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IMAGE | ESOPHAGUS

Ruptured Thoracic Aneurysm Causing Hematemesis

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CASE REPORT

We present a 72-year-old man who was admitted to the gastroenterology ward after a frank hematemesis. He had been seen 5 days prior in clinic with dysphagia, anorexia, weight loss, and pain in the epigastrium and thoracic spine. At admission he was stable with normotensive blood pressure, not tachycardic, and had hemoglobin 12.5 g/dL. On examination there was epigastric tenderness, but the abdomen was soft with normal bowel sounds and there were no significant findings on rectal examination. After intravenous fluid resuscitation, his hemoglobin was 9.1 g/dL. The Blatchford and pre-endoscopy Rockall scores were calculated as 6 and 4, respectively. Esophagogastroduodenoscopy (EGD) revealed a bulging of the posterior wall in the mid-esophagus, with a small tear that was thought to be a Mallory-Weiss tear with underlying intramural hematoma (Figure 1). Computed tomography (CT) scan of the thorax showed the presence of a mid descending thoracic aneurysm (7.2 x 5.2 x 5.7 cm) that was ruptured, inflamed, and compressing the esophagus (Figure 2). Shortly after the CT scan, the patient deteriorated with worsening hypotension, tachycardia, and back pain. After urgent cardiothoracic and vascular surgery consult, the patient was transferred to a specialist center for a thoracic endovascular aortic repair.

Hematemesis is a common cause for admission to gastrointestinal wards. Differential diagnoses include esophagitis, gastritis, variceal bleeding, peptic ulcers, malignancy, and a Mallory-Weiss tear. Thoracic aortic aneurysms (TAAs) are relatively uncommon, with an incidence of 10.4 per 100,000 people.[1] The etiology is most often degenerative in nature, resulting from atherosclerotic weakening of the aortic wall, but other causes, including infection, aortic dissection, trauma, and inherited genetic disease, can lead to aneurysm formation.[2,3] Most TAAs are asymptomatic until symptoms of complications from

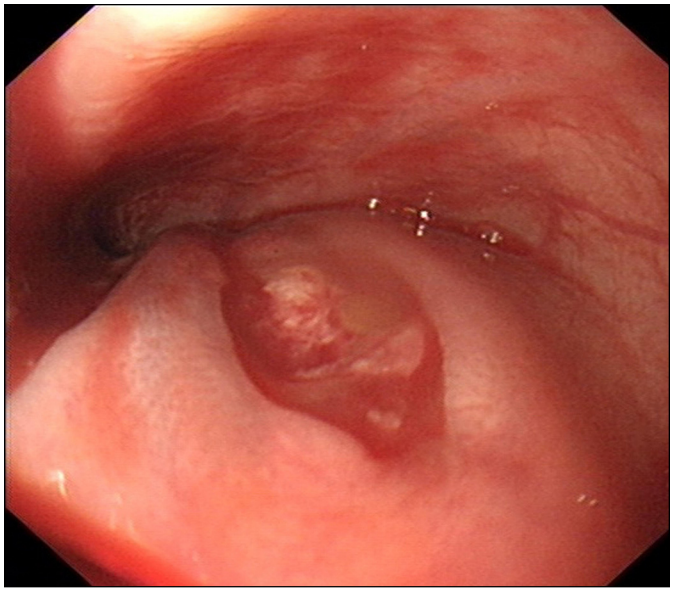

Figure 1. The mid-esophagus during gastroscopy showing a small tear and underlying intramural hematoma.

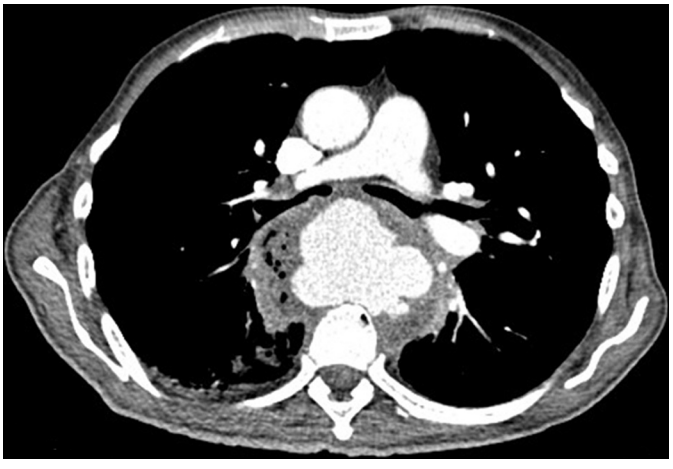

Figure 2. CT scan of the thorax showing a ruptured and inflamed mid-descending thoracic aneurysm compressing the esophagus.

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thromboembolism develop, such as rupture, aortic regurgitation, and visceral compression. When symptoms of a TAA manifest, the risk of rupture is very high. Case reports of TAAs presenting with dysphagia have also been published.[4] Dysphagia is usually urgently investigated with EGD to exclude esophageal cancer, and physicians should be suspicious of a compressive lesion, such as a TAA, if no obstructing lesion can be seen. This case report describes a rare cause of hematemesis and highlights the symptoms of TAAs that should prompt early investigation and treatment if patients are to have the best chance of survival.

DISCLOSURES

Author contributions: S. Batool conceptualized the article and performed the literature review. P. Isaacs conceptualized the article, interpreted the findings, reviewed the article, and is the article guarantor. AD Gerrard conceptualized, wrote, and researched the article.

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Informed consent was obtained for this case report.

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