Images in surgery

This section features outstanding photographs of clinical materials selected for their educational value or message, or possibly their rarity. The images are accompanied by brief case reports (limit 2 typed pages, 4 references). Our readers are invited to submit items for consideration.

Dysphagia aortica: Harbinger of aortoesophageal fistula?

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A 69-YEAR-OLD MAN PRESENTED with dysphagia and a weight loss of 10 lbs during a month. When he came to the hospital, he was only able to tolerate fluids. The patient had a history of hypertension and an operative repair of an abdominal aortic aneurysm in 1992. A physical examination was unremarkable. The patient initially consulted a physician in another hospital, and a diagnosis of esophageal malignancy was suspected. A barium esophagogram demonstrated an extrinsic compression at the level of the mid-esophagus with a blockage of barium proximal to the obstruction (Fig 1). The patient was admitted to our unit a month later. Esophagoscopy revealed an extrinsic compression of the esophagus at 28 cm from the incisor (Fig 2). No mucosal lesion was identified. Computed tomography of the thorax showed a descending thoracic aortic aneurysm with an intramural thrombus, displacing the esophagus to the right. Shortly after the computed tomography, the patient had massive hematemesis and died. An autopsy examination confirmed the cause of death as exsanguinations from aortoesophageal fistula caused by a ruptured descending thoracic aortic aneurysm into the esophagus.

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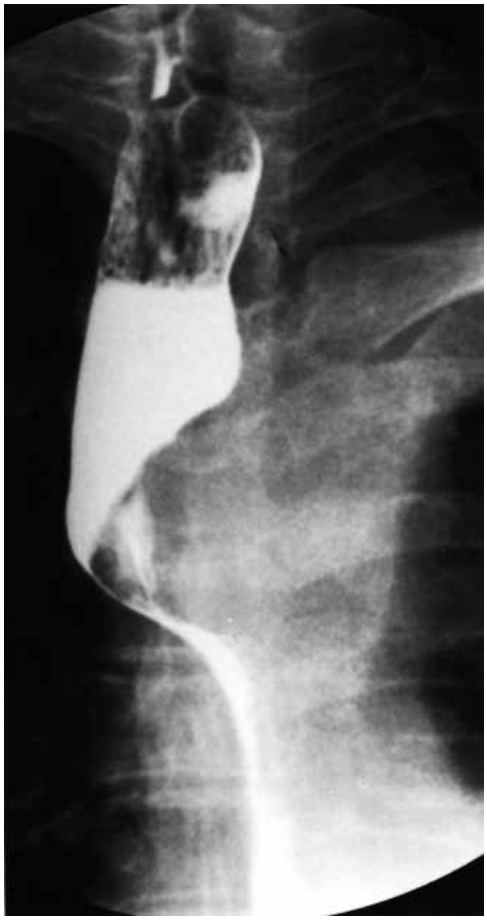

Fig 1. Barium swallow showing an extrinsic lesion of esophagus with contrast blockage at the level of mid-esophagus.

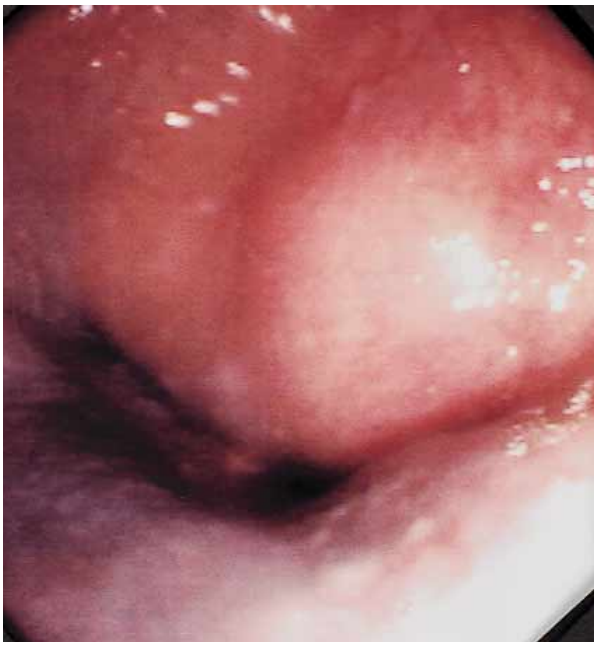

Fig 2. Endoscopic view showing a bluish extrinsic bulge at 24 cm of esophagus.

DISCUSSION

Dysphagia aortica is a rare etiology of dysphagia resulting from extrinsic compression of the esophagus by a thoracic aortic aneurysm or tortuous thoracic aorta.[1] The indolent clinical course of dysphagia aortica mimics esophageal malignancy or achalasia. Owing to its rarity, dysphagia aortica is seldom included in the differential diagnoses of dysphagia. Lack of awareness of this condition among clinicians partly attributed to the delay in diagnosis.

Thoracic aortic aneurysm carries a high risk of rupture unless surgically treated. Of all the ruptured thoracic aortic aneurysms, about 10% occurred in the esophagus, and it is the leading cause of aortoesophageal fistula.[2] As exemplified by our patient, most reported patients with aortoesophageal fistula died from exsanguinations before a correct diagnosis was reached.

The classic Chiari's triad of primary aortoesophageal fistula includes chest pain, sentinel hemorrhage, and fatal exsanguinations after a symptom-free interval.[3] The presentation of this patient was atypical because of the absence of chest pain and sentinel hemorrhage in the history. A high index of suspicion is therefore essential in any patients presenting with dysphagia. The radiologic or endoscopic finding of an extrinsic lesion compressing on the esophagus demands prompt action. During endoscopy, one important caveat is the avoidance of biopsies of the lesion, which could result in catastrophic hemorrhage.

In summary, dysphagia aortica should be considered in the differential diagnoses of dysphagia. The clinical presentation of thoracic aortic aneurysm may simulate primary esophageal disease.[3] Timely recognition and treatment of dysphagia aortica could evade the fatal consequence of aortoesophageal fistula.

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