Dysphagia caused by a rare esophageal external compression lesion (with video)

Chenyue Tang¹, Jianwei Zhu², Duanmin Hu², Guilian Chen²
¹Department of Gastroenterology, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu Province, China; ²Department of Gastroenterology, The Second Affiliated Hospital of Soochow University, Suzhou, Jiangsu Province, China

A 41-year-old woman presented to the gastroenterology department with a recent onset of intermittent dysphagia. Physical examination was normal, and no appetite or weight loss was noted. There was no other history of significant serious illness or previous surgery or trauma. Gastroscopy revealed a subepithelial lesion on the anterior wall of the esophagus at the level of carina [Figure 1a]. To evaluate the origin of lesion, the patient was referred to EUS. Moreover, EUS revealed an extrinsic lesion with echoless structures resembling the lumina which connected to the thoracic aorta, and rich blood flow signals were detected by Doppler ultrasonography [Figure 1b and c, Video 1].

Contrast-enhanced computed tomography (CT) was used to further evaluate the lesions and showed multiple lesions with the same density as the aorta in the retrobronchial space, which were suspicious for an aneurysm. However, no obvious evidence of bronchiectasis was found on CT scan. Using three-dimensional reconstruction, it was clearly demonstrated seven aneurysms with varying sizes of the right bronchial artery, which takes an aberrantly tortuous course immediately arising from the descending thoracic aorta [Figure 2a]. Subsequent digital subtraction angiography confirmed the finding [Figure 2b]. On the basis of these findings, the patient was diagnosed with multiple bronchial arterial aneurysms (BAAs) that compressed the esophagus. Then, the patient was transferred to the intervention department for transcatheter arterial embolization. All seven aneurysms were selectively embolized successfully. At 6 months' follow-up, the CT angiogram showed complete thrombosis of all aneurysms and the patient’s symptom improved significantly.

In the current study, we reported a case of BAA diagnosed by EUS. To our best knowledge, only one published case report has described a prospective diagnosis of a BAA provided by EUS to date.[¹] BAA is an uncommon vascular phenomenon but potentially life-threatening once ruptured.[²] In general, most cases of this disease have been reported among patients with chronic pulmonary diseases such as bronchiectasis, pulmonary tuberculosis, and trauma.[³] However, in this case, there was no underlying etiology of BAA, which may be cause misdiagnosis with other abnormal vascular structure. Therefore, it is vital that careful EUS investigation should be performed for any abnormal vascular structure which appearance of esophageal subepithelial lesion. To diagnosis an abnormal vascular

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Tang C, Zhu J, Hu D, Chen G. Dysphagia caused by a rare esophageal external compression lesion (with video). Endosc Ultrasound 2020;9:205-6.
structure by EUS, the origin of the vascularization should be carefully investigated and delineated.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initial will not be published, and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES

1. Meiselman M, Melitas C, Auran T. Esophageal subepithelial nodule: Bronchial artery aneurysm with fistulization to the pulmonary artery (with video). Gastrointest Endosc 2019;89:1063-4.
2. Kim JS, Lee SY, Son KH, et al. Bronchial artery aneurysm presenting as hematemesis and mediastinal hemorrhage. Korean J Thorac Cardiovasc Surg 2015;48:296-301.
3. Bak SH, Han H. Diagnosis of bronchial artery aneurysm by computed tomography: A case report. Radiol Case Rep 2017;12:455-9.