Emergent endoscopic submucosal dissection for a polypoid fibroadipose tumor accidentally disgorged from the mouth: an organ-preserving minimally invasive treatment

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A 74-year-old woman presented with dysphagia. EGD at a previous hospital showed a giant pedunculated polyp from the entrance of the esophagus to the esophagogastric junction. She was referred to our hospital for treatment. On EGD, the polyp was covered with normal epithelium with a swollen and ulcerated head, measuring 17 cm in length. A CT scan revealed an intraluminal tumor in the esophagus with low density and no findings of metastasis (Fig. 1A). Positron emission tomography–CT revealed a highly concentrated area in the esophagus (Fig. 1B). We diagnosed the patient with polypoid fibroadipose tumor of the esophagus or hypopharynx.

In treatment selection, we considered endoscopic resection, including the method of resection, that is, using a snare or endoscopic submucosal dissection (ESD), method of traction, and so on. Further, considering the case if the head size exceeded the esophageal diameter at the entrance, we decided to make the incision in the cervical esophagus or stomach. Subsequently, we performed endoscopy to determine the location and width of the polyp. However, during the examination, a strong vomiting reflex suddenly occurred, and the polyp head was disgorged from the mouth (Fig. 2A-D; Video 1, available online at www.giejournal.org). We found that the polyp could pass through the esophagus and was located mainly at the hypopharynx and partly at the cervical esophagus. ESD using a laryngoscope was considered appropriate, similar to ESD for superficial pharyngeal cancer.[1] Returning the polyp inside the esophagus had a risk of airway obstruction, and resecting the polyp could be easier, pulling the polyp head manually as traction without worry of retrieval. Thus, without returning polyp, we conducted nasotracheal intubation in the endoscopy room and performed emergent ESD in the operating room with the patient under general anesthesia. After elevating the larynx with a laryngoscope to secure a sufficient visual field and working space, we placed marking dots around the base of the polyp. After making a surrounding incision, we dissected the subepithelial layer. Manual traction of the disgorged polyp was effective in identifying the base of the polyp and in resecting the polyp, particularly for subepithelial dissection (Fig. 2E-G). We successfully removed the polyp en bloc and preserved the pharynx. The swallowing and speaking functions were preserved, and airway obstruction was prevented. She was discharged on the 10th postoperative day with no adverse event. The histopathological diagnosis was well-differentiated liposarcoma (Fig. 3A and B). We considered total pharyngolaryngectomy as additional treatment because the resected margin was positive. However, well-differentiated liposarcoma is characterized by slow progression and total pharyngolaryngectomy would not totally deny the future local recurrence. Thus, we did not perform additional treatment. The patient has no recurrence 12 months postoperatively (Fig. 4A and B).

Polypoid fibroadipose tumors of the esophagus and hypopharynx are rare. In particular, liposarcoma of the hypopharynx is extremely rare[2-6] and usually found on the limbs or trunk.[7,8] The diagnostic examinations include EGD, barium esophagogram, CT, and MRI. These tumors of the esophagus and hypopharynx should be resected because they cause not only dysphagia but also the risk of sudden death because of airway obstruction.[3,4,7] They are occasionally malignant, as found after resection in this case; therefore, resection should be the line of treatment. Surgical removal is chosen most frequently[4]; however, it occasionally decreases the quality of life because of both cosmetic outcomes and loss of function. Endoscopic resection is a safe and minimally invasive treatment, but the technical difficulty must be overcome.[3,5,8,9] In this case, we performed emergent ESD of a polypoid fibroadipose tumor, which had accidentally disgorged from the

Abbreviation: ESD, endoscopic submucosal dissection.

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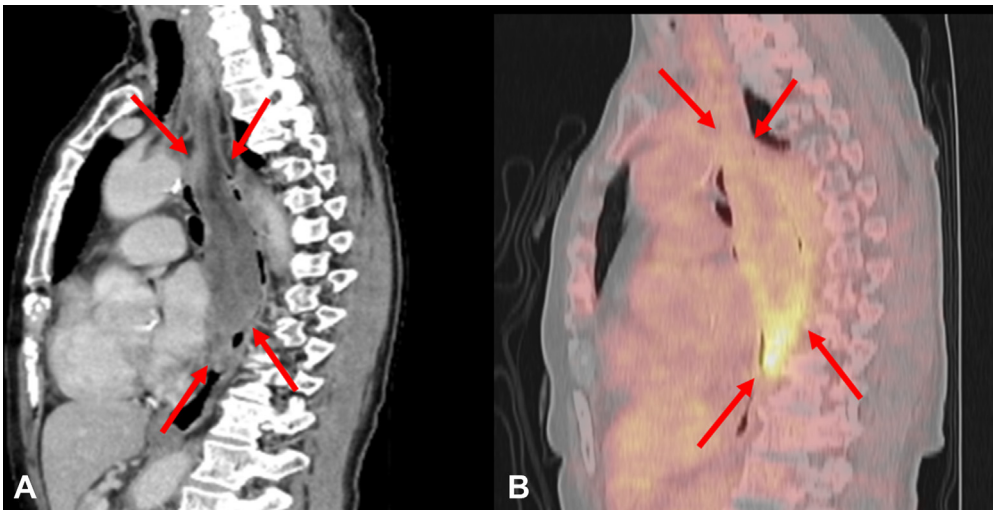

Figure 1. A, A CT scan shows an intraluminal tumor at the esophagus with low density (*red arrows*) and no findings suggestive of metastasis. **B**, Positron emission tomography–CT shows a highly concentrated area (*red arrows*), predominantly in the lower esophagus, which is the ulcerated head of the polyp observed via EGD.

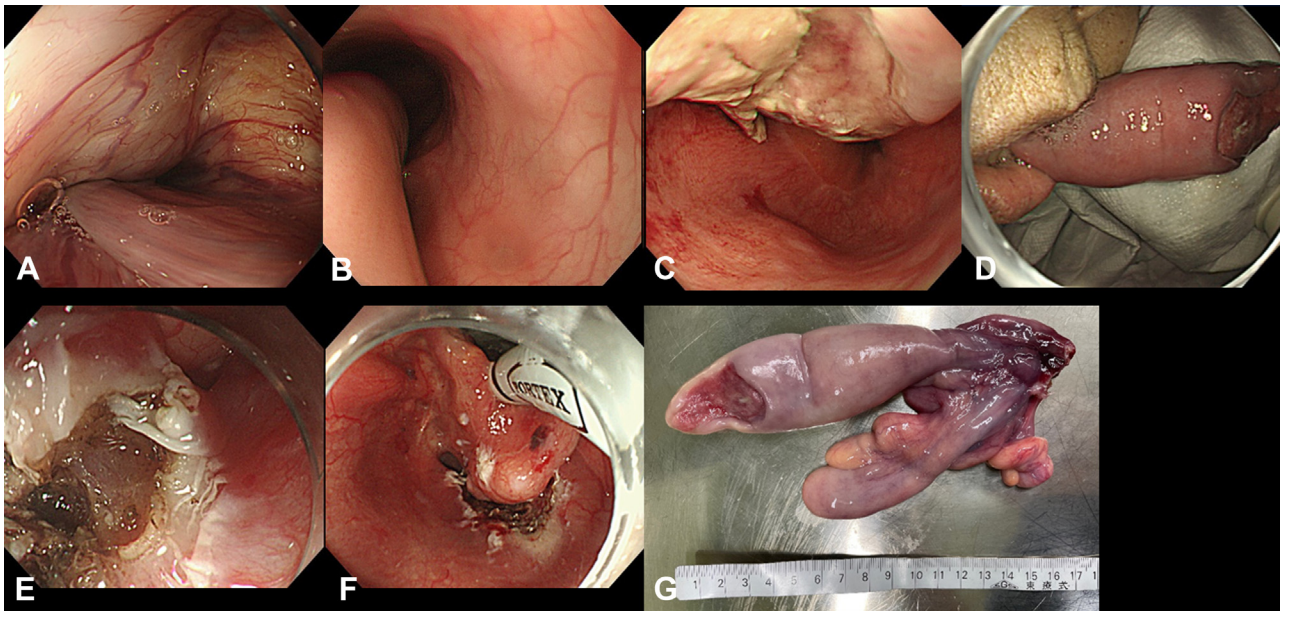

Figure 2. A, EGD shows that the stalk of the polyp is mainly at the hypopharynx. **B**, The polyp is lined by normal mucosa. **C**, The polyp extends to the lower esophagus, and the polyp head is ulcerated. **D**, The polyp is disgorged from the mouth. **E**, The polyp is resected from the base. **F**, The polyp is totally removed by endoscopic submucosal dissection. Procedure duration was 87 minutes from marking to completion of endoscopic submucosal dissection. We did not use antibiotics during the perioperative period. **G**, The resected polypoid fibroadipose tumor accompanies the ulcerated head.

esophagus, without adverse events while preventing airway obstruction and preserving swallowing and speaking functions.

DISCLOSURE

The authors disclosed no financial relationships.

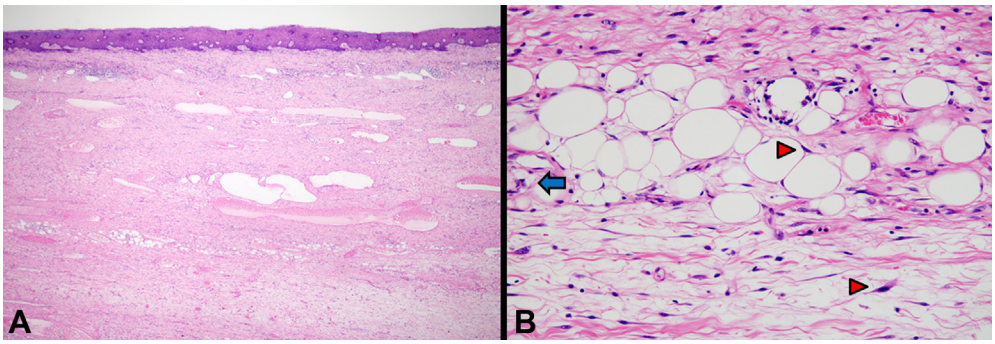

Figure 3. A, The polyp comprises adipose, fibrous, and vascular tissue components. The surface of the lesion is covered with nonneoplastic squamous epithelium. **B**, In high-power magnification, atypical stromal cells with hyperchromatic enlarged nuclei (*red arrowheads*) and lipoblast (*blue arrow*) are observed, and diagnosed with well-differentiated liposarcoma.

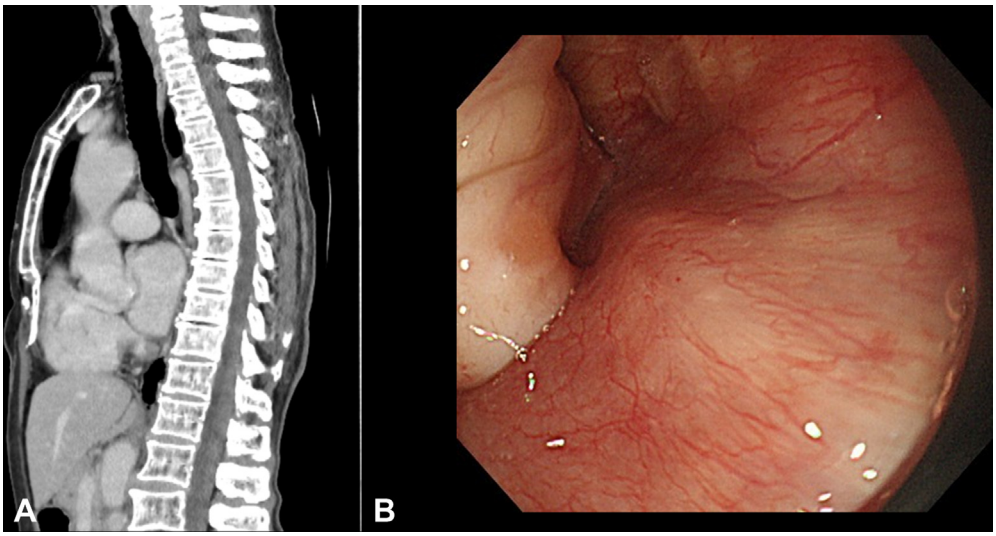

Figure 4. A, A follow-up CT scan showed no tumor at the esophagus. **B**, We could see the scar of endoscopic submucosal dissection in the posterior wall of hypopharynx in follow-up EGD.

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