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 (3mg) and pethidine chloride (35mg), 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

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

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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.