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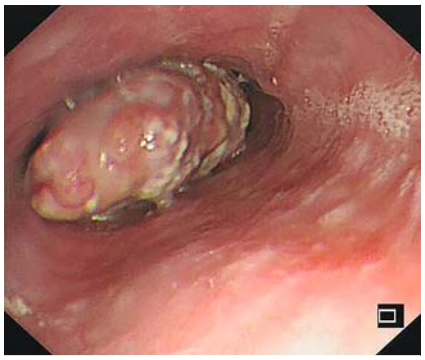
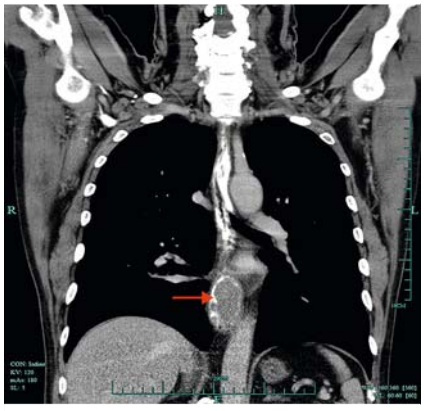
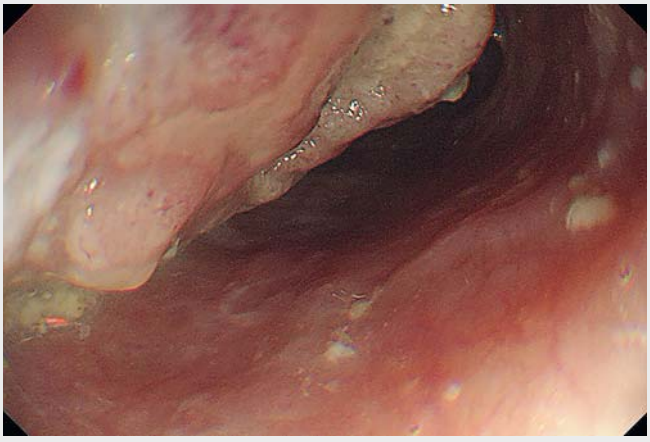
Unusual case of a protruding mass in the esophagus successfully treated by endoscopic submucosal dissection



▶ **Fig. 1** Endoscopic view of the mass in the esophagus.



▶ **Fig. 2** Contrast-enhanced computed tomography scan (coronal plane) showing an intraluminal mass (red arrow) in the lower esophagus.



Video 1 Endoscopic submucosal dissection is performed to remove a large polypoid esophageal mass.

A 65-year-old man presented with a history of progressive dysphagia for 1 month. His physical examination and blood tests showed no abnormalities. He underwent upper gastrointestinal endoscopy three times, which showed a bulky protruding mass in the esophagus at 34 – 39 cm from the incisors (▶ **Fig. 1**). Pathologic findings all revealed inflammatory hyperplasia of epithelial cells and subepithelial granulation tissue. A contrast-enhanced computed tomography (CT) scan showed an intraluminal mass in the lower esophagus (▶ **Fig. 2**), with no evidence of mediastinal lymphadenopathy or any metastases in the chest or abdominal organs. After a multidisciplinary team discussion, we performed endoscopic submucosal dissection (ESD) (▶ **Video 1**), and the lesion was successfully resected en bloc (▶ **Fig. 3**).

Histopathology revealed malignant squamous cells on the surface and sarcoma-like spindle cells in the stroma (▶ **Fig. 4**). The malignant squamous cells were well differentiated and invading the muscularis mucosa. The sarcoma-like components showed no significant dysplasia with only reactive fibroblastic proliferation and inflammatory granulocytic infiltration. Immunohistochemistry showed the squamous cells stained positively for cytokeratin and the stromal cells for vimentin. These findings are consistent with the general features of esophageal pseudosarcoma, which is a rare subtype of spindle cell carcinoma (SpCC) [1]. SpCC is characteristically a polypoid mass with intermingled spindle cell and squamous cell components [2]. Psuedosarcoma was identified by Lane as a sub-

▶ **Fig. 3** Macroscopic appearance of the resected tumor specimen.

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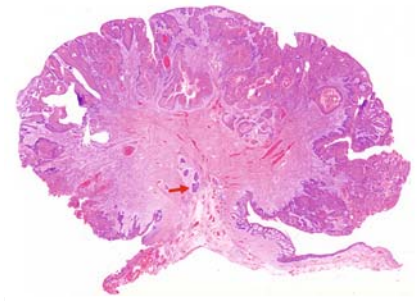
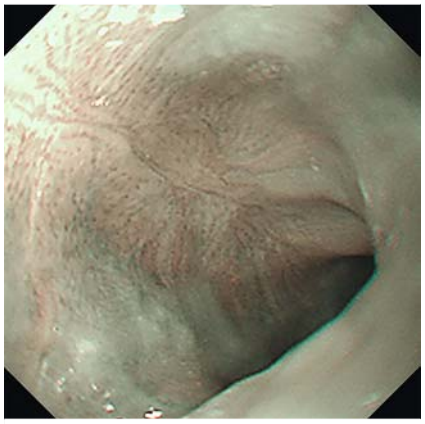


▶ **Fig. 4** Histopathological appearance of the tumor showing a polypoid tumor with bulky sarcoma-like components and superficial malignancy, with invasion of squamous carcinoma cells into the muscularis mucosa (red arrow).



▶ **Fig. 5** Surveillance endoscopy with narrow-band imaging after 6 months showing a well-healed scar and no evidence of tumor.

type of SpCC in which the epithelial cells are carcinomatous while the sarcoma-like cells are a non-neoplastic, reactive fibroblastic proliferation [3].

The patient did not undergo further surgical resection or chemoradiotherapy owing to the early staging (T1aN0M0) of the tumor. Surveillance endoscopy after 6 months showed satisfactory wound healing and no residual or recurrent tumor (▶ **Fig. 5**). To the best of our knowledge, this is the first reported case of a pseudosarcoma treated by ESD. ESD allows accurate evaluation of the tumor and can hopefully provide curative resection for early lesions.

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Competing interests

The authors declare that they have no conflict of interest.

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