This case illustrates a radiologic finding from an ischemic event that proved to be fatal. The patient in this case is a 60-year-old woman who presented to the emergency department in a semiconscious state. She had experienced episodic vomiting, diarrhea, and worsening lethargy for 3 days. Her immediate family reported that the patient had not left her bed for more than 24 hours.

Her medical history was significant for hypothyroidism and non–insulin-dependent diabetes. The patient’s social history was significant for a 60+ pack-per-year history of tobacco use.

Her physical examination at presentation revealed a blood pressure, 102/61 mm Hg; temperature, 91.6°F; pulse, 74 beats per minute; respirations, 28 per minute; pulse oximetry, 85% on room air. Abdominal examination revealed notable abdominal girth and absent bowel sounds. Laboratory values showed a lactate, 7.1 mmol/L; glucose, 794 mg/dL; negative serum ketones; arterial pH, 7.0.

The corresponding images show a noncontrast computed tomography (CT) of the abdomen performed soon after the patient’s presentation. The findings are significant for pneumoperitoneum and air throughout the portal venous system (Figure 1), the stomach and bowel walls (Figure 2), and a small amount of air anterior to the pericardium.

Portal venous air, a rare radiologic finding, occurs when intraluminal gas, found in the intestine or produced by bacteria, enters the portomesenteric circulation. The etiology of this finding can be due to ischemic (bowel infarction) and nonischemic conditions (sepsis with Pseudomonas aeruginosa, inflammatory bowel disease, colonic cancer, trauma, iatrogenic). Ischemic causes, the most common, portend a worse prognosis that may depend on the severity of the disease. Clinical outcomes are determined by the timing of diagnosis and surgical intervention, and the mortality rate is high.

Despite aggressive medical treatment, this patient went into pulseless electrical activity and died. Consent for autopsy was refused.

References