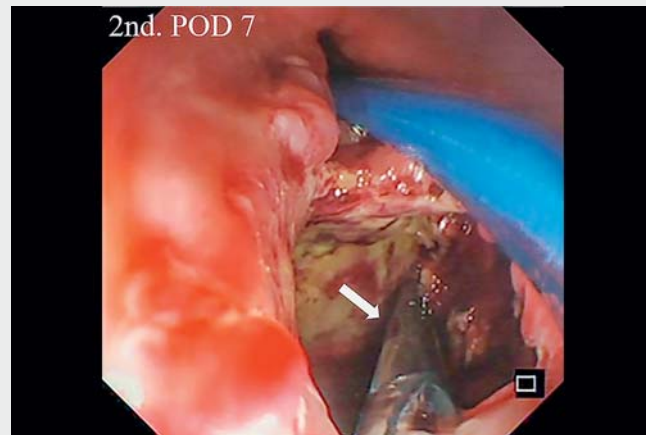


Management of an esophagopleural fistula after resection of giant submucosal tumor of the cardia

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A 24-year-old woman was admitted with a large mass derived from the muscularis propria of the esophagus and the cardia. Submucosal tunneling endoscopic resection was performed. The size of the specimen was 10×10cm, and the post-operative pathology was leiomyoma with red degeneration. After the tumor was removed, a huge tunnel cavity was left. We used metal clips to clamp the tunnel entrance (► **Video 1**).

On postoperative Day (POD) 4, the patient presented chest tightness and shortness of breath. Computed tomography (CT) examination showed the formation of an esophagopleural fistula. The second gastroscopy (POD 7) revealed an esophageal fistula with 1.0 cm mucosal defect at the lower esophagus (► **Fig. 1 a, b**). After entering the thoracic cavity through the esophageal fistula, the necrotic tissue was cleaned and a gastric tube was placed into the cavity for drainage through the esophageal mucosal defect (► **Fig. 1 c**). The third gastroscopy (POD 11) showed that the residual cavity was obviously smaller than before drainage (► **Fig. 2 a**). On POD 22, gastroscopy revealed that the esophageal wounds near the cardia had

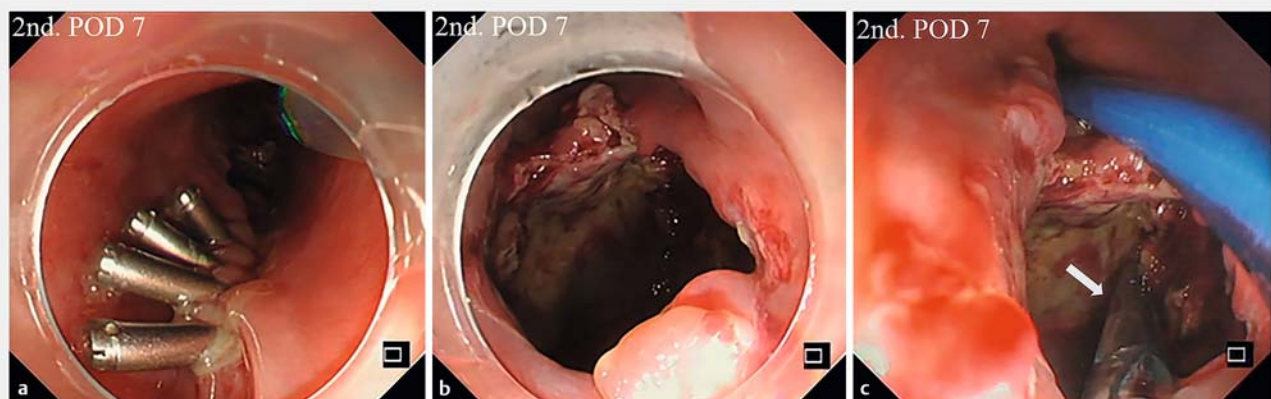


► **Video 1** A gastric tube (arrow) was inserted into the cavity for drainage through the esophageal mucosal defect during the second and third gastroscopies. The esophageal wounds had almost healed by postoperative Day 22.

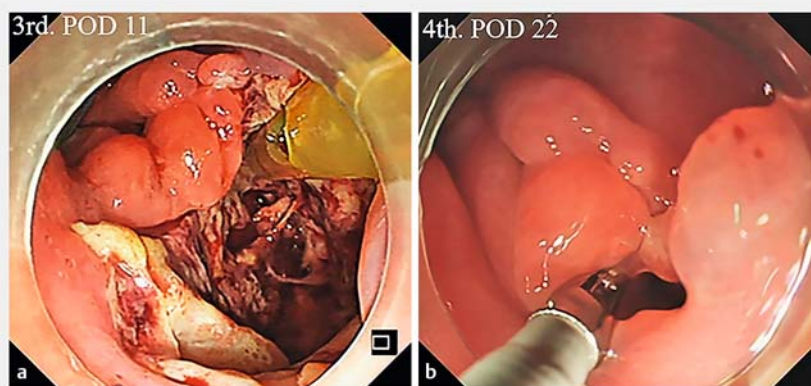
almost healed (► **Fig. 2 b**), and CT showed that pleural effusion and atelectasis had improved markedly. The patient started drinking liquids 2 days later and was discharged the next day. For the huge cavities left after endoscopic resection of large tumors or those caused by postoperative fistula, we can perform

prophylactic drainage by placing a tube through the tunnel mouth, and applying negative pressure suction to keep the cavity closed and to drain the effusion, in order to facilitate wound healing.

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► **Fig. 1** The second gastroscopy on postoperative Day 7. **a** An esophageal fistula with 1.0 cm mucosal defect was seen at the lower esophagus. **b** Fresh granulation tissue and some necrotic tissues were seen in the residual cavity. **c** A gastric tube (arrow) was placed into the cavity for drainage through the esophageal mucosal defect.



► **Fig. 2** The third and fourth gastroscopies. **a** The third gastroscopy showed that the residual cavity was obviously smaller than before drainage. **b** The fourth gastroscopy showed that the esophageal wounds near the cardia were almost healed.

Bibliography

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