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A case of achalasia associated with early esophageal cancer

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Keywords: Achalasia. Esophageal cancer. Peroral endoscopic myotomy. Endoscopic submucosal dissection.

Dear Editor,

A 65-year-old male was admitted to our hospital due to reflux for more than 20 years. After endoscopy and barium-swallow examination (Fig. 1A), he was diagnosed



with achalasia and a squamous cell carcinoma. Therefore, peroral endoscopic myotomy (POEM) combined with endoscopic submucosal dissection (ESD) was performed simultaneously. During the procedure, a mucosal erosion with a clear boundary was shown in the middle segment of the esophagus (Fig. 1B). ESD was first performed and the lesion was removed *en bloc* (Fig. 1C). Subsequent POEM therapy was performed after marking the left esophageal wall 10 cm above the cardia. After submucosal injection, the submucosal plane was created through a longitudinal 2 cm incision; then, the muscle was cut to a length of 10 cm into the esophagus and 2 cm below the cardia; and finally, the incision was closed using clips (Fig. 1D and E). Pathological examination revealed high-grade intraepithelial neoplasia of squamous epithelium (carcinoma *in situ*) with a negative margin (Fig. 1F). The patient recovered without complications four days after the procedure. The endoscopy showed perfect healing of the esophageal lesions during two-months of follow-up, and the reflux symptoms were resolved.

Discussion

Achalasia is a rare esophageal motility disorder and is considered as a precancerous lesion. Studies have shown that esophageal cancer in patients with achalasia was often detected at an advanced stage with an inferior prognosis. This is possibly due to achalasia masking the symptoms of esophageal cancer, as well as insufficient attention to the disease (1,2). Notably, in this case, an early esophageal cancer was found incidentally by the endoscopy. The ESD was successfully performed and *en bloc* resection achieved. However, there is no guideline for esophageal cancer screening in patients with achalasia (3). ESD has been a conventional therapy for early esophageal cancer. Furthermore, it has also been reported that ESD assisted by water pressure method (WPM) and magnifying endoscopy can be successfully performed in difficult cases (4). Therefore, we should pay attention to endoscopic monitoring of patients with achalasia.

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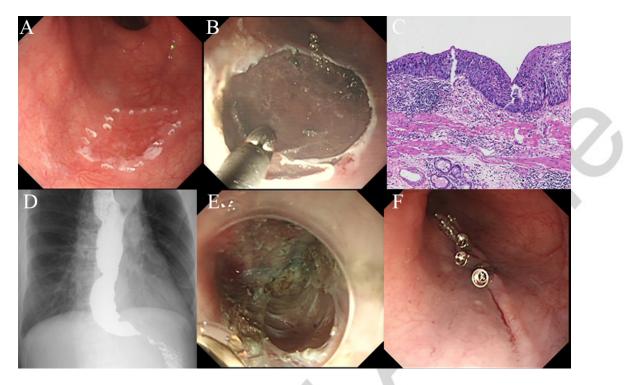


Fig. 1. A. A mucosal erosion in the middle part of the esophagus was marked. B. The lesion was removed by endoscopic submucosal dissection (ESD). C. Pathological findings: high-grade intraepithelial neoplasia of squamous epithelium (carcinoma *in situ*). D. Barium-swallow examination revealed achalasia. E. Myotomy during peroral endoscopic myotomy. F. Clip closure of the esophageal incision.