

Salvage surgery after curative chemoradiotherapy for cT4 thoracic esophageal cancer is the only treatment that can be expected to cure, but the incidence of postoperative complications is also high, and its indication and timing should be carefully considered. In our hospital, radical chemoradiotherapy was positively performed for cT4 chest esophageal cancer, and salvage surgery was positively performed.

Methods: We examined 24 salvage surgery cases after chemo radiotherapy for cT4 esophageal cancer, which was conducted at our hospital from April 2012 to June 2018. The effect of treatment is determined after radical chemoradiotherapy. In the case of PR/SD, salvage surgery or salvage surgery is performed after additional chemotherapy. Salvage surgery was actively considered when it was considered resectable and resistant. In cases where CR was obtained, salvage surgery was performed in cases where relapse was observed during the course. Invasion organs were 9 cases of aorta, 11 cases of tracheobronchial, and 4 cases of others.

Results: No hospital deaths. Postoperative complications were 50%. Pneumonia 21%, anastomotic leak 13%. The period from the start of radical chemoradiotherapy to salvage surgery was 2.2 to 17.0 months (median 3.8 months). Grade 3 was observed in 4 cases. The 3-year OS was 80%, and the 3-year PFS was 43%. The recurrence rate of cT4b (Ao) was 75%, and that of cT4b (tracheobronchial) was 57%. In addition, the recurrence rate was high in the cases that were cN (+) and all the cases had postoperative recurrence in the cases that were pN (+) in the histopathological examination after salvage surgery.

Conclusion: Since cT4 was down-staged and enabled for radical surgery, dCRT could eventually be a powerful preoperative treatment. There was no death at the hospital, and postoperative complications are considered acceptable. Consideration of multidisciplinary treatment for patients with positive lymph node metastasis is needed. There are not a few cases of pCR, and surgical indications and informed consent are more important.

212 USEFULNESS OF ENDOSCOPIC ESOPHAGECTOMY IN A PRONE POSITION FOR ELDERLY PATIENTS OVER 75 YEARS OLD

Ken Ito,¹ Takashi Kamei,² Masahiro Chin,¹ Motohisa Hagiwara,¹ Yasuyuki Hara,¹ Hiroyuki Kumata,¹ Eiji Hashizume,¹

1. Nihonkai General Hospital, Yamagata, Sakata, Japan 2. Tohoku University Hospital, Miyagi, Sendai, Japan

Surgery for esophageal squamous cell carcinoma (ESCC) is one of the most invasive surgery and high mortality rate because operation is centered on the thoracic cavity. Recently, Japan has been facing aging society, and surgery for elderly ESCC patient is increasing. In our hospital, we changed surgical position from left lateral position to prone. In this study, we investigated the surgical outcome and prognosis of ESCC operation in the patients aged ≥ 75 .

Methods: From April 2011 to March 2019, 39 ESCC operations for patients aged ≥ 75 were performed in our hospital. We compared surgical position. We retrospectively examined clinicopathological factors, long-term prognosis, preoperative nutritional status (albumin, neutrophil and lymphocyte ratio), and operation factors (operation time, blood loss, recurrent nerve paralysis, complication, hospital stay).

Results: Cases in lateral position surgery were 22 and prone position were 17. The median age was 79 vs 79 years old, and the gender ratio was male: female = 16:6/14:3. No significant differences were observed in preoperative nutritional status. The operation time was 458 min vs 501 min ($p = 0.126$). The blood loss was 318 mL vs 195 mL ($p = 0.003$). The rate of recurrent nerve paralysis was 42.1% vs 29.4% ($p = 0.262$). The number of patients in Clavien-Dindo \geq III complications was 40.9% vs 41.2% ($p = 0.987$). 3-year OS was 74.7% vs 77.3%, DFS was 78.6% vs 67.7%.

Conclusion: In ESCC patients aged ≥ 75 , surgery in prone position was relatively safe. The blood loss and the recurrent nerve paralysis were tend to be less. Recurrent nerve monitoring during operation and evaluation of perioperative swallowing function seemed to be the next subject.

213 CLINICAL SIGNIFICANCE OF ROBOTIC ESOPHAGECTOMY FOR THORACIC ESOPHAGEAL CANCER

Hiroya Takeuchi, Hirotohi Kikuchi, Yoshihiro Hiramatsu, Tomohiro Matsumoto, Wataru Soneda, Kinji Kamiya,
Department of Surgery, Hamamatsu University School of Medicine, Hamamatsu-shi, Shizuoka, Japan

Nowadays many patients with esophageal cancer are treated with thoracoscopic esophagectomy (TE) with precise mediastinal lymphadenectomy as a minimally invasive esophagectomy (MIE) in Japan. These advanced endoscopic surgeries are believed to contribute to early postoperative recovery. More recently robotic esophagectomy (RE) appeared attractively. To date, however, there has been a very limited number of comparison studies to verify the benefits of RE for esophageal cancer, especially in Japan where squamous cell carcinoma is predominant.

Methods: We retrospectively compared the short-term outcomes between TE ($n = 43$) and RE ($n = 19$) which were performed in our institution between 2018 and 2020 to verify the clinical significance of RE. Preoperative background factors of the patients compared were almost identical between the two groups.

Results: The operative time was longer in the RE group than in the OE group, whereas blood loss was equivalent between the two groups. There was no significant differences in the number of dissected mediastinal lymph nodes between the TE and RE groups (33 ± 15 vs 29 ± 11). The incidence of postoperative recurrent laryngeal nerve palsy was markedly less in the RE group than the TE group (5.2% vs. 18.6%). Moreover, the incidence of postoperative pneumonia also tended to be less in the RE group than in the TE group (5.2% vs. 11.6%). There were no operative mortality in the two groups.

Conclusion: Our results suggest that RE is comparable with conventional TE in terms of short-term outcome after surgery, and beneficial to technically reduce the recurrent laryngeal nerve palsy as a promising MIE.

215 LOCATION OF ANASTOMOSIS BEHIND THE STERNOCLAVICULAR JOINT INCