Endoscopic submucosal tunnel dissection of a bronchogenic esophageal cyst

A 23-year-old man was admitted to our hospital with the complaint of chest discomfort and dyspnea for the previous 3 months. Upper endoscopy showed a 2.5 × 2.0 cm bulging lesion in the distal esophagus (Fig. 1). Endoscopic ultrasound revealed a 1.1 × 2.5 cm hypoechoic cystic lesion arising from the muscularis propria (Fig. 2). Endoscopic submucosal tunnel dissection (ESTD) was performed using a hybrid knife (ERBE, Tübingen, Germany), and a cystic mass was observed between the mucosa and the muscular layers of the esophagus. On locating the cyst, its yellowish milky fluid content was aspirated. The cyst wall was excised using endoscopic argon plasma coagulation (Fig. 3). Histopathological examination showed a cuboidal epithelium lined cyst wall, which contained cartilage and a few bronchial glands, consistent with a bronchogenic cyst (Fig. 4). The patient remained asymptomatic during follow-up.

The bronchogenic cyst is thought to be a congenital lesion that arises from the primitive foregut with abnormal budding [1]. It has been reported to occur in the mediastinum, lung parenchyma, pericardium, thymus, and so on [1, 2], but the esophageal type is uncommon [2]. At present, complete surgical excision of the cysts by thoracotomy or thoracoscopy is recommended [3]. Sashiyama et al. pub-

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Fig. 1 Upper endoscopy revealing a large bulging lesion in the distal portion of the esophagus, 40 cm from the incisors in a 23-year-old man complaining of chest discomfort and dyspnea.

Fig. 2 Endoscopic ultrasound showing a 1.1 × 2.5 cm hypoechoic cystic lesion arising from the muscularis propria.

Fig. 3 Endoscopic submucosal tunnel dissection of the bronchogenic esophageal cyst. a An esophageal submucosal tunnel was created. b After incision of the cyst, its yellowish milky fluid content spurts out and was aspirated. c The cyst wall was excised using endoscopic argon plasma coagulation. d Endoclips were used to close the entrance to the submucosal tunnel.

Fig. 4 Histopathological examination showed a cuboidal epithelium lined cyst wall, which contained cartilage and a few bronchial glands, consistent with a bronchogenic cyst.
lished a report on an esophageal bronchogenic cyst excised by endoscopic mucosal resection [4]. In our case, we used ESTD for treatment of the bronchogenic esophageal cyst. ESTD is a novel method to treat submucosal tumors arising from the muscularis propria. Several studies have demonstrated that ESTD is effective and safe in removing upper gastrointestinal submucosal tumors from the esophagus and cardia [5]. Compared to surgery, ESTD might be a less complicated and less hazardous option, and offer a minimally invasive approach, especially for those patients who are at high operative risk because of cardiovascular compromise. However, long-term outcomes and complications should be evaluated further.

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Competing interests: None

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References

Bibliography
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Fig. 4 Histopathologic examination showing cuboidal epithelium lining and smooth muscle in the cyst wall.

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