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## Laterally Cut-Tunneling Technique for Resection of Esophagus Submucosal Tumor

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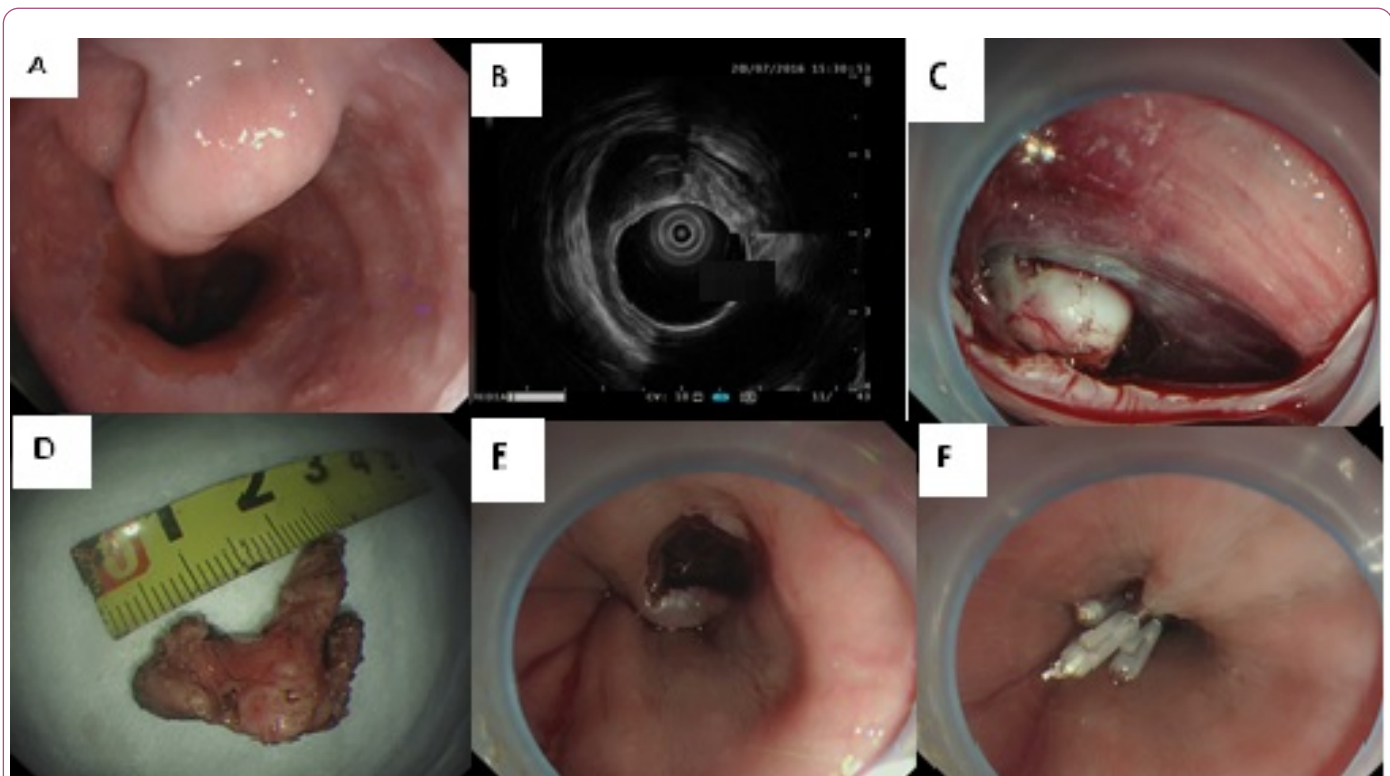
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### Image Description

With the development of endoscopic technology, endoscopic resection of gastro esophageal Sub Mucosal Tumors (SMTs) may be gradually accepted [1,2]. An esophagus sub mucosal tumor was successfully resected by laterally cut-tunneling technique (LC-TT)-a modified endoscopic method for endoscopic tunneling resection. The procedures of Endoscopic resection are as follows:

- Selecting the edge marking lesions to be incised.

- Lifting the lesions sufficiently with sub mucosal injection.
- Dissecting and exposing part of the tumors along the semiarc of the mucosa on one side of the marked lesions.
- Establishing tunnels: Separating sub mucosa along the surface of the tumors to the anal side of the tumors about 0.5-1 cm and removing the lesions along the envelope of the tumors.
- Closing the tunnel portal titanium clips. LC-TT provides an alternative to the resection of gastro esophageal SMTs.



**Figure 1** An esophagus submucosal tumor was successfully resected by laterally cut-tunneling technique (LC-TT). A modified endoscopic method for endoscopic tunneling resection. (A) Submucosal tumor near the dentate line; (B) Ultrasound gastroscopy showed that the mass was located in the intrinsic muscular layer; (C) Aterally cut-tunneling technique to expose the tumor body; (D) Resection of the specimen of the tumor; (E) Tunnel opening after resection of the tumor; (F) Closed the tunnel portal with titanium clips.

The tunnel portal can be effectively closed using the titanium clips, even if perforation has occurred. Tumors can be found directly to improve the efficiency of peeling; retaining the surface mucosa of the tunnel can reduce the surface of wound and facilitate to closed it completely; even if perforation occurs, the closure of the tunnel opening is similar to that of POEM and STER, but the tunnel opening is smaller than that of EFR and ESE [3-5] and the closure is relatively easy, needing no pocket suture, the operation time is further shortened. It is demonstrated that the LC-TT in treating gastro esophageal SMTs originating from the MP layer is feasible and safe (**Figure 1**).

## References

1. Zhou DJ, Dai ZB, Wells MM, Yu DL, Zhang J, et al. (2015) Submucosal tunneling and endoscopic resection of submucosal tumors at the esophagogastric junction. *World J Gastroenterol* 21: 578.
2. Mori H, Kobara H, Nishiyama N, Masaki T (2018) Current status and future perspectives of endoscopic full-thickness resection. *Dig Endosc* 30: 25-31.
3. Khashab MA, Saxena P, Valeshabad AK, Chavez YH, Zhang F, et al. (2013) Novel technique for submucosal tunneling and endoscopic resection of submucosal tumors (with video). *Gastrointest Endosc* 77: 646-648.
4. Reinehr R (2015) Endoscopic Submucosal Excavation (ESE) is a safe and useful technique for endoscopic removal of submucosal tumors of the stomach and the esophagus in selected cases. *Z Gastroenterol* 53: 573-578.
5. Lv XH, Wang CH, Xie Y (2017) Efficacy and safety of submucosal tunneling endoscopic resection for upper gastrointestinal submucosal tumors: A systematic review and meta-analysis. *Surg Endosc* 31: 49-63.