

## AB136. SOH22ABS026. Omission of intra-operative pyloric procedures in minimally invasive esophagectomy: what is the impact on patients?

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**Background:** Pyloroplasty or pyloromyotomy is often undertaken during esophagectomy to aid gastric emptying post-operatively. Minimally invasive esophagectomy (MIE) frequently omits a pyloric procedure. The impact on peri-operative outcomes and the need for subsequent interventions is unclear. This study assesses the requirements for endoscopic balloon dilation of the pylorus (EPD) following MIE.

**Methods:** Patients undergoing MIE from 2016–2020 were reviewed. Patients undergoing open resection, an intraoperative pyloric procedure and total gastrectomy were excluded. Demographic, clinical, and pathological data were reviewed. Univariable and multivariable analysis were performed as appropriate.

**Results:** In total, 171 patients underwent MIE. There were no differences in age (median 65 vs. 65 years, P=0.60), pathological stage (P=0.10) or ASA status (P=0.52) between those requiring and not requiring EPD. Forty-three patients (25%) required EPD, with a total of 71 procedures. Twenty-seven patients (16%) had EPD on their index admission. Seventy-five patients (43%) had a post-operative complication. There was a correlation between complications and the requirement for EPD both on the index admission (P<0.001) and subsequently (P<0.001). On multivariable analysis, there was no association between the need for a pyloric procedure and

overall survival (P=0.14). Eight patients (5%) required insertion of a feeding jejunostomy in the post-operative period, with no difference between those with or without EPD (P=0.11). Two patients required subsequent surgical pyloromyotomy for delayed gastric emptying.

**Conclusions:** Pyloroplasty or pyloromyotomy can be excluded during MIE at the expense of a significant number of post-operative EPD procedures. The impact of excluding pyloric procedures on gastric emptying requires further study.

**Keywords:** Complications; endoscopy; esophagectomy; minimally invasive; pyloroplasty

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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