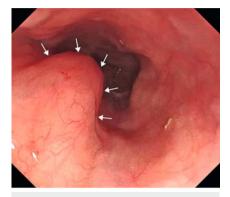
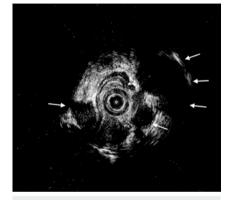
# Abnormal bronchial artery mimicking esophageal submucosal tumor

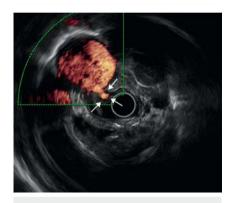




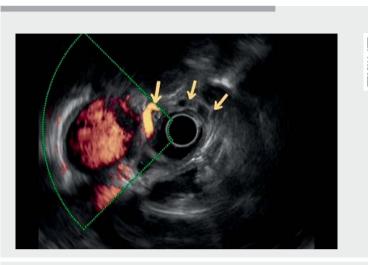
► **Fig.1** A subepithelial lesion (arrows) in the middle esophagus.



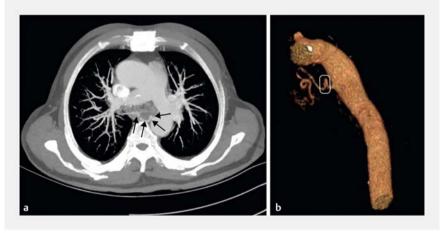
▶ Fig.2 Endoscopic ultrasonography with a miniprobe revealed a soft lesion without motion. The esophageal wall was normal, with anechoic tubular structure (arrows) outside the wall.



► Fig.3 Doppler sonography suggested an abnormal artery communicating (white arrows) with the aorta.



**Video 1** Endoscopic ultrasonography with a miniprobe revealed a soft lesion without motion. The esophageal wall was normal, with anechoic tubular structure outside the wall. Doppler sonography suggested an abnormal artery communicating with the aorta.



**Fig.4** Enhanced computed tomography imaging. **a**, **b** Imaging confirmed the tortuous and dilated bronchial artery, which was causing esophageal compression.

An 80-year-old man presented with a subepithelial lesion in the middle esophagus (**> Fig. 1**). He reported no significant discomfort. His medical history was unremarkable. Physical examination revealed no significant abnormalities.

Endoscopic ultrasonography (EUS) with a miniprobe revealed a soft lesion without motion. The esophageal wall was normal, with anechoic tubular structure outside the wall (> Fig. 2). Doppler sonography suggested an abnormal artery communicating with the aorta (> Fig. 3, > Video 1). Enhanced computed tomography (CT) confirmed the tortuous and dilated bronchial artery, which was causing esophageal compression (> Fig. 4). Thus, the patient was diagnosed with abnormal bronchial artery mimicking esophageal submucosal tumor. As the patient reported no dysphagia or other symptoms, regular follow-up was prescribed [1]. The patient remained well during 6 months of follow-up.

Esophageal submucosal tumors are commonly encountered during clinical practice. Hemangioma, leiomyoma, granular cell tumor, and cyst are common types [2]. In this case, we reported a rare condition of abnormal bronchial artery mimicking esophageal submucosal tumor. Our experience further demonstrates the importance of routine application of Doppler sonography or enhanced CT for determining the nature of submucosal tumors.

Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AC\_3AH

## Acknowledgments

We acknowledge the support from Natural Science Foundation of China (Grant No: 82170675), 1·3·5 project for disciplines of excellence, West China Hospital, Sichuan University (Grant No: ZYJC21011), and Science and Technology Bureau of Ya 'an City 22KJJH0019.

## Funding

Science and Technology Bureau of Ya 'an City 22KJJH0019

1·3·5 project for disciplines of excellence, West China Hospital, Sichuan University ZYJC21011

National Natural Science Foundation of China 82170675

### Competing interests

The authors declare that they have no conflict of interest.

# The authors

## Ou Chen<sup>1, 2\*</sup>, Liansong Ye<sup>1\*</sup>, Li Zhang<sup>3</sup>, Bing Hu<sup>1</sup><sup>©</sup>

- 1 Department of Gastroenterology, West China Hospital, Sichuan University, Chengdu, China
- 2 Department of Gastroenterology, Ya'an People's Hospital, Ya'an, China
- 3 Department of Radiology, Ya'an People's Hospital, Ya'an, China

#### Corresponding author

#### Bing Hu, MD

Department of Gastroenterology, West China Hospital, Sichuan University, 37 Guo Xue Alley, Wuhou district, Chengdu City, Sichuan Province 610041, China hubingnj@163.com

#### References

- Walker CM, Rosado-de-Christenson ML, Martínez-Jiménez S et al. Bronchial arteries: anatomy, function, hypertrophy, and anomalies. Radiographics 2015; 35: 32–49
- [2] Tsai SJ, Lin CC, Chang CW et al. Benign esophageal lesions: endoscopic and pathologic features. World J Gastroenterol 2015; 21: 1091–1098

#### **Bibliography**

Endoscopy 2023; 55: E462–E463 DOI 10.1055/a-2018-4127 ISSN 0013-726X © 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https:// creativecommons.org/licenses/by-nc-nd/4.0/) Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



# ENDOSCOPY E-VIDEOS https://eref.thieme.de/e-videos



Endoscopy E-Videos is an open access online section, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply, discounts and wavers acc. to HINARI are available.

This section has its own submission website at

https://mc.manuscriptcentral.com/e-videos

<sup>\*</sup> Co-first authors.