246. ALBUMIN AND DERIVED NEUTROPHIL-TO-LYMPHOCYTE RATIO IS A NOVEL PROGNOSTIC FACTOR FOR PATIENTS WITH ESOPHAGEAL SQUAMOUS CELL CARCINOMA
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Various nutritional and inflammatory biomarkers have been reported to be associated with cancer prognosis, but most studies have focused on conditions before neoadjuvant chemotherapy (nCT). Developing real-time biomarkers reflecting changes in systemic conditions during nCT is important. We established a novel biomarker, represented as the albumin to derived neutrophil-to-lymphocyte ratio (Alb-dNLR ratio), and calculated the change in Alb-dNLR ratio (ΔAlb-dNLR) during nCT. We aimed to evaluate whether ΔAlb-dNLR is associated with prognosis in ESCC patients.

We investigated 172 patients who underwent nCT before esophagectomy between April 2010 and March 2018. Alb-dNLR was calculated as the ratio of albumin count to (white blood cell count—neutrophil count). Alb-dNLR ratio was calculated by dividing serum albumin level by dNLR, and ΔAlb-dNLR was evaluated by dividing the post-nCT Alb-dNLR ratio by the pre-nCT Alb-dNLR ratio. Patients were divided into ‘high’ and ‘low’ groups according to ΔAlb-dNLR.

Thirty-nine patients (22.7%) had a low ΔAlb-dNLR (<0.8). The 5-year overall survival (OS) rates in patients with low and high ΔAlb-dNLR were 38.1% and 53.6%, respectively (p = 0.0072). Multivariate analyses demonstrated that estimated blood loss (p = 0.044), pathological T stage (p = 0.0003), and ΔAlb-dNLR (p = 0.005) were independent prognostic factors for OS. ΔAlb-dNLR is a useful prognostic factor for OS in patients with ESCC receiving nCT.

247. IMPACT OF INCREASING LYMPH NODE YIELD ON STAGING, MORBIDITY AND SURVIVAL AFTER ESOPHAGECTOMY FOR ESOPHAGEAL ADENOCARCINOMA
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For esophageal malignancies, leading oncological centers advocate transthoracic esophagectomy, including routine en-bloc resection of the thoracic duct for adequate mediastinal lymphadenectomy. However, mediastinal lymphadenectomy may increase survival, but also increase morbidity. This study analyses the impact of chyle leakage following esophagectomy for esophageal adenocarcinoma, without increasing morbidity. Extended lymphadenectomy is therefore a valuable adjunct to multimodal treatment, and should be standard of care in esophageal cancer surgery, irrespective of choice of neoadjuvant therapy.

Chyle leakage was present in 43/314 included patients (14%); of whom 24 (56%) were classified as severity A and 19 (44%) as severity B. All patients were successfully treated with either medium chain triglyceride diet (98%) or total parenteral feeding (2%). There were no re-interventions for chyle leakage during initial admission, although one patient needed additional pleural drainage during re-admission. Patients with chyle leakage had 3 days longer duration of thoracic drainage and hospital stay.

Chyle leakage is a frequently occurring complication following esophagectomy with resection of the thoracic duct and extensive lymphadenectomy, with substantial clinical consequences. Even though non-surgical treatment was successful in all patients with chyle leakage in this series, chyle leakage impeded postoperative recovery. Future research should focus on reducing the incidence of chyle leakage after esophagectomy.

250. PROGNOSTIC FACTORS ASSOCIATED WITH 18FDG-PET/CT IN ESOPHAGEAL SQUAMOUS CELL CARCINOMA AFTER TRIMODALITY TREATMENT
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Patients with locally advanced and potentially curable esophageal cancer (EC) should receive trimodality treatment, which involves neoadjuvant concurrent chemoradiotherapy (nCRT) followed by esophagectomy. The maximum standard uptake value (SUVmax) in SUV of 18FDG-PET/CT have been reported to be useful in predicting the prognosis of EC patients treated with nCRT and subsequent esophagectomy. We aimed to determine the pathological response in patients with EC after trimodality therapy and to investigate the prognostic factors associated with SUVmax.

248. IMPACT OF INCREASING LYMPH NODE YIELD ON STAGING, MORBIDITY AND SURVIVAL AFTER ESOPHAGECTOMY FOR ESOPHAGEAL ADENOCARCINOMA
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Extended lymphadenectomy during esophagectomy for esophageal cancer may increase survival, but also increase morbidity. This study analyses changes in lymph node yield over time in a tertiary referral center, and investigates the influence of lymph node yield after transthoracic esophagectomy for esophageal adenocarcinoma on the number of positive lymph nodes, pathological N-stage, complications, and survival.

Consecutive patients undergoing transthoracic esophagectomy with gastric conduit reconstruction for esophageal adenocarcinoma between January 2010 and December 2020 were prospectively recorded (follow-up until January 2022). Lymph node yield was analyzed as continuous and dichotomous variable (≤30 vs. ≥31 nodes). The effect of lymph node yield on number of positive lymph nodes, complications, disease-free and overall survival was assessed in multivariable regression analyses.