

## Anterior arytenoid cartilage dislocation, a rare complication of esophagogastroduodenoscopy

Arytenoid cartilage dislocation is a rare complication after tracheal intubation, occurring in less than 0.1% of cases [1, 2]. Here we present a case of arytenoid cartilage dislocation following esophagogastroduodenoscopy (EGD). A man in his sixties underwent EGD as a follow-up examination after endoscopic treatment for early gastric cancer. The examination was carried out with a standard endoscope (GIFH260, Olympus, Tokyo, Japan), under conscious sedation with midazolam (3 mg) and pethidine chloride (35 mg), and was completed uneventfully. After a 1-hour rest in the recovery unit, the patient developed aphonia without any throat pain. Following treatment with dequalinium chloride troches, the patient still had persisting hoarseness and difficulty swallowing 4 days later. Laryngoscopy showed anterior dislocation of the left arytenoid cartilage, with a flaccid and fixed left vocal cord (Fig. 1). Fiberscopic reduction was carried out as an ambulatory procedure, under local anesthesia, and reposition was confirmed on the following day (Fig. 2). The dysphonia and vocal cord movement improved gradually over the next 2 weeks (Fig. 3).

Arytenoid cartilage dislocation presents with hoarseness, dysphagia, throat pain, and stridor. Direct visualization of cricoarytenoid dislocation by laryngoscopy is useful, and early recognition directly impacts treatment success [3]. Only one case of arytenoid dislocation following EGD has been reported in the literature [4], and the incidence of this rare complication is unknown. Endoscopists should be mindful of arytenoid dislocation occurring as a complication after EGD.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AB

Competing interests: None

**N. Kakushima<sup>1</sup>, K. Hotta<sup>1</sup>, M. Tanaka<sup>1</sup>, N. Kawata<sup>1</sup>, H. Sawai<sup>1</sup>, K. Imai<sup>1</sup>, T. Takao<sup>1</sup>, M. Takao<sup>1</sup>, K. Takizawa<sup>1</sup>, H. Matsubayashi<sup>1</sup>, Y. Yamaguchi<sup>1</sup>, H. Ono<sup>1</sup>, T. Onitsuka<sup>2</sup>**

<sup>1</sup> Division of Endoscopy, Shizuoka Cancer Center, Shizuoka, Japan

<sup>2</sup> Division of Head and Neck Surgery, Shizuoka Cancer Center, Shizuoka, Japan

### References

- 1 Yamanaka H, Hayashi Y, Watanabe Y et al. Prolonged hoarseness and arytenoid cartilage dislocation after tracheal intubation. *Br J Anaesth* 2009; 103: 452–455
- 2 Szigeti C, Baeuerle J, Mongan P. Arytenoid dislocation with lighted stylet intubation: Case report and retrospective review. *Anesth Analg* 1994; 78: 185–186
- 3 Sataloff RT, Bough ID, Spiegel JR. Arytenoid dislocation: diagnosis and treatment. *Laryngoscope* 1994; 104: 1353–1361
- 4 Afonso A, Woo P, Reed A. Arytenoid dislocation following upper gastrointestinal endoscopy. *Endoscopy* 2011; 43: E368

### Bibliography

DOI <http://dx.doi.org/10.1055/s-0032-1310072>  
*Endoscopy* 2012; 44: E363  
 © Georg Thieme Verlag KG  
 Stuttgart · New York  
 ISSN 0013-726X

### Corresponding author

**N. Kakushima**  
 Division of Endoscopy  
 Shizuoka Cancer Center  
 1007 Shimonagakubo  
 Nagaizumi  
 Suntogun  
 Shizuoka 411-8777  
 Japan  
 Fax: +81-55-989-5692  
[kakushin-ky@umin.ac.jp](mailto:kakushin-ky@umin.ac.jp)



**Fig. 1** Laryngoscopic view of the anterior dislocation (blue arrows) of the left arytenoid cartilage four days after esophagogastroduodenoscopy (EGD) in an older man.



**Fig. 2** The repositioned arytenoid cartilage 1 day after fiberscopic reduction.



**Fig. 3** There was gradual improvement in the dysphonia and vocal cord movement over the next 2 weeks.