

thoracic nodes (22 vs 25; $P = 0.1188$), harvested upper mediastinal nodes (12 vs 12; $P = 0.4233$) were similar. RAMIE showed less severe postoperative morbidity (Clavien-Dindo Grade III or higher) (9% vs. 22%; $P = 0.0810$) and lower incidence of recurrent laryngeal nerve palsy (Clavien-Dindo Grade II or higher) (7% vs. 18%; $P = 0.1076$). There was no postoperative death in both groups.

Conclusion: Although this result contains our early learning curve period of RAMIE, short term outcome of RAMIE is acceptable from a safety point of view.

113 CONCURRENT SURGICAL TREATMENT STRATEGY FOR SYNCHRONOUS ESOPHAGEAL CANCER AND HEAD AND NECK CANCER IN OUR INSTITUTION

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Esophageal cancer patients have a high frequency to coincide with head and neck (H&N) cancer. We have corporated together with Otorhinolaryngology, H&N Surgery, and Plastic surgery department doctors for the treatment of synchronous esophageal and H&N cancer patients. The aim of this study is to analyze the treatment results and prognosis of synchronous esophageal and H&N cancer patients.

Methods: From January 2014 to December 2019, 5 patients underwent concurrent surgical resection of synchronous esophageal and H&N cancer in our institution. We retrospectively reviewed the surgical outcomes and prognosis of these patients of synchronous esophageal and H&N cancer (HNEC group) and compared the results with 27 patients who had esophagectomy with 3 regional lymph node dissection during the same period (EC group).

Results: The location of H&N cancers were pharynx/tongue; 4/1, and clinical stage was all Stage IV. The clinical stage of esophageal cancers was Stage 0/II/III; 1/1/2/1. All patients underwent video-assisted thoracic esophagectomy. The surgical procedures concurrently performed for the H&N cancer were pharyngolaryngectomy with free jejunum transfer for 3 patients, wide tongue and mandibular segment resection with mandibular reconstruction in 1 patient, and mandibular transection with radial forearm flap reconstruction in 1 patient. There was no significant difference in the frequency of postoperative complication between 2 groups. HNEC group tend to have shorter recurrence free survival compared to EC group ($p = 0.051$).

Conclusion: H&N surgery with thoracotomy is a highly invasive surgery, however, it can be safely performed with local management. The risk of recurrence is high in H&N cancer patients, therefore it is important to move onto adjuvant therapy without delay. Paraenteral nutrition may be useful in management of these patients.

116 PROGNOSTIC IMPACT OF THE SHORT-AXIS DIAMETER FOR THE NODAL ASSESSMENT BEFORE PREOPERATIVE CHEMOTHERAPY IN ESOPHAGEAL CANCER

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1.Division of Digestive and General Surgery, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan 2.Department of Gastroenterological Surgery, Niigata Cancer Center Hospital, Niigata, Japan 3.Department of Digestive and General Surgery, Uonuma Institute of Community Medicine, Niigata University Medical and Dental Hospital, Niigata, Japan Clinical N category (cN) is generally assessed by measuring the nodal diameter by CT before the initiation of primary treatment in esophageal squamous cell carcinoma (ESCC). The short-axis diameter is recommended for

evaluating treatment response in solid tumors by RECIST. This study aimed to elucidate the prognostic implication of the maximum short-axis diameter of lymph node (cN-size) before preoperative chemotherapy for ESCC.

Methods: We enrolled a total of 152 patients who underwent preoperative cisplatin/5-fluorouracil therapy (CF) followed by esophagectomy from 2005 to 2011. There were 127 men and 25 women with a median age of 65 years (range: 47–79 years). Clinically metastatic node was defined as follows; the node with cN-size ≥ 10 mm or that with $5 \text{ mm} \leq \text{cN-size} < 10$ mm and contrast enhancement, round shape and/or central necrosis in CT before starting CF. The association between the maximum cN-size and the overall survival (OS) after surgery was statistically investigated. The median follow-up period was 87 months (range: 36–145 months).

Results: The number of patients with cN0 and cN1–3 was 60 and 92, respectively. Twenty-seven and 65 patients with cN1–3 were classified into cN-size < 10 mm and cN-size ≥ 10 mm group, respectively. The 5-year OS rates in cN0, cN-size < 10 mm and cN-size ≥ 10 mm groups were 70%, 51% and 45%, respectively ($P = 0.006$). Among Ut-Mt tumors, the OS in the cN-size < 10 mm group was significantly worse than that in the cN0 group (5-year OS rate: 45% vs. 74%, $P = 0.048$). However, there were no significant differences in the OS between these two groups in Lt tumors (67% vs. 64%, $P = 0.789$).

Conclusion: The maximum short-axis diameter of lymph node before preoperative chemotherapy is significantly associated with OS in patients with ESCC. Lymph node with $5 \text{ mm} \leq \text{cN-size} < 10$ mm in the short axis should be treated as a metastatic node especially in Ut or Mt tumors, considering the poor prognosis.

130 SEVERITY OF ANASTOMOTIC LEAKAGE AFTER DIFFERENT TYPES OF ESOPHAGECTOMY: A NATIONWIDE COHORT STUDY

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Orringer, McKeown and Ivor Lewis esophagectomy are the most commonly performed procedures for esophageal and gastro-esophageal junction cancer. Anastomotic leakage remains a major problem after all types of esophagectomy and it is currently unknown whether anastomotic leakage severity is different between the types of esophagectomy. The aim of this study was to investigate the relationship between surgical techniques and the severity of anastomotic leakage in patients after Orringer esophagectomy, McKeown esophagectomy or Ivor Lewis esophagectomy.

Methods: All esophageal and gastro-esophageal junction cancer patients with anastomotic leakage after Orringer, McKeown or Ivor Lewis esophagectomy between 2011 and 2019 were selected from the Dutch Upper Gastrointestinal Cancer Audit (DUCA). The primary outcome parameter was a composite endpoint of reoperation, intensive care unit (ICU) readmission and 30-day/in-hospital mortality. Secondary outcome parameters included postoperative complications, re-intervention rate, ICU and hospital length of stay.

Results: Data from 1034 patients with anastomotic leakage after Orringer ($n = 287$), McKeown ($n = 397$) and Ivor Lewis esophagectomy ($n = 346$) were evaluated. The primary endpoint occurred in 36.3% of patients with anastomotic leakage after Orringer esophagectomy, in 55.4% of patients with anastomotic leakage after McKeown esophagectomy and in 61.2% of patients with anastomotic leakage after Ivor Lewis esophagectomy ($p < 0.001$). When adjusting for potential confounding variables, the sequelae of anastomotic leakage after Orringer and McKeown esophagectomy remained less severe compared to anastomotic leakage after Ivor Lewis esophagectomy (OR 0.28, 95% CI 0.20–0.41, $p < 0.001$ and OR 0.71, 95% CI 0.52–0.97, $p = 0.031$, respectively).

Conclusion: Consequences of anastomotic leakage are most severe after Ivor Lewis esophagectomy, moderately severe after McKeown esophagectomy and least severe after Orringer esophagectomy. This study demonstrated that not only the incidence, but also the severity of anastomotic leakage should be considered in current clinical practice and in studies that compare leakage rates between different surgical techniques of esophagectomy.