Peroral endoscopic myotomy for an achalasia patient with multiple esophageal diverticula

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Dear Editor,

Peroral endoscopic myotomy (POEM) has been proved to be safe and effective for treating achalasia; however, the presence of esophageal diverticulum increases the technical difficulty. In this letter, we report a case of POEM for achalasia with concomitant multiple esophageal diverticula.

Case report

A 57-year-old female patient presented to our hospital due to a 2-year history of vomiting. She was diagnosed with achalasia and received botulinum toxin injection three months before; however, the symptoms relapsed. Upon presentation, the Eckardt score was 6. Esophagostroduodenoscopy revealed accompanied esophageal diverticulum (Fig. 1A). Timed-barium swallow was consistent with achalasia and multiple diverticula (Fig. 1B).

She received POEM therapy. After submucosal injection, a longitudinal mucosal incision was made to create the tunnel entry. A submucosal tunnel was created, and the endoscope was drawn out of the tunnel to make submucosal injections to preset tunnel routes during tunnel creation, in order to avoid the site of diverticula. After circular myotomy (Fig. 1C), several metal clips were applied close to the mucosal entry (Fig. 1D). She was discharged after a 5-day hospital stay and her symptoms were resolved. Six months after POEM the patient was asymptomatic and the Eckardt score had decreased to 1, although the diverticula were still present.

Discussion

POEM is initially used for treating achalasia. Recently, a similar technique has also been reported for the treatment of esophageal diverticulum by performing a myotomy at the opposite side of it. This case report describes a patient with multiple diverticula on the opposite side of the esophagus, thus making POEM possible. However, the case report is limited by the small number of patients and the lack of long-term follow-up. Further studies will be needed to determine the efficacy and safety of POEM in patients with both achalasia and esophageal diverticulum.
myotomy on the opposite site. We used submucosal injection with a mixed solution containing indigo to preset tunnel routes, which was initially modified for sigmoid-type achalasia (1). This modification could help direct the tunnel straight to the stomach and also avoid myotomy at the site of the diverticulum.

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References