

Early-stage laryngeal squamous cell carcinoma of the epiglottis treated by endoscopic submucosal dissection

Recent efforts by gastrointestinal endoscopists have enabled detection of laryngeal and pharyngeal cancer at an early stage, especially in Japan [1–3]. In addition, endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) [4] have recently been used for treatment of hypopharyngeal cancer at an early stage. In this report, we describe for the first time a case of early-stage laryngeal carcinoma that was successfully treated by ESD.

A 61-year-old man was admitted to Hokkaido University Hospital because of a laryngeal cancer, which was found by follow-up endoscopy after EMR of esophageal cancer. The patient had a history of heavy smoking and alcohol consumption. On endoscopic examination, a round, flat-elevated lesion measuring 1.5 × 1.0 cm was noted on the front right part of the epiglottis (● Fig. 1). The surface was reddish and granular without any ulcerations. A whole-body CT scan demonstrated no lymphadenopathy. ESD was performed with the patient under general anesthesia. Submucosal dissection was done with a needle knife, and was performed successfully without complications (● Fig. 2a). Histopathologic examination of the resected specimen showed that squamous cell carcinoma had very slightly invaded the subepithelial layer (● Fig. 2b,c). The margins of the resected specimen were free histologically. There was no invasion into veins or lymph vessels. There has been no recurrence during a follow-up period of 9 months after ESD. In this case, by using the ESD technique, an en-bloc resected specimen and accurate histological evaluation were obtained without the occurrence of any complication such as injury to the epiglottis. Gastrointestinal endoscopy can now provide images of higher quality than those obtained by laryngoscopy. Gastrointestinal endoscopists should strive to find supraglottic cancer at an early stage in the laryngeal area for pa-

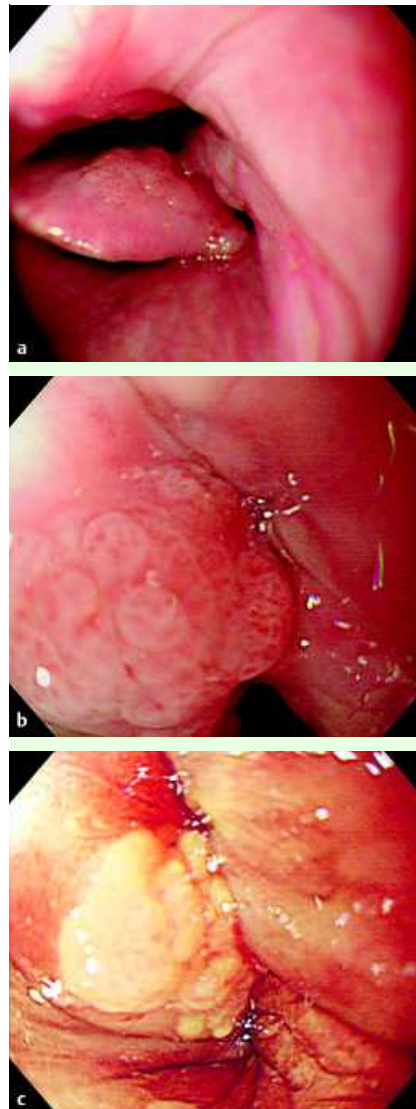


Fig. 1 Endoscopic view showing the right suprahoid epiglottis of larynx. **a** Distant view showing granular elevated erythematous lesion. **b** Close-up view showed an area of reddish dots on the lesion. **c** Endoscopic iodine staining showed an unstained area that conformed with the lesion.

tients in the high-risk group such as heavy drinkers and heavy smokers [3], and of course it is necessary to cooperate with the otolaryngologist to treat.

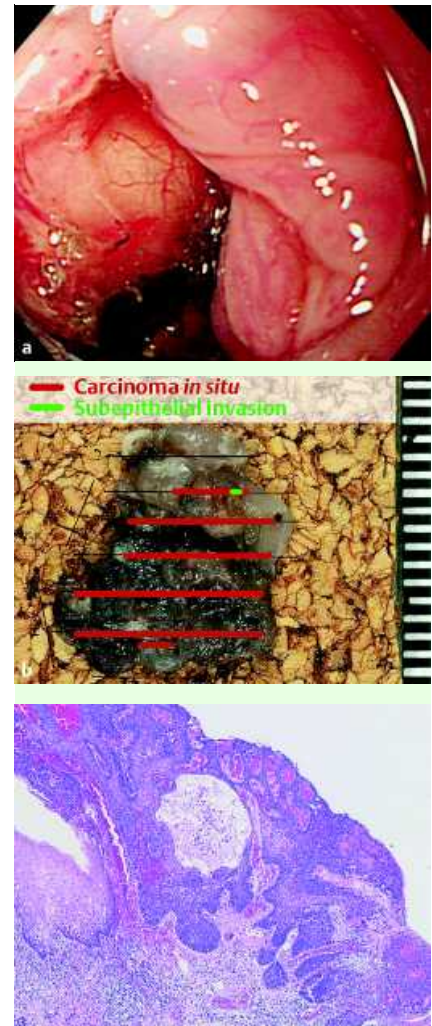


Fig. 2 Complete resection of the tumor by submucosal dissection (ESD). **a** After the ESD, the cartilaginous tissue of the epiglottis under tumor was visible through the transparent subepithelial layer. **b** Macroscopic image of the resected specimen. **c** Photomicrograph of the ESD specimen showing the lesion elevated from the epithelial mucosa and very slight invasion into the subepithelial layer (hematoxylin & eosin; original magnification × 200).

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T. Yoshida¹, Y. Shimizu², J. Hirota¹,
M. Nakagawa¹, S. Ono², N. Oridate³,
M. Kato², M. Asaka¹

¹ Department of Gastroenterology,
Hokkaido University Graduate School of
Medicine, Sapporo, Hokkaido, Japan

² Division of Endoscopy, Hokkaido Univer-
sity Hospital, Sapporo, Hokkaido, Japan

³ Department of Otolaryngology,
Hokkaido University Graduate School of
Medicine, Sapporo, Hokkaido, Japan

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Corresponding author

T. Yoshida, MD

Department of Gastroenterology
Hokkaido University Graduate School of Medicine
Division of Endoscopy
Hokkaido University Hospital
Nshi-7, Kita-15, Kita-ku, Sapporo
Hokkaido 060–8638
Japan
Fax: +81-11-7067867
peugeot307ccs16@yahoo.co.jp