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Blown-out myotomy as a cause of symptomatic recurrence after POEM: endoscopic management

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Conflicts of interest

The authors confirm that they have no conflicts of interest.

Blown-out myotomy (BOM) is an uncommon but clinically relevant structural complication described after surgical or peroral endoscopic myotomy (POEM) in patients with achalasia. It is characterized by the formation of a wide-mouthed pseudodiverticulum at the site of the previous myotomy, associated with impaired esophageal emptying and symptomatic recurrence (1,2). We report a case of BOM after POEM that was successfully managed using a sequential endoscopic approach.

A 58-year-old man with type III achalasia was initially treated with POEM using a posterior approach, achieving an initially favorable clinical response. Six months later, he developed recurrence of dysphagia and regurgitation. Upper gastrointestinal endoscopy and esophagogram revealed a pseudodiverticulum in the distal third of the esophagus, not present in previous studies, consistent with BOM (Figure 1). High-resolution manometry showed persistence of a spastic segment in the mid-esophageal body, with adequate relaxation of the lower esophageal sphincter.

Given the persistence of spastic contractility in the esophageal body, a second POEM targeting this segment was performed, but it did not achieve sustained clinical improvement. Because the septum of the pseudodiverticulum was thin and poorly defined, endoscopic septotomy was considered too high a risk for perforation and was therefore ruled out. Finally, a third POEM using an anterior approach was performed due to suspected insufficient distal decompression. During this procedure, muscular hypertrophy was noted on the anterior aspect of the lower esophageal sphincter, and a targeted myotomy was performed to optimize esophageal emptying.

Following this last procedure, the patient achieved complete and sustained resolution of symptoms, with significant weight gain and notable improvement in quality of life. No complications were noted during clinical or endoscopic follow-up.

BOM has been reported as a cause of therapeutic failure after POEM, with a reported incidence ranging from 17% to 30% in recent series (1,2). Its pathophysiology involves focal weakness of the esophageal wall at the myotomy site, subjected to high pressures in the presence of residual functional obstruction or persistent spastic contractility (2,3). Type III achalasia is a recognized risk factor for its development (2).

Currently, no consensus exists regarding the management of symptomatic BOM. Reported treatment options include repeat POEM targeting residual spastic segments and endoscopic septotomy of the pseudodiverticulum in selected cases (4,5). Our case illustrates that, even when manometry shows apparently adequate relaxation of the lower esophageal sphincter, more effective decompression via an alternative approach may be necessary to achieve proper esophageal emptying.

In conclusion, BOM should be considered in the differential diagnosis of patients with symptomatic recurrence after POEM. Careful structural and functional reevaluation is essential to guide management. Endoscopic intervention may be a safe and effective option in selected cases.

REFERENCES

1. Kuipers T, Ponds FA, Fockens P, et al. Focal Distal Esophageal Dilation (Blown-Out Myotomy) After Achalasia Treatment: Prevalence and Associated Symptoms. *Am J Gastroenterol.* 2024;119(10):1983-9. DOI: 10.14309/ajg.0000000000002816
2. Triggs JR, Krause AJ, Carlson DA, et al. Blown-out myotomy: an adverse event of laparoscopic Heller myotomy and peroral endoscopic myotomy for achalasia. *Gastrointest Endosc.* 2021;93(4):861-868.e1. DOI: 10.1016/j.gie.2020.07.041
3. El Abiad R, Ashat M, Khashab M. Complications related to third space endoscopic procedures. *Best Pract Res Clin Gastroenterol.* 2024;71:101908. DOI: 10.1016/j.bpg.2024.101908.
4. Zhang ZC, Xu JQ, Pan HT, et al. Peroral endoscopic myotomy for symptomatic blown-out myotomy following previous myotomy for achalasia. *Endoscopy.* 2025;57(8):876-82. DOI: 10.1055/a-2552-8282.
5. Sakaguchi H, Tanaka S, Abe H, et al. A new treatment for blown-out myotomy, a diverticulum formed after peroral endoscopic myotomy. *Endoscopy.* 2024;56 (Suppl 1):E74-5. DOI: 10.1055/a-2226-9356

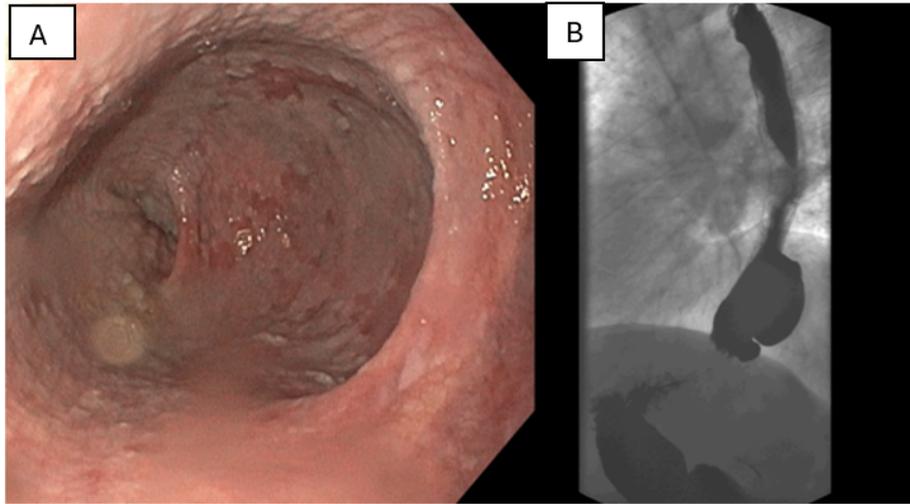


Figure 1. Blown-out myotomy after POEM. (A) Pseudodiverticulum visualized on endoscopic imaging. (B) Wide-mouthed diverticulum seen on esophagogram.