## EDITORIAL - THORACIC ONCOLOGY

## Significance of Thoracic Duct Resection During Esophagectomy for Esophageal Squamous Cell Carcinoma

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For a long time, it has been controversial whether the thoracic duct (TD) should be resected or not for localized esophageal squamous cell carcinoma (ESCC) during esophagectomy. On the one hand, an increase in the number of dissected lymph nodes around TD leading to improved survival is mentioned as an advantage of TD resection.<sup>1</sup> On the other hand, circulation instability, negative effect on nutritional status, and decreased immunity are listed as disadvantages.<sup>2,3</sup>

A retrospective study demonstrated that TD resection did not contribute to improved survival but did lead to metastases in more organs than TD preservation in ESCC patients treated with McKeown esophagectomy. 4.5 This study showed the answer to the aforementioned questions. However, although neoadjuvant chemoradiotherapy (NACRT) is standard in esophageal cancer treatment regardless whether ESCC or adenocarcinoma is in most countries, these studies included patients who received no preoperative treatment or only neoadjuvant chemotherapy.

Oshikiri et al.<sup>6</sup> conducted a cohort study using big data to clarify the significance of TD resection for improving the long-term outcome for ESCC patients treated with NACRT followed by esophagectomy. They showed that TD resection did not improve survival for patients with ESCC who underwent NACRT followed by McKeown esophagectomy. Furthermore, despite retrieval of more lymph nodes, TD resection caused distant metastases in

more organs than TD preservation. The Comprehensive Registry of Esophageal Cancer in Japan, which is almost a national database including 80 % of cases in Japan, was used in this study. To exclude selection bias, confounding factors were successfully eliminated by a quite strict propensity score-matching. Especially, the inclusion of cancer originating in other organs and year of treatment as covariates is worthy of special mention.

Based on the results of these recent studies, TD resection for ESCC with esophagectomy after either neoadjuvant chemotherapy or NACRT does not improve survival, and prophylactic TD resection is not recommended.

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