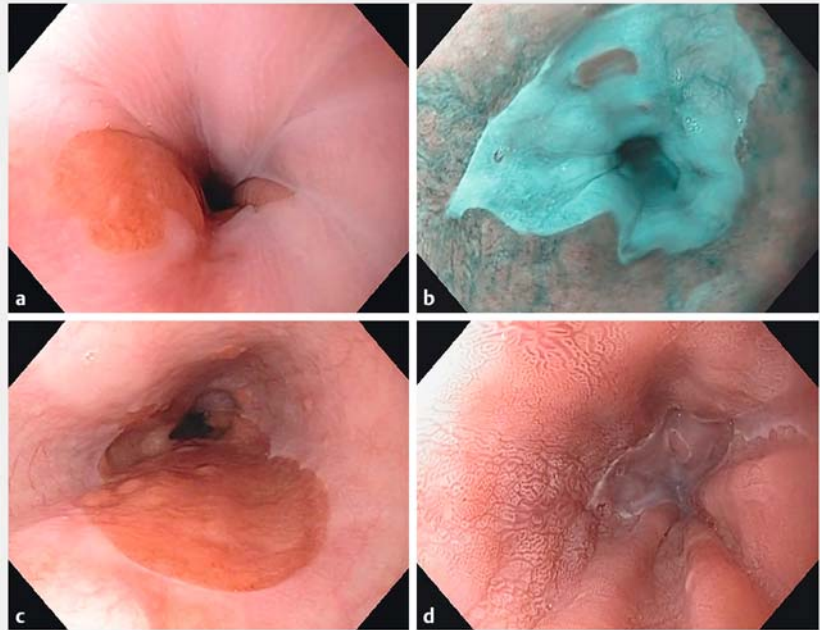


## Long esophageal inlet patch as a rare cause of laryngopharyngeal symptoms

A 31-year-old woman presented to our department with nonspecific laryngopharyngeal symptoms, such as globus sensation, regurgitation, and heartburn, which she had experienced for a few years. Her medical history was irrelevant. An esophagogastroduodenoscopy revealed an irregular Z-line in the distal esophagus without evidence of Barrett's esophagus (► **Fig. 1 a**), and an area of ectopic gastric mucosa in the mid-proximal esophagus, 8 cm in length and at 35 to 27 cm from the incisors, involving more than half of the esophageal lumen (► **Fig. 1 b**, ► **Video 1**). Inspection with white-light endoscopy, narrow-band imaging (NBI), and acetic acid staining showed a columnar mucosal pattern with few discrete mucosal irregularities (► **Fig. 1 c, d**). Numerous biopsies revealed a fundic-type gastric epithelium with areas of moderate inflammation with no evidence of intestinal metaplasia or dysplasia (► **Fig. 2**).

Esophageal gastric heterotopia, also called inlet patch, is a rare, most likely congenital condition with prevalence ranging from 6.9% to 13.8% in recent endoscopic studies [1,2]. It is defined as areas of gastric mucosa in the esophagus – typically in its proximal part, although it can also be seen in other parts of the esophagus [3]. Proximal inlet patches are usually small [1], and can be easily missed on routine gastroscopy. The use of advanced imaging techniques, such as NBI, increases the detection rate [4]. Most inlet patches are asymptomatic; however, because of their acid secretion characteristics, they may cause a variety of laryngopharyngeal symptoms including regurgitation, globus sensation, heartburn, and chronic cough [1]. Although rare, complications such as strictures, fistulas, ulcerations, and malignant transformation have been reported. In symptomatic patients, the treatment options include gastric acid secretion inhibitors or endoscopic treatment, such as argon plasma coagulation or radio-

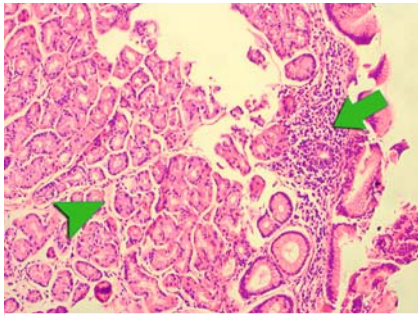


► **Fig. 1** Endoscopy images. **a** Irregular Z-line in the distal esophagus (40 cm from the incisors). **b** Proximal border of the inlet patch (27 cm from the incisors). **c** Distal border of the inlet patch seen in narrow-band imaging. **d** Central part of the inlet patch (30 cm from incisors) after acetic acid staining.



► **Video 1** Endoscopy showing an 8-cm-long inlet patch in the mid-proximal esophagus examined with white-light imaging, narrow-band imaging, and after acetic acid staining.





► **Fig. 2** Histopathological examination ( $\times 100$ , hematoxylin and eosin staining): fundic-type gastric epithelium with gastric glands (arrowhead) and moderate inflammation (arrow).

frequency ablation [5]. The patient described here has been treated with long-term proton pump inhibitors, ranitidine and prokinetic drugs, and has not required any additional treatment in the year following presentation.

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### Competing interests

None

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