



Dysphagia Lusoria in a Young Patient: An Underrecognized Cause of Dysphagia

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Abstract

Dysphagia lusoria is an uncommon entity manifesting as difficulty swallowing due to external compression of the esophagus by an aberrant right subclavian artery (ARSA). The vascular anomaly stems from embryonic disruption at the level of the brachial arches. Dysphagia lusoria surfaces as difficulty swallowing and diagnosis is made by barium swallow. Computed tomography (CT) scan of the chest helps further characterize and diagnose dysphagia lusoria. We herein present a case of a young female presenting for swallowing difficulties who was found to have external compression of the proximal esophagus by an aberrant right subclavian artery, corroborating a diagnosis of dysphagia lusoria.

Keywords: Dysphagia Lusoria; Aberrant Right Subclavian Artery; Vascular Compression

Introduction

Dysphagia lusoria is characterized by a posterior compression of the proximal esophagus [1]. Epidemiologically, 20 to 40% of patients with dysphagia lusoria complain of difficulty swallowing as a presenting symptom when they seek medical help [2]. This case underscores the importance of a prompt diagnosis of dysphagia lusoria, which is an otherwise overlooked entity. In other words, clinicians should be prudent to include dysphagia lusoria in their differential diagnosis when confronted with a case of dysphagia in their clinical practice. Dysphagia lusoria should be promptly diagnosed to tailor therapeutic implications.

Case Presentation

We describe a 27-year-old female with no known past medical or past surgical history who sought medical care for non-progressive difficulty swallowing. Patient complains about a 5-month history of dysphagia to both solids and liquids. An esophagogastroduodenoscopy (EGD) was performed and was unremarkable. Patient was referred to an ear-nose-throat (ENT) specialist for further investigation. Laryngoscopy was employed and was normal. Barium swallow was subsequently done that indicated an indentation at the level of the proximal third of the esophagus (Figure 1), which raised a concern for an external compression of the upper 1/3 of the esophagus by an aberrant right subclavian artery. CT angiography of the chest was done which demonstrated an ARSA

posteriorly compressing the proximal esophagus, corroborating a diagnosis of dysphagia lusoria. Patient was consequently referred for vascular surgery.

Discussion

ARSA is a vascular aberration involving the aortic arch whereby a persistent 7th intersegmental artery abuts the 4th vascular arch with the right dorsal aorta [3]. Prevalence of ARSA is around 0.7% and it predominantly impacts the posterior esophagus [4]. Rarely, ARSA can impinge on the anterior esophagus. The majority of ARSA originate from left-sided aortic arch. Infrequently, an aberrant left subclavian artery (ALSA) can originate from the right-sided aortic arch [5]. For instance, 30 to 40% of patients with ARSA exhibit dysphagia as an initial presenting symptom [1,2]. Management is dictated by symptoms severity. Barium swallow is the mainstay diagnostic modality [3]. CT chest can further delineate the vascular lesion. Dietary adjustments and swallowing techniques are opted for when symptoms are mild [4]. Conversely, when symptoms are severe enough to interfere with daily-life functioning, surgery is warranted. Dysphagia lusoria refractory to swallowing techniques and dietary adjustments is also amenable to surgical intervention [5]. Vascular surgery is effectuated though ligation of ARSA at its origin. Dilation of the esophageal stricture is an option for patients who are not deemed candidates for surgical intervention [4,5]. Esophageal dilation provides symptomatic relief and can be frequently repeated at regular time-intervals.



Figure 1: Barium swallow demonstrating an indentation (Black arrow) of the posterior esophageal wall in the proximal third of the esophagus, which raised a concern for an external compression of the upper 1/3 of the esophagus by an aberrant right subclavian artery.

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Conclusions

Dysphagia lusoria is an exceedingly rare entity that is often underrecognized when approaching a patient with dysphagia. Physicians should be vigilant to diagnose dysphagia lusoria in the right clinical setting so that appropriate management is tailored accordingly. Barium swallow and CT chest angiography are of paramount importance to diagnose the congenital vascular anomaly. Dysphagia lusoria should be promptly diagnosed when there is a high index of suspicion because early diagnosis impacts therapeutic implications. Vascular surgery remains the cornerstone treatment modality for ARSA. This article underscores that physicians should include dysphagia lusoria in their differential diagnosis when they are confronted with a patient complaining of non-progressive swallowing difficulty.