

Performing The Unthinkable: Endoscopic Retrieval Of A Retained Nasogastric Tube Using An Olympus Loop Cutter Following A Thoracoscopic Ivor Lewis Oesophagectomy.

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INTRODUCTION

The incidence of adenocarcinoma located at the gastroesophageal junction (GEJ) has increased dramatically in recent decades despite a decrease in the overall incidence of gastric cancer in Western countries. Minimally invasive techniques, including robotic-assisted minimally invasive esophagectomy (RAMIE), have become increasingly common in the surgical treatment of oesophageal cancer. Postoperative feeding methods for oesophageal cancer patients often include jejunostomy and nasogastric tube (NGT) feeding. However, the necessity of NGT post-esophagectomy remains controversial, with studies suggesting no significant difference in postoperative complications whether or not NGT decompression is used. This case report details the endoscopic removal of a nasogastric tube that was inadvertently sutured at the esophagogastric anastomosis following a thoracoscopic Ivor Lewis Esophagectomy

CASE REPORT

A 62-year-old woman underwent a thoracoscopic Ivor Lewis Esophagectomy for a Siewert 2 esophagogastric junction adenocarcinoma. The procedure included a side-to-side anastomosis using an Endo GIA stapler and closure with a V - Loc suture. A 16-Fr nasogastric tube was placed to aid with enteral feeding and anastomotic healing. On postoperative day 12, the patient experienced persistent odynophagia following enteral feeding. Esophagogastroduodenoscopy revealed that the nasogastric tube was caught in one of the anastomotic sutures. An Olympus Loop Cutter (Figure 1) was used to release the tube without disturbing the suture. Postoperatively, the patient developed a right pleural effusion, suspected to be due to an anastomotic leak, and required percutaneous drainage, prolonging recovery. A barium contrast study revealed a small leak, managed conservatively (Figure 2). Although the patient initially recovered well, she experienced persistent odynophagia upon resuming oral feeding and required nasogastric tube reinsertion.

DISCUSSION

The use of nasogastric tubes in esophagectomy patients is controversial. Historically, NGTs were used for postoperative decompression and drainage to reduce pulmonary and anastomotic complications. However, recent evidence suggests that routine NGT placement does not provide the expected benefits and may introduce unnecessary risks. The Olympus Loop Cutter, while not designed for suture cutting, was effectively used in this case to endoscopically release the nasogastric tube. This approach prevented the need for reoperation, which is associated with increased mortality and hospital costs following minimally invasive Ivor Lewis esophagectomy.



Figure 1.0: The Gross Appearance Of The Tip Of Reusable Olympus Loop Cutter



Figure 2.0: Barium Study Showing Anastomotic Leak Near The Neo-Oesophagus - Gastric Pull Up Junction Anastomosis

CONCLUSION

To avoid inadvertently suturing the NGT to the anastomosis, strategies such as removing the tube during laparoscopic repair or meticulous suturing techniques should be employed. While the Olympus Loop Cutter is not intended for cutting sutures, it can be used as a salvage tool in the absence of endoscopic scissors to remove a retained NGT. Re-operative surgery should be considered only when endoscopic approaches fail.

REFERENCES

1. Devesa SS, Blot WJ, Fraumeni JF Jr. Changing patterns in the incidence of esophageal and gastric carcinoma in the United States. Cancer 1998;83:2049-53.
2. van Boxel GI, Kingma BF, Voskens FJ, et al. Robotic-assisted minimally invasive esophagectomy: past, present, and future. J Thorac Dis. 2020;12(2):54-62.
3. Huang K, Wu B, Ding X, et al. Post-esophagectomy tube feeding: a retrospective comparison of jejunostomy and a novel gastrostomy feeding approach. PLoS One. 2014;9(3):e89190.
4. Zhang R, Zhang L. Feasibility of complete nasogastric tube omission in esophagectomy patients. J Thorac Dis. 2019;11(Suppl 5):S819-S823.