

Special Article - Surgical Case Reports

Thoracoscopic Enucleation of Esophageal Submucosal Tumor

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Abstract

Preoperative diagnosis and surgical approach are critical points in the management of posterior mediastinal lesions. A 77 year-old woman with esophageal submucosal tumor underwent thoracoscopic enucleation of the tumor. Clinically, she presented with dysphagia and epigastric discomfort. The patient was uneventful discharged on postoperative day 3. Postoperative esophagography showed normal patency. Perioperative images are interest.

Keywords: Esophageal submucosal tumor; Thoracoscopic excision; Mediastinal bronchogenic cyst

Introduction

Esophageal submucosal tumor could locate at any area of whole course of the esophagus [1]. The disease usually present with dysphagia that resulted from tumor compression of the esophagus. Here, we present a patient with a 3.6 cm esophageal submucosal tumor. The patient underwent thoracoscopic enucleation of the tumor. We will focus on the thoracoscopic enucleation and perioperative images.

Case Presentation

A 77-year-old woman complained of dysphagia and epigastric discomfort for more than 3 months. Chest film showed normal airways. Esophagography showed submucosal defect at lower thoracic esophagus (Figure 1). Endoscopy revealed a submucosal lesion located at lower thoracic esophagus (Figure 2). Contrast computed tomography revealed a 3.6 cm heterogeneous density bulging mass at the lower esophagus (Figure 3). The surgical procedure was as following; a 4 cm incision was made at left 5th intercostal space of middle axillary line and a port at left 9th intercostal space of posterior axillary line. A 3.6 cm lesion in the lower third esophageal submucosa was carefully dissected free from the adjacent tissue (Figure 4). Operation time was 60 minutes. Histology was proved to be



Figure 1: Esophagography showed a submucosal defect at lower thoracic esophagus.



Figure 2: Chest computed tomography showed a heterogenous density mass at lower thoracic esophagus.



Figure 3: Endoscopic finding showed an esophageal submucosal lesion.

esophageal submucosal gastrointestinal stromal tumor. Postoperative esophagography showed normal patency (Figure 5).

Comments

Different imaging techniques can be used for preoperative diagnosis and differential diagnoses included a duplication cyst, esophageal leiomyoma, pleural fibroma, lymphadenopathy and bronchogenic cyst. Despite improved imaging modalities, a definitive diagnosis remains difficult preoperatively [1]. In the presenting case, esophageal submucosal tumor was diagnosed before surgical

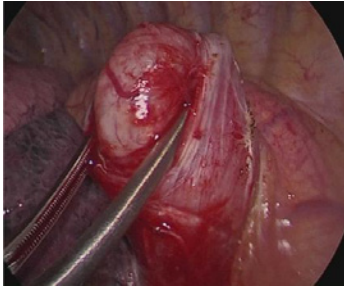


Figure 4: Thoracoscopic findings showed the esophageal submucosal tumor.



Figure 5: Postoperative esophagography showed normal esophagus.

intervention. Esophageal submucosal tumors originating from the muscularis propria layer could be treated using submucosal tunneling endoscopic resection with a high successful rate, even

when the size of the tumor was larger than 35 mm [2]. The above endoscopic procedure had occasional complication that required further treatment [3]. A giant esophageal submucosal tumor has been reported, which required esophagectomy [4]. Thoracoscopic excision of esophageal submucosal tumor was feasible [5]. In our presenting case of esophageal submucosal tumor, thoracoscopic enucleation was very useful because the 3.6 cm tumor was easily identified and excised without difficulty.

References

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