

A Rare Cause of Dysphagia by Extrinsic Compression

Mara Sarmento Costa^a João Oliveira Dias^b Patrícia Vaz Silva^b
Cláudia Agostinho^a Paulo Souto^a Pedro Narra Figueiredo^{a, c}

^aGastroenterology Department, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal; ^bPediatric Cardiology Department and Congenital Heart Diseases Referral Center, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal; ^cFaculty of Medicine, University of Coimbra, Coimbra, Portugal

Keywords

Aberrant subclavian artery · Deglutition disorders · Manometry

Uma causa rara de disfagia por compressão extrínseca

Palavras Chave

Artéria subclávia aberrante · Distúrbios da deglutição · Manometria

A 38-year-old man presented with dysphagia for solids fluctuating in severity. This symptom had persisted for several years. He reported feeling worse in the previous month, having also lost 10% of total weight. He had no relevant past medical history and physical exam was normal.

Initial workup by upper endoscopy was normal. High-resolution esophageal manometry excluded outflow obstruction of the esophagogastric junction or peristalsis disorders but identified a horizontal and pulsatile high-pressure area below the upper esophageal sphincter

(Fig. 1a, b, see arrows). The initial interpretation of the manometry, as the high-pressure area maintained itself throughout the exam, gave rise to the search for an extrinsic cause. Barium swallow was then performed, revealing an extrinsic compression at the level between the upper and middle thirds of the esophagus (Fig. 2a, b, see arrows). A thoracic computed tomography angiography identified an abnormal origin to the right subclavian artery, after the left subclavian origin (Fig. 3, see arrow).

The patient refused surgical intervention and maintains mild symptoms under general measures. The abnormal right subclavian artery, also known as the arteria lusoria, is present in 0.5–2.5% of the general population and causes symptoms in about 20% [1, 2]. Despite being congenital, it leads to dysphagia more frequently after the 5th decade of life [2]. The present case intends to raise awareness to the potential role of high-resolution manometry in the diagnosis of this rare condition.

Mara Sarmento Costa and João Oliveira Dias contributed equally as joint first authors.

