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External Mass Compressing the Left Atrium on Transthoracic Echocardiography

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A 74-year-old man who had suffered from dysphagia for about 2 months was referred to our hospital for treatment of an esophageal mass. He had diabetes mellitus and hypertension for the previous 3 years. On physical examination, his blood pressure measured 110/70 mmHg at a heart rate of

85/min. No murmurs were heard on auscultation. An electrocardiogram was a normal sinus rhythm and chest radiography revealed no active lung lesions. Esophagogastroduodenoscopy showed an ulcero-infiltrative mass in the mid-to-lower esophagus (Fig. 1). Chest computed tomography confirmed

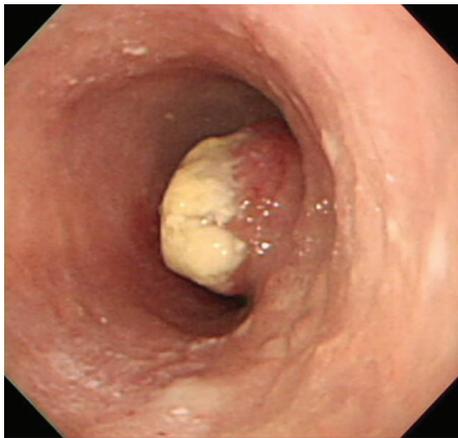


Fig. 1. Esophagogastroduodenoscopy shows a 3.0×2.4×8.0 cm esophageal mass.

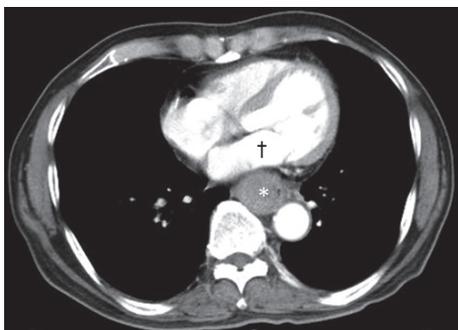


Fig. 2. Chest CT reveals an esophageal mass (*) which compresses the left atrium (†).

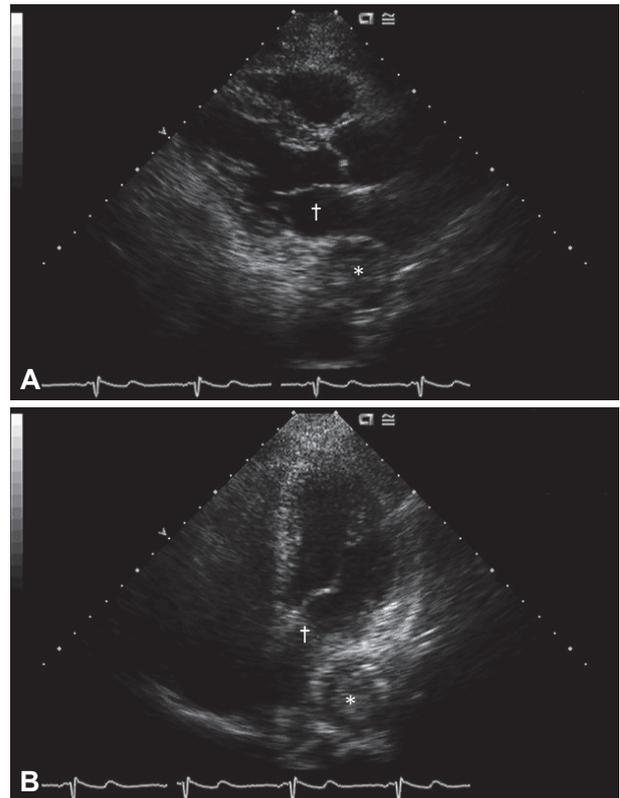


Fig. 3. Two-dimensional echocardiographic parasternal long axis view (A) and apical four-chamber view (B). A round and well-demarcated esophageal mass (*) compresses the left atrium (†), which resembles the image on chest CT.

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an obstructive, 3.0×2.4×8.0 cm intraluminal esophageal mass arising from the right anterior side (Fig. 2); there was no evidence of direct invasion into the major organs of the mediastinum. The final biopsy result was squamous cell carcinoma. Transthoracic echocardiography demonstrated normal systolic and diastolic function. As noted on the parasternal long axis view and the apical 4-chamber view, the left atrium was compressed by the esophageal mass (Fig. 3). He underwent an esophagectomy, esophagogastrostomy, and feeding jejunostomy for a malignancy.

Extrinsic compression of the left atrium is an uncommon clinical event. Several case reports exist in patients with esophageal carcinomas,¹⁾ and esophageal hematomas,²⁾ dissecting aneurysms of the ascending aorta,³⁾ and mediastinal masses.⁴⁾ The transthoracic echocardiography of the patient presented

herein showed a typical esophageal mass that compressed the left atrium.

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