

## Letters to the Editor

### Peroral endoscopic myotomy for an achalasia patient with multiple esophageal diverticula

**Key words:** Achalasia. Esophageal diverticulum. Peroral endoscopic myotomy.

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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. Esophagogastroduodenoscopy revealed accompanied esophageal diverticula (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

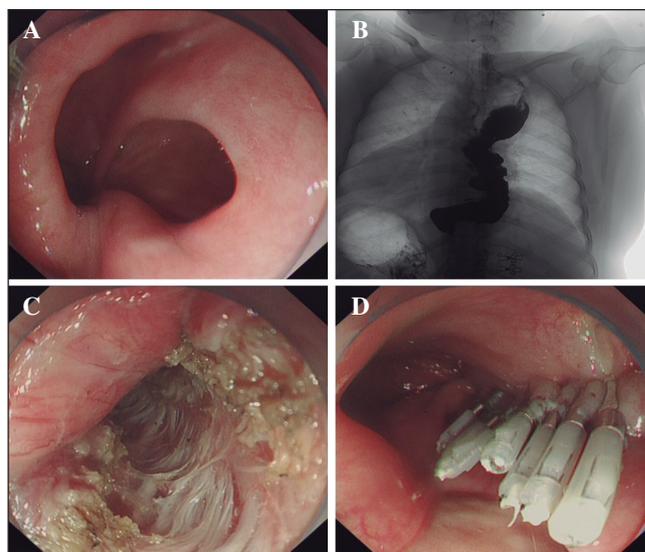


Fig. 1. A. Endoscopic image of the diverticulum. B. Esophagography revealed achalasia with multiple diverticula. C. Circular myotomy during peroral endoscopic myotomy. D. The mucosal entry was closed with several clips.

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. In the present case, multiple diverticula were found in the opposite orientation, thus it was not possible to perform

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.

Yuyong Tan, Hongyi Zhu and Deliang Liu  
(liudeliang1964@163.com)

*Department of Gastroenterology. The Second Xiangya Hospital of Central South University. 410011 Changsha, Hunan. China*

### References

1. Lv L, Liu J, Tan Y, et al. Peroral endoscopic full-thickness myotomy for the treatment of sigmoid-type achalasia: Outcomes with a minimum follow-up of 12 months. *Eur J Gastroenterol Hepatol* 2016;28:30-6. DOI: 10.1097/MEG.0000000000000491