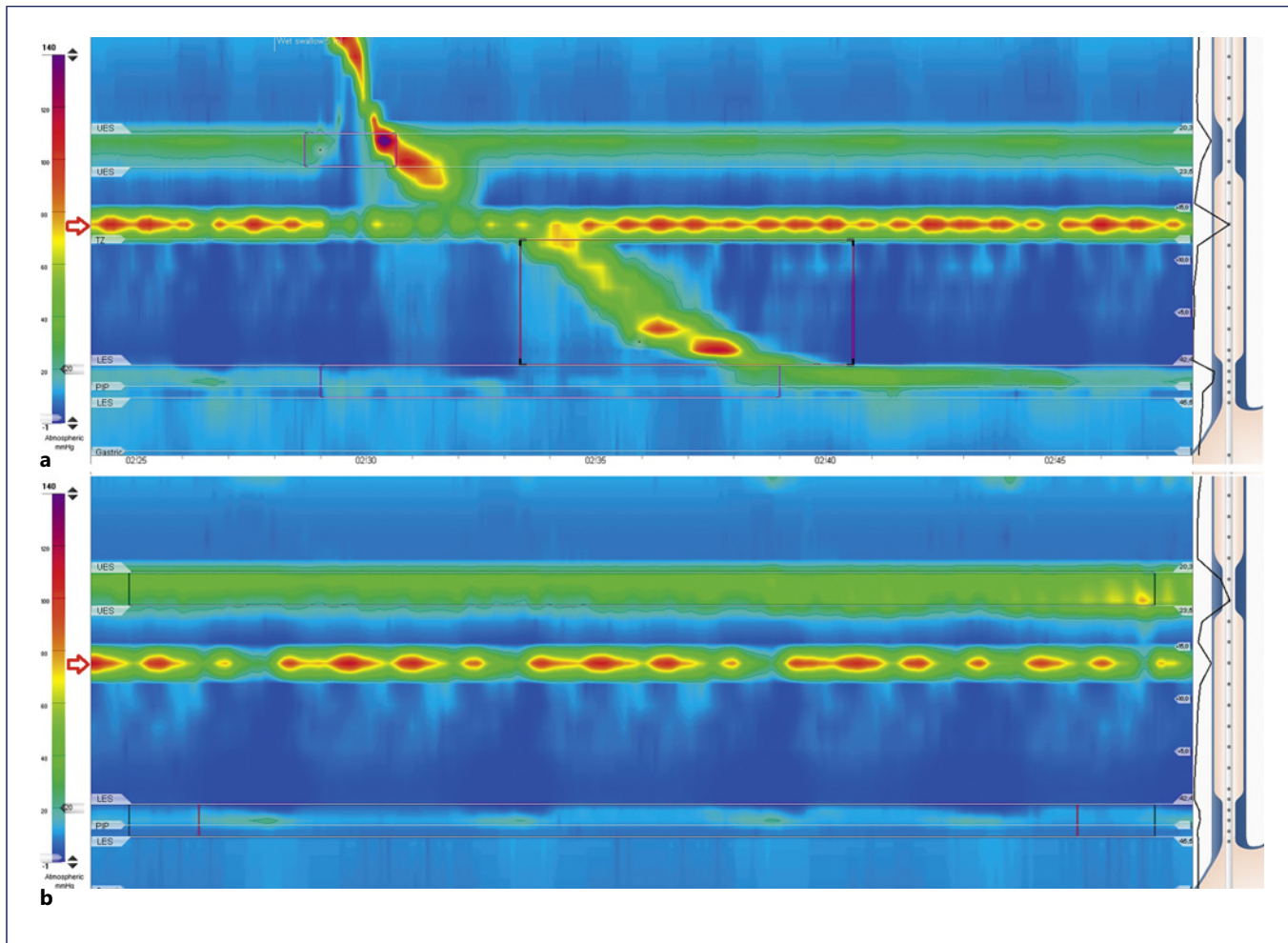


Fig. 1. a, b High-resolution esophageal manometry: a horizontal high-pressure area is pictured just beneath the upper esophageal sphincter.

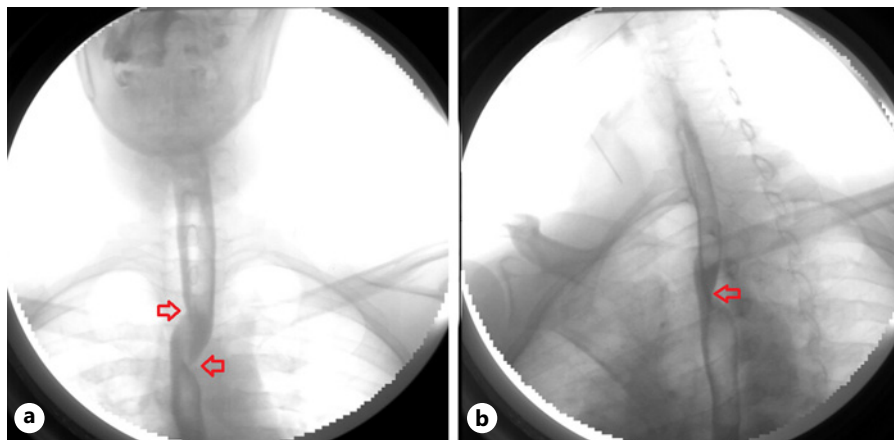


Fig. 2. a, b Barium swallow: an extrinsic compression can be seen, as pointed out by the red arrows, between the upper and middle thirds of the esophagus.

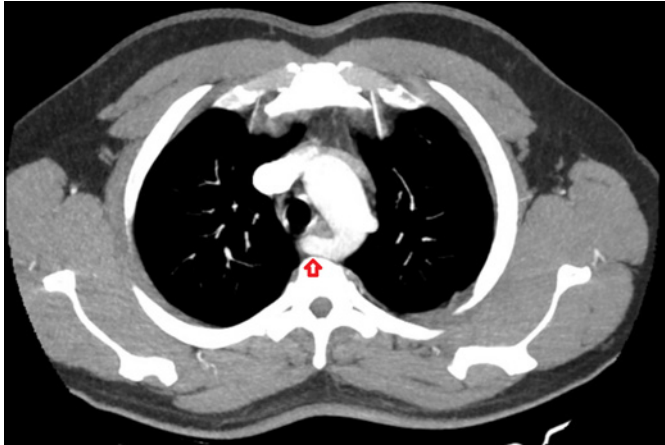


Fig. 3. Due to suspected dysphagia *lusoria*, the patient underwent thoracic computed tomography angiography confirming an abnormal origin to the right subclavian artery (see arrow).

Statement of Ethics

Written informed consent was obtained from the patient for the publication of his information, picture, and imaging.

References

- 1 Myers PO, Fasel JH, Kalangos A, Gailloud P. Arteria lusoria: developmental anatomy, clinical, radiological and surgical aspects. *Ann Cardiol Angeiol.* 2010;59(3):147–54.
- 2 Coles M, Sharma A. Dysphagia lusoria: is the dysmotility connection illusory or real? *Dig Dis Sci.* 2020;65:942–5.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Funding Sources

None.

Author Contributions

Mara Sarmento Costa, João Oliveira Dias, Patrícia Vaz Silva, Cláudia Agostinho, and Paulo Souto were responsible for the patient evaluation. Mara Sarmento Costa was responsible for data acquisition and wrote the manuscript. Mara Sarmento Costa, João Oliveira Dias, Patrícia Vaz Silva, Cláudia Agostinho, Paulo Souto, and Pedro Figueiredo reviewed and approved the manuscript.

Data Availability Statement

All data generated or analyzed during this study are included in this article. Further inquiries can be directed to the corresponding author.