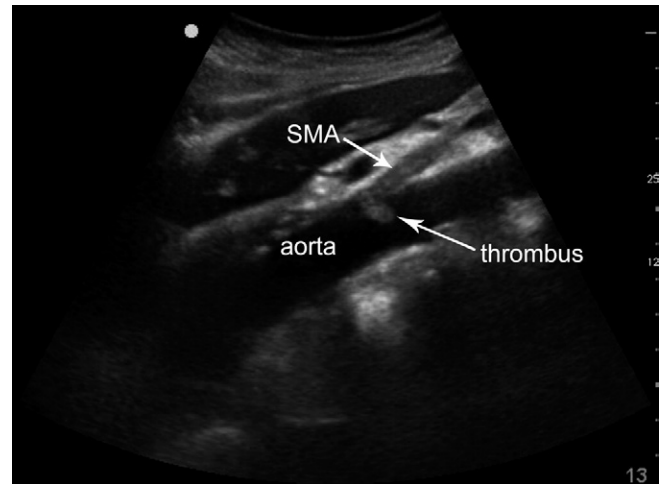


Figure 2. Intraluminal thrombus extending into the SMA on longitudinal view.

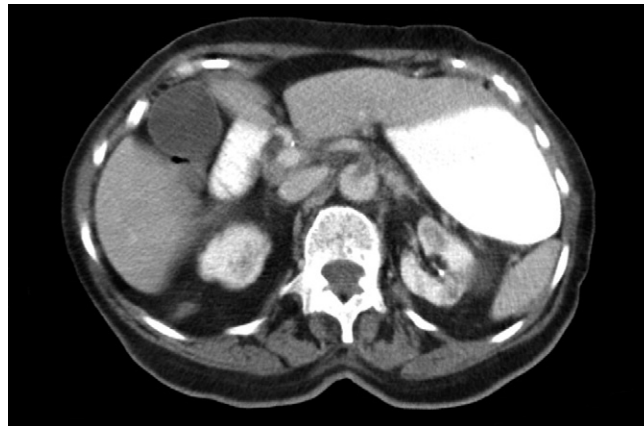


Figure 3. CT scan. Used with permission of Wilson Pyle, MD, Baystate Medical Center, Department of Emergency Medicine, Springfield, MA.

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A 91-year-old woman with a history of hypertension and chronic diarrhea presented to the emergency department from a skilled nursing facility for evaluation of vomiting and one episode of rectal bleeding. A naturally stoic woman and poor historian because of dementia, she denied abdominal pain. Vital signs on presentation were notable for a resting tachycardia and an oxygen saturation of 90% on room air. She was provided with supplemental oxygen and intravenous fluids. Physical examination revealed an elderly woman in no apparent distress whose mental status was consistent with advanced dementia. Cardiac and pulmonary examination was unremarkable, her abdomen was nontender and mucous membranes were dry. Significant laboratory findings included a WBC count of $35,500/\text{mm}^3$, lactate level 4.4 mmol/L, and a urinalysis suggestive of a urinary tract infection. While the patient was prepared for a computed tomographic (CT) scan of her abdomen, an emergency bedside ultrasonography of her aorta was performed.

For the diagnosis and teaching points, see page 59.

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DIAGNOSIS:

Thrombotic occlusion of the superior mesenteric artery. The ultrasonography demonstrated a thrombus in the abdominal aorta that extended into the superior mesenteric artery (Figures 1 and 2). Emergency surgical consultation was obtained because of these findings. CT scan with intravenous contrast confirmed the presence of a filling defect consistent with the diagnosis of a proximal abdominal aortic and superior mesenteric artery thrombosis (Figure 3). In addition, the CT scan revealed a pulmonary embolus, left renal infarction, and small-bowel ischemia. Given the patient's advanced age and comorbidities, her family elected to provide comfort measures only. She did not receive anticoagulation but received intravenous antibiotics and fluids. She remained relatively stable despite a persistent tachycardia. After a short hospital stay, she was transferred back to her skilled nursing facility. Aortic thrombosis has been described in patients with neoplastic disease, aortic aneurysm, aortic dissection, and atherosclerosis. It is rare in the absence of these disease states.¹ Contributing factors in this case may include a presumed diagnosis of age-related atherosclerosis, early sepsis, and vascular stasis caused by dehydration.

Bedside emergency ultrasonography of the aorta has well-established clinical utility in identification of the normal aorta and abdominal aortic aneurysm.² Although ultrasonography alone is usually not sensitive enough to rule out aortic dissection or thrombus, routine scanning to rule out abdominal aortic aneurysm may occasionally identify these diagnoses.

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