

Early adenocarcinoma originating in submucosal gland of thoracic esophagus presenting as submucosal tumor

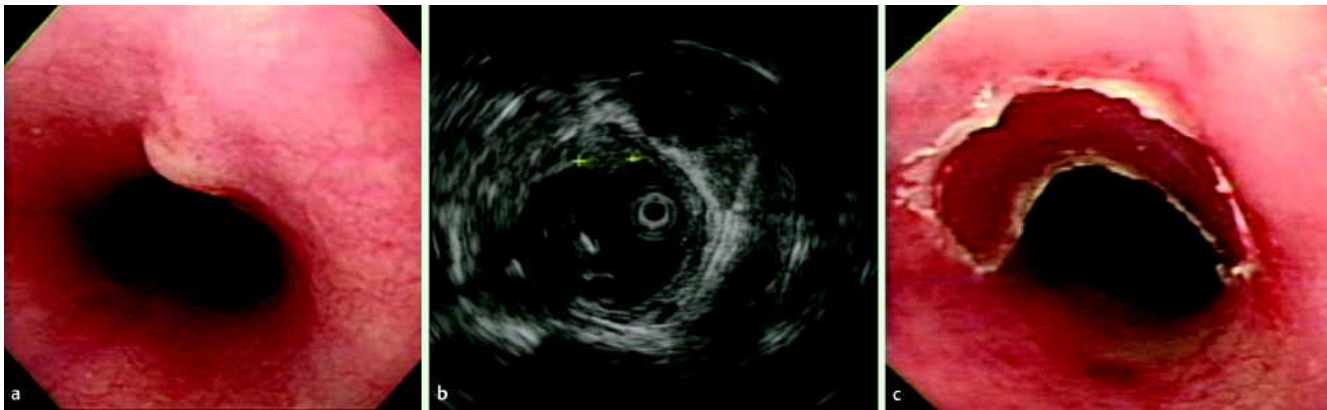


Fig. 1 Endoscopic images of the esophageal lesion. **a** Initial endoscopic appearance. **b** Endoscopic ultrasound image. **c** Endoscopic appearance after mucosectomy.

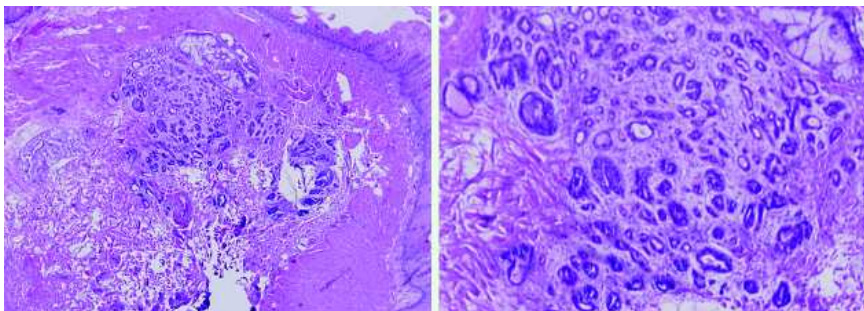


Fig. 2 Histopathological analysis showed a tubular adenocarcinoma arising in the submucosal glands (H&E stain; $\times 40$).

The most common malignant neoplasm of the esophagus is squamous cell carcinoma. The majority of adenocarcinomas of the esophagus originate in the esophago-gastric junction, Barrett's esophagus, or ectopic gastric mucosa [1]. Adenocarcinoma arising in a submucosal gland of the esophagus beneath the squamous epithelium is rare [2].

A 43-year-old woman with an esophageal submucosal lesion about 1 cm in size, located 24 cm from the incisors (● Fig. 1 a), underwent endoscopic ultrasonography that revealed an isoechoic lesion about 0.5 cm in size over the deep mucosal and submucosal layers of the esophageal wall (● Fig. 1 b).

The patient underwent endoscopic mucosal resection using the cap method (EMRC) without complications (● Fig. 1 c).

The resected specimen measured $1 \times 0.5 \times 0.5$ cm. Microscopically, a submucosal tumor composed of distorted tubular glands with an infiltration growth pattern was noted. The tumor was confined to the submucosa without involvement of either overlying epithelium or muscularis propria. Diagnosis was a tubular adenocarcinoma arising in the submucosal glands (● Fig. 2).

After an explanation of the risks of possible aggressive behavior of adenocarcinoma of the esophagus, the patient still refused surgery or adjuvant radiation therapy. To date (18 months of follow-up), there has been no evidence of recurrence or metastasis.

There were some concerns: increased depth of tumor invasion increases the risk of lymph node metastases [3], and endoscopic therapy for tumors with submucosal invasion may overlook this risk.

Therefore, there are still debates about endoscopic mucosal resection as a treatment for early esophageal cancer [4,5]. In our reported case, the adenocarcinoma arose in the submucosal gland, not in epithelium. The definition of this tumor as "early stage" may be somewhat controversial.

In this case, we considered that local treatment alone was not contraindicated, since both endoscopic image and pathological section showed complete resection, and endoscopic ultrasonography and chest CT scan gave no evidence of lymph node metastasis.

Endoscopy_UCTN_Code_CCL_1AB_2AC_3AB

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Bibliography

DOI 10.1055/s-2008-1077680
Endoscopy 2008; 40: E237–E238
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ISSN 0013-726X

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