Clinical Case Reports

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CLINICAL IMAGE

Aberrant right retroesophageal subclavian artery causing esophageal compression

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Key Clinical Message

Dysphagia lusoria is present in 0.2–2.5% of the population representing the most common anomaly of the aortic arch (De Araújo et al., 2015, Int. J. Surg. Case Rep., 7, 32). It usually presents in infants, but can present at any age. Symptoms include cough, dysphagia, thoracic pain, and pulmonary infection. Barium contrast studies, CT, and MR angiography are useful studies for evaluating the condition. Dietary modification and PPI therapy are the first-line treatments with surgical intervention reserved for those with ongoing symptoms (Janssen et al., 2000, Am. J. Gastroenterol., 95, 1411).

Keywords

Aortic arch anomaly, diverticulum of Kommerell, dysphagia, dysphagia lusoria, retroesophageal subclavian artery.

Question

A 67-year-old female presented to a surgical clinic with a history of dysphagia.

She had suffered from this problem for as long as she could recall. The dysphagia was nonprogressive and was worse for solids than for liquids. She had no concerning symptoms such as weight loss or anorexia. The computed tomography scan of her thorax demonstrates the anomaly causing her symptoms. Can you identify it?

Answer

She was found to have an aberrant right retroesophageal subclavian artery. Furthermore, there is aneurysmal dilatation of the origin of the subclavian artery in keeping with a diverticulum of Kommerell. The aberrant subclavian artery clearly compresses on this ladies esophagus, thus accounting for her history of chronic nonprogressive dysphagia. This condition is known as dysphagia lusoria. The first image demonstrates the artery compressing the esophagus near its origin [See Figure 1]. The second image shows the artery ascending in the thorax after having passed posteriorly to the esophagus [See Figure 2]. This lady declined treatment as she was satisfied that the condition was not dangerous and felt her symptoms were not severe enough to undertake the risks associated with the surgery. This condition can be diagnosed on barium contrast studies, CT, or MR angiography. Endoscopy and manometry can be used to rule out other causes of dys-

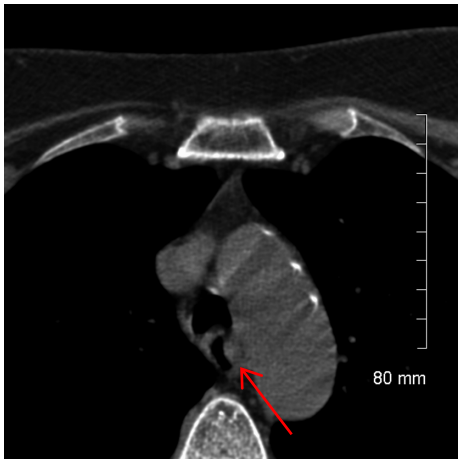

Figure 1. The esophagus being compressed by the origin of the subclavian artery.

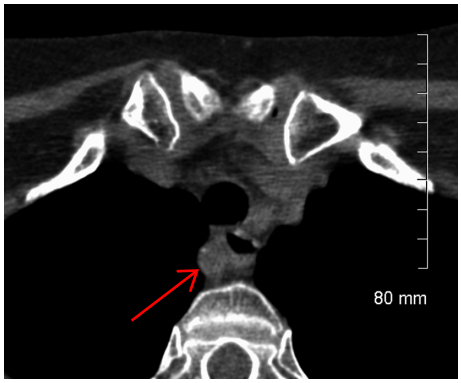

Figure 2. The artery ascending in the thorax after having passed posteriorly to the esophagus.

phagia. Conservative management usually involves dietary modification as well as treatment with proton pump inhibitors (PPIs) and prokinetic agents. For those who do not respond to conservative management, the surgical management usually involves ligation of the artery through a left-sided thoracotomy or a right supraclavicular approach, the artery can then be anastomosed to the right common carotid artery so that it can continue to perfuse the arm.

Conflict of Interest

None declared.

References

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