Pyloroplasty or pyloromyotomy is often undertaken during esophagectomy to improve conduit function and potentially reduce complications. Minimally invasive esophagectomy (MIE) frequently omits a pyloric procedure. The impact on peri-operative outcomes and the need for subsequent interventions on the pylorus are unclear. This study assesses the requirements for endoscopic balloon dilation of the pylorus (EPD) following MIE.

Patients undergoing MIE from 2016–2020 were reviewed. Patients undergoing hybrid or open resection, or an intraoperative pyloric procedure were excluded. Demographic, clinical, and pathological data were reviewed. Data on the need for post-operative EPD in the short- and long-term settings were recorded. Univariable and multivariable analysis were performed as appropriate.

171 patients underwent MIE. There were no differences in age (p = 0.6), stage (p = 0.10) or ASA status (p = 0.52) between those requiring and not requiring EPD. Forty-three patients (25%) required EPD. 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 EPD and overall survival (p = 0.14). Eight patients (5%) required insertion of a feeding jejunostomy. Two patients underwent surgical pylorotomy for delayed gastric emptying.

Although pyloroplasty or pyloromyotomy can safely be excluded during MIE, a quarter of patients will require post-operative EPD procedures, for delayed gastric emptying or as part of management of post-operative complications. The impact of excluding pyloric procedures on gastric emptying requires further study.

317. ABSOLUTE LYMPH NODE YIELD AND LYMPH NODE RATIO ARE PREDICTORS OF SURVIVAL AND IMPORTANT QUALITY METRICS IN ESOPHAGEAL CANCER SURGERY
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Surgical resection following neoadjuvant therapy remains the cornerstone of curative management of esophageal cancer. In spite of this, there remains uncertainty regarding the optimal radicality of lymphadenectomy, and whether increasing lymph node yields confer a true survival benefit. This study aims to assess the impact of lymph node (LN) yield and LN ratio on the need for post-operative EPD in the short- and long-term settings.

Three hundred seven patients underwent esophagectomy, with 288 having a minimally invasive operation (MIE). Stage (stage 3 HR: 1.64 (1.02–2.62), p = 0.04, stage 4 HR: 2.50 (1.43–5.01), p = 0.001), margin status (HR: 2.62 (1.57–4.36), p < 0.001), LN yield <15 (HR: 2.62 (1.57–4.36), p < 0.001) and elevated LN ratio (HR: 8.42 (2.85–24.90, p < 0.001) predicted survival. Patients undergoing MIE had higher LN yields compared with open (30.7 vs 25.3, p < 0.001). LN yield and high LN ratio are associated with reduced overall survival. Maintaining a LN yield >15 should remain a key quality metric. A LN ratio of 0.05 was associated with a significant survival benefit.

318. PRE-TREATMENT CRP AND ALBUMIN DETERMINES PROGNOSIS FOR UNRESECTABLE ADVANCED ESOPHAGEAL CANCER
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Nutritional disorders due to cancer-related weight loss, such as cancer-impaired food passage, are prominent in many cases in advanced oesophageal cancer. Here, we investigated the nutritional factors that most affect the therapeutic effect and prognosis of unresectable oesophageal cancer.

One hundred four patients diagnosed with cT4b oesophageal squamous cell carcinoma were included in this study. The values of C-reactive protein/albumin ratio, Glasgow Prognostic Score, prognostic nutritional index, neutrophil/lymphocyte ratio and platelet/lymphocyte ratio were calculated from the pre-treatment blood sampling results of the patients who received chemoradiotherapy, and the therapeutic effect and prognosis were analysed. High- C-reactive protein/albumin group and Glasgow Prognostic Score 1 or 2 group showed significantly worse prognosis compared with the low- C-reactive protein/albumin group and Glasgow Prognostic Score 0 group in both disease-specific survival and overall survival.

Evaluation of pre-treatment CRP and albumin value in locally advanced oesophageal cancer leads to useful prognostic prediction.

319. SIGNIFICANCES OF EXPRESSION OF TOLL-LIKE RECEPTORS IN ESOPHAGEAL SQUAMOUS CELL CARCINOMA CELLS
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Well known risk factors of Esophageal squamous cell carcinoma (ESCC) are habit of alcoholic drinking, smoking and poor diet. Moreover, recent reports showed that poor oral health is associated with upper aerodigestive tract malignancies including ESCC. We previously reported that among 232 ESCC patients who had preoperative assessment of oral function by dentist, about 70% of patients were diagnosed with periodontitis and about half of those patients were needed dental extraction. Toll-like receptors (TLRs), a family of pattern recognition receptors, are able to recognize pathogen-associated molecular patterns (PAMPs) recognized with a wide range of viruses, bacteria, fungi and parasites and thus play key roles in innate immune responses. Among these TLRs, TLR4 recognizes LPS, which construct the cell wall of gram-negative bacteria. Based on these findings, it is supposed that continuous exposure of LPS from gram-negative periodontal bacteria induces chronic inflammation caused by inflammatory cytokines from TLR4 signals, then carcinogenesis and progression of ESCCC occurs.

Figure 1. a) Correlation matrix demonstrating significant correlation between TRG, IC50 and EC50 in patient organoids with LA disease treated with cisplatin. b) Graphical representation demonstrating correlation matrix.