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INTRODUCTION: During esophagectomy for cancer, there is no agreement yet if prophylactic thoracic duct ligation (TDL), with or without its thoracic duct resection (TDR), could influence the perioperative complications and the long-term survival. This systematic review and meta-analysis compared patients who went through esophagectomy associated or not to ligation or resection of thoracic duct.

METHODS: A systematic review was conducted in PubMed, Embase, Cochrane Library Central and Lilacs (BVS). The inclusion criteria were: (1) studies that compare thoracic duct ligation, with or without resection, and non-thoracic duct ligation; (2) involve adult patients with esophageal cancer; (3) articles that analyses the outcomes - perioperative complications, perioperative mortality, chylothorax development and overall survival; (4) only clinical trials and cohort were accepted. A 95% confidence interval (CI) was used, and random effects model was performed.

RESULTS: Fourteen articles were selected. TDL did not influence the risk for complications (risk difference [RD]: 0.04; 95% CI: -0.08, 0.17); chylothorax (RD: 0.01; 95% CI: -0.00, 0.02); mortality (RD: 0.00; 95% CI: -0.00, 0.00); reoperation rate (RD: 0.01; 95% CI: -0.00, 0.02); and long-term survival (HR: 1.17; 95% CI: 0.85, 1.48). TDR was associated with higher risk for postoperative complications (RD: -0.1; 95% CI: -0.19, -0.00); chylothorax (RD: -0.02; 95% CI: -0.03, -0.00). However, no difference was noted for reoperation rate (RD: 0.01; 95% CI: -0.00, 0.02), and overall survival (HR: 1.16; 95% CI: 0.8, 1.51).

CONCLUSION: Esophagectomy involving TDL did not have more complications nor high reoperation rate or change in long term survival. Nonetheless, TDR increased the risk for postoperative complications and chylothorax.

Sarcopenia and Operative Outcomes for Non-metastatic Colon Cancer

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**INTRODUCTION:** Sarcopenia, defined as loss of muscle mass and function is a negative prognostic factor for major abdominal cancer operation outcomes. We sought to understand the impact of sarcopenia on short-term operative outcomes in stage I-III colon cancer (CC).

**METHODS:** We performed a retrospective study of patients with stage I-III CC resected between 2007-2017. Abstracted data included patient demographics, surgical management and postoperative complications (Clavien-Dindo). Psoas muscle index (PMI; total psoas muscle area at the 3rd lumbar vertebra over height$^2$) was measured on preoperative CT using the segmentation software TeraRecon. Sarcopenia was defined as the gender-adjusted lowest PMI quartile. The association between PMI and surgical morbidity was evaluated by Chi-square and logistic regression.

**RESULTS:** We identified 523 patients with stage I-III CC and available CT images. Forty-four percent were male, 53.4% were non-white, and 24.9% were sarcopenic. PMI was lower in females than males (4.88 vs 6.42 cm$^2$/m$^2$, p < 0.001). There were no differences in race, comorbidities, or stage between patients with and without sarcopenia, however those with sarcopenia were more likely to have high grade histology (19.6% vs 10.8%, p = 0.043). Preoperative sarcopenia was not associated with surgical complications (p = 0.670). By multivariate analysis, only age was associated with complications with 19.8% increased odds per 10 years increase in age.

**CONCLUSION:** Unlike for other cancers, preoperative sarcopenia was not associated with increased surgical morbidity for non-metastatic CC. Further areas for investigations include the association of sarcopenia with oncologic outcomes and defining its interaction with other body composition measures such as visceral adiposity.

Should Routine Lymphoscintigraphy Be Standard of Care for Extremity Melanoma?

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**INTRODUCTION:** Lymphoscintigraphy (LS) is recommended prior to sentinel lymph node biopsy (SLNB) to improve accuracy. It has generally fallen out of favor in breast cancer; for logistical reasons it has historically been omitted for melanoma patients at our institution. We hypothesized that success of SLNB in extremity melanoma would be similar between LS and non-LS groups.

**METHODS:** We queried our melanoma database and identified all patients with an extremity melanoma who underwent SLNB between October 2009 and February 2020. We reviewed electronic medical records and imaging systems to identify whether patients had LS. All patients underwent injection with radiocolloid the morning of surgery and had all possible lymph node drainage basins interrogated with the Neoprobe.