Endoscopic submucosal dissection of a neoplastic lesion in the epiglottis

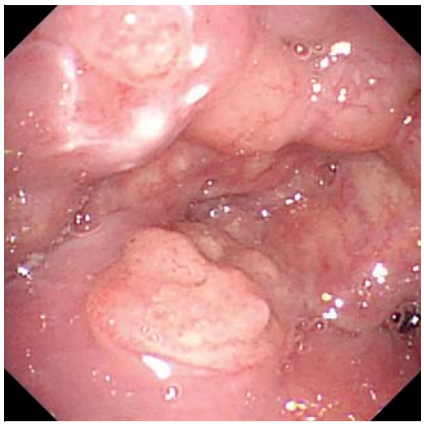
The traditional methods of surgical treatment for supraglottic squamous cell carcinoma (SCC) include open supraglottic laryngectomy, transoral robotic surgery, and transoral laser surgery [1, 2]. These surgical methods cause the patient not only great physical damage but also, as a consequence, a certain economic burden [3]. Exploring the possibilities of endoscopic resection for early lesions is therefore very worthwhile.

An early neoplastic lesion was found in the epiglottis of a 63-year-old man. His history showed that 2 years previously he had undergone extensive resection of SCC of the left hypopharynx and base of the tongue. Six months later he had undergone endoscopic submucosal dissection (ESD) of the right piriform fossa, and a further 6 months later (1 year before the current admission) esophageal ESD was performed. The neoplastic lesion in the epiglottis was found during the regular postoperative nasopharyngeal laryngoscopy.

The lesion was about 1.2 cm × 0.7 cm in size and was assessed as a superficial raised lesion (0-IIa) with B1 and B2 type intraepithelial papillary capillary loops (IPCL) (▶ **Fig. 1**, ▶ **Fig. 2**). The biopsy histopathological finding was SCC. The boundary of the lesion was clear on narrow-band imaging and Lugol chromoendoscopy. Enhanced computed tomography (CT) showed no evidence of metastasis.

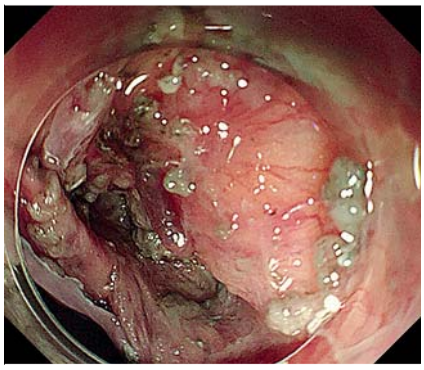
ESD was performed to remove the lesion; no adverse events were observed (▶ **Fig. 3**, ▶ **Fig. 4**; ▶ **Video 1**). Pathology results revealed poorly differentiated SCC and showed that curative resection was achieved. On routine follow-up, gastroscopy and CT scan showed no recurrence or lymph node metastasis.

Despite the restricted space in the epiglottis, adopting ESD to treat SCC of the epiglottis has the advantages of (1) enabling curative resection with a clear margin in the whole surgical field and (2) ease of operative technique via flexible endoscopy, which is minimally invasive and maintains organ integrity.

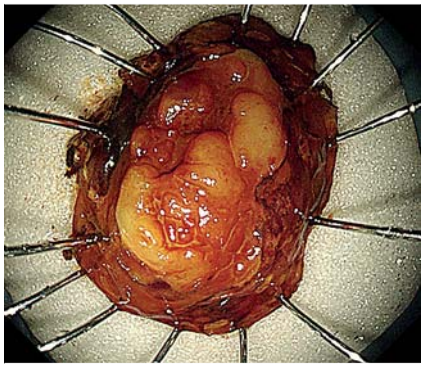


▶ **Fig. 1** An early neoplastic lesion in the epiglottis of a 63-year-old man.

▶ **Fig. 2** The early neoplastic lesion in the epiglottis under narrow-band imaging.



▶ **Fig. 3** Artificial ulcer after endoscopic submucosal dissection.



▶ **Fig. 4** Surgical specimen of the lesion removed by means of endoscopic submucosal dissection.

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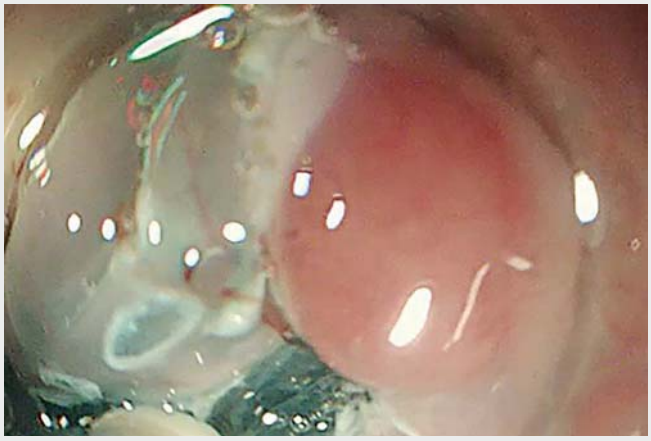
Competing interests

The authors declare that they have no conflict of interest.



Video 1 Early neoplastic lesion in the epiglottis resected by endoscopic submucosal dissection.

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