IMAGE OF THE ISSUE

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Modified Open Submucosal Tunnel Dissection for the Treatment of A Huge Submucosal Tumor in the Lower Esophagus

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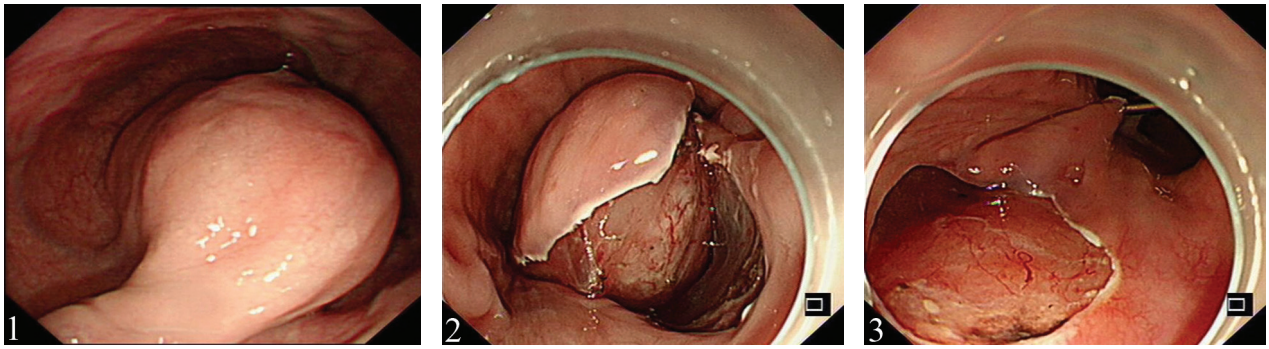

Endoscopic submucosal tunnel dissection (ESTD) is an established technique for esophageal submucosal tumors (SMTs), yet large masses near the cardia present challenges. We reported a 38-year-old male presented with postprandial abdominal distension and discomfort. Imaging and identified a 3.5×4.0 cm smooth-surfaced mass in the distal thoracic esophagus (Supplementary file S1), originating from the muscularis propria layer, with no central ulceration (Fig. 1). Due to its size and proximity to the cardia, a modified ESTD procedure was performed. A mucosal incision was created 3 cm proximal to the oral margin of the tumor followed by submucosal tunneling. Intraoperative visual impairment necessitated a mucosal incision on the tumor surface (Fig. 2). The partially dissected mass was translocated into the gastric fundus via this window to enhance exposure of the tumor-cardia interface. Dissection was completed along the muscularis propria plane under direct vision (Fig. 3). The specific endoscopic operation and simple schematic diagram were shown in Supplementary File S2, S3. The specimen was extracted orally, and the mucosal entry site was closed using repositionable clips. Histopathology confirmed a benign spindle cell leiomyoma with negative margins. Postoperative management included 48-hour fasting, proton pump inhibitors, antibiotics, and nutritional support. The patient commenced a liquid diet on day 3 and was discharged on day 4 without complications. For this giant esophageal tumor, EUS localized its origin within the muscularis propria.

Unlike conventional ESTD which initiates tunneling at the tumor edge [1], we created the entry 3 cm proximally, a key modification to avoid submucosal adhesions and ensure en bloc resection. Impaired visualization of the distal edge near the cardia was overcome by transferring part of the mass into the gastric cavity [2]. The mucosal defect, unlike open techniques [3], was systematically closed with hemostatic clips to reduce delayed bleeding. These ESTD modifications enabled safer, more efficient, and complete resection of large cardia-adjacent tumors.

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Conflicts of interest: None to declare.

Supplementary material: To access the supplementary material visit the online version of the *J Gastrointestin Liver Dis* at http://dx.doi.org/10.15403/jgld-6523

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