Abstract:

Esophagectomy is a challenging operation with considerable potential for postoperative complications, including chylothorax. Because no randomized controlled trial or metaanalysis is available to clarify the incidence of chylothorax in esophageal cancer surgery, the authors analyzed their own institutional data for 1,856 patients and performed a systematic review using the MEDLINE database (9,794 patients) to identify risk factors, compare success rates of therapeutic approaches, and investigate long-term outcomes. The overall institutional chylothorax rate was 2% (n = 39). Reoperation was performed for 69% of the patients. No significant difference was noted between the transthoracic and transhiatal approaches. Regression analysis showed neoadjuvant treatment (odds ratio [OR], 0.302; p = 0.001) and tumor type (OR, 0.304; p = 0.002) to be independent risk factors. The systematic review included 12 studies. Chylothorax occurred for 2.6% of the patients. Treatment favored reoperation in five studies (70-100%) and a conservative approach in four studies (58-72%), with equal mortality rates. No significant difference was found between the transthoracic and transhiatal approaches. Chylothorax rates are low in high-volume centers (2-3%). No significant difference was noted between the transthoracic and
transhiatal approaches. Neoadjuvant treatment and tumor type were shown to be independent risk factors. Treatment concept (reoperation vs conservative treatment) did not affect long-term survival.