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IMAGE | ESOPHAGUS

A Rare Case of Adult Dysphagia: Dysphagia Lusoria

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CASE REPORT

A 51-year-old woman presented to our clinic with a 1-year history of nonprogressive dysphagia for solids with no previous similar episodes. Physical examination was unremarkable. Gastrointestinal endoscopy revealed a pulsatile compression in the esophagus (Figure 1). Computed tomography (CT) revealed an aberrant right subclavian artery on the left aorta and a Kommerell diverticulum resulting in esophageal compression (Figure 2). We diagnosed dysphagia lusoria, provided the patient with lifestyle modification instructions, and referred her for the surgical removal of the aberrant artery and vascular reconstruction. At the patient's 3-month post-op follow-up appointment, she reported complete resolution of her symptoms.

Dysphagia lusoria, commonly named Bayford-Autenrieth dysphagia, is a rare clinical entity with an estimated prevalence of approximately 0.5% first described by David Bayford in 1790.[1,2] It results from an embryonic abnormality in the development of the aortic arch and its branches, leading to extrinsic compression of the esophagus. Usually, the culprit artery is an aberrant right subclavian artery originating from the left aortic arch, but an aberrant left subclavian artery originating from the right aorta has also been described.[3] Most patients with dysphagia lusoria are asymptomatic; when symptomatic, solid food dysphagia, coughing, chest pain, and Horner syndrome are the most common symptoms.[1] Proposed mechanisms for symptomatic dysphagia include age-related decreased esophageal mobility and aneurysm formation with Kommerell diverticulum.[4] When Kommerell diverticulum is present, they form a vascular ring located behind the esophagus leading to external posterior compression.[5] Barium esophagogram is the best modality to diagnose dysphagia lusoria, followed by CT or magnetic resonance angiography and Doppler ultrasound (to confirm and delineate vascular anatomy).[1]

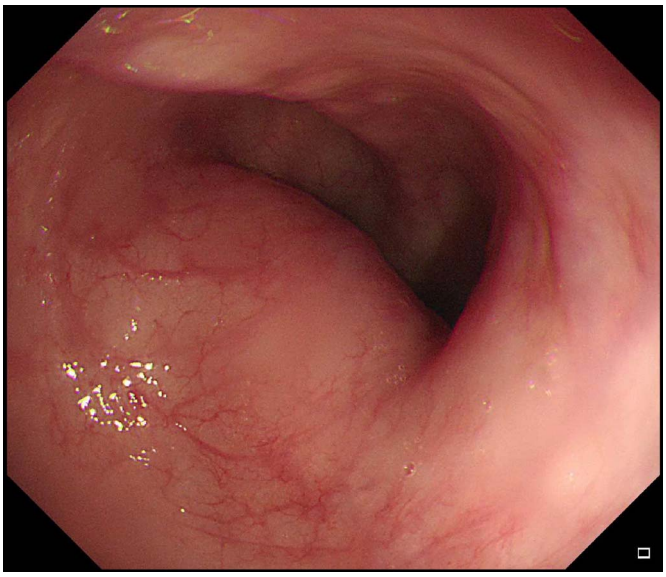

Figure 1. Esophagogastroduodenoscopy showing an external pulsatile compression in the esophagus.

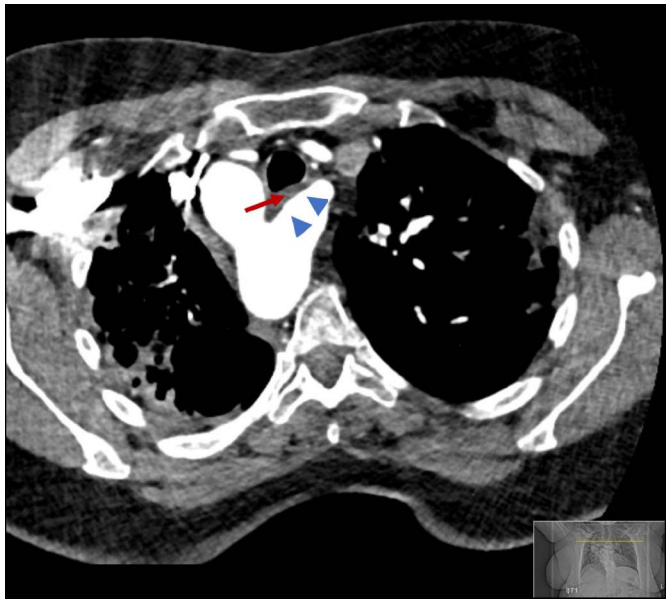

Figure 2. Computed tomography showing an aberrant right subclavian artery on the left aorta (blue arrows) and a Kommerell diverticulum, resulting in esophageal compression (red arrow).

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A barium esophagogram typically shows an oblique ascending extrinsic compression superior to the aortic arch.[1] Endoscopy may demonstrate extrinsic compression of the posterior wall of the esophagus.[1] Despite being one of the most valuable studies in evaluating patients with dysphagia, manometry study has little or no clinical value in the diagnosis of dysphagia lusoria and is entirely nonspecific in this setting.[1,3] Management of this condition is variable: nonsevere cases are best managed by patient reassurance and lifestyle and dietary modification such avoiding exacerbating foods, eating slowly and chewing well, and sipping liquids, and nonresponders or those with severe symptoms are best managed with surgery aimed at moving and fixing the aberrant vessel in its appropriate position.[1] Our case illustrates the importance of performing early endoscopy during the initial diagnostic evaluation of any patient with symptomatic dysphagia and to consider choosing appropriate radiological imaging when extraluminal compression is observed that can explain the patient's symptoms.

DISCLOSURES

Author contributions: M. Alourfi wrote the manuscript, approved the final manuscript, and is the article guarantor. M. Mosli edited the manuscript, revised the manuscript for intellectual content, and approved the final manuscript.

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