

# Esophageal Apoplexy

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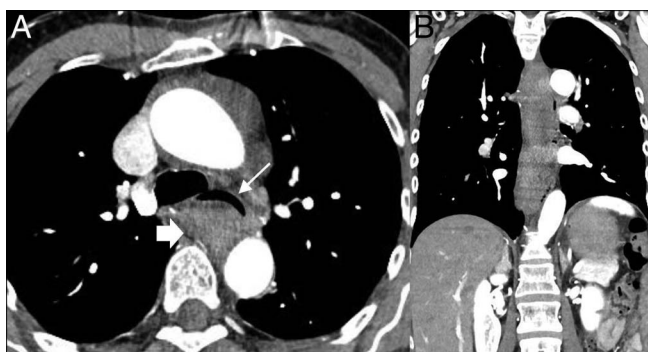
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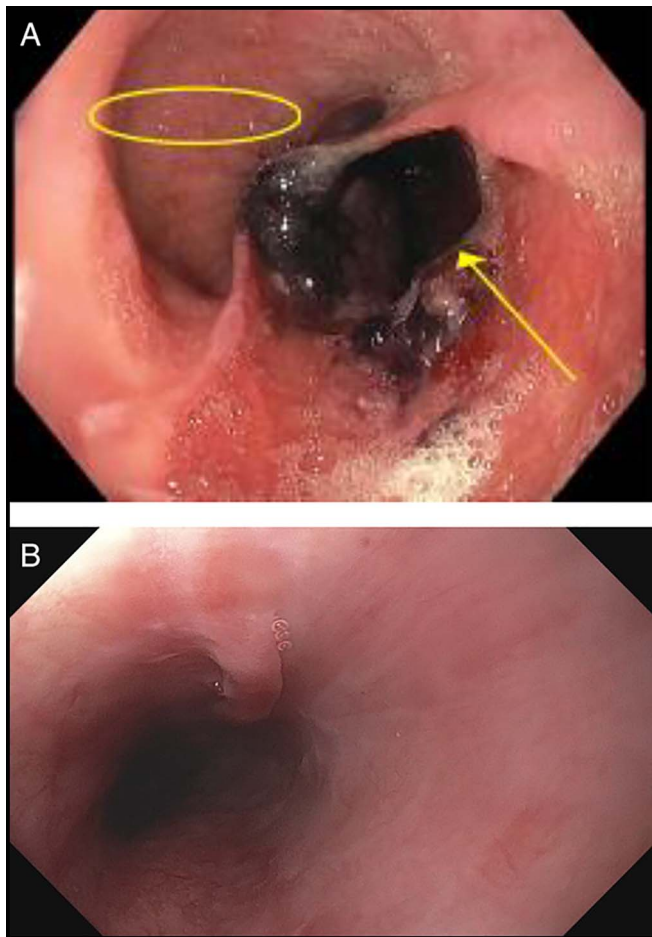
## CASE REPORT

A 72-year-old healthy woman presented to the emergency department with acute-onset epigastric pain, diaphoresis, and nausea after eating almonds and bran flakes. Her vital signs showed a blood pressure of 101/63, a pulse rate of 110, and SpO<sub>2</sub> 95% in room air. On physical examination, the afebrile 72-year-old female patient seemed to be acutely ill, but she was otherwise normal. Laboratory abnormalities were a hemoglobin level of 10.8 and a hematocrit level of 32.2. Computed tomography (CT) of the chest demonstrated a tubular intraluminal mass in the esophagus extending from the thoracic inlet to the gastroesophageal junction (Figure 1). Upper endoscopy showed a pseudolumen with submucosal dissection and intraluminal clot (Figure 2). She was made nothing by mouth (NPO) and managed with intravenous hydration, pain control, and observation. Repeat CT of the chest revealed severe thickening of the esophagus with enhancement of the serosa. Because of inability to take oral feedings, a percutaneous gastrojejunostomy tube was inserted. The patient was discharged and sent to Mayo Clinic's esophageal clinic for consultation. A review of clinical information and CT and endoscopy images led to a diagnosis of esophageal apoplexy. Over the course of a month, the patient had resolution of her chest pain and felt well, with repeat endoscopy demonstrating mild scarring of the esophagus (Figure 2). She was started on oral feedings, and the gastrojejunostomy tube was removed.

Esophageal apoplexy is a rare form of esophageal injury and has been described in the literature as intramural hemorrhage, intramural hematoma, and esophageal dissection.<sup>1,2</sup> The differential diagnosis includes Boerhaave syndrome, which is a transmural perforation, and a Mallory-Weiss tear typically located in the proximal stomach and associated with intraluminal bleeding.<sup>1,3</sup> Esophageal apoplexy is usually secondary to procedure-related complications but can be spontaneous.<sup>1,2</sup> The most common presenting symptoms include acute-onset chest pain, dysphagia, and hematemesis most commonly in older women. However, odynophagia and epigastric pain have also been described.<sup>1-3</sup> These nonspecific presenting symptoms can delay early diagnosis.<sup>4</sup> The vital signs are usually normal, although hypotension has been described.<sup>1</sup> Evaluations include Gastrografin swallow study, CT scan, and esophagoscopy.<sup>4</sup> A CT scan may reveal nonenhancing, intraluminal mass or soft-tissue density, which can be diagnostic if intramural blood is seen.<sup>2-4</sup> A Gastrografin swallow study may reveal an intraluminal filling defect.



**Figure 1.** (A) Corresponding axial noncontrast (top row) image from a chest CT demonstrates intramural hematoma with a thin air-filled esophageal true lumen displaced and significantly narrowed (arrows). (B) Coronal images from a contrast-enhanced chest CT show the long intramural hematoma. CT, computed tomography.



**Figure 2.** (A) Posterior pseudolumen with clot (arrow) compared with normal lumen noted anteriorly and compressed by blood clot (circle). (B) Gastroscopy noted 2 areas of healed scarring at 20 and 30 cm from the incisors. No evidence of perforation.

Esophagoscopy often reveals an ulcerated friable mucosa with or without breach of the esophageal lumen. Treatment is to make the patient NPO and provide intravenous hydration and pain control with observation. Most cases resolve without procedural or operative intervention.<sup>3</sup>

## DISCLOSURES

Author contributions: S. Myburgh and DA Katzka: both writing and editing of the manuscript. J. Fidler: proofing of the manuscript, interpretation, and preparation of the CT images.

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Informed consent was obtained for this case report.

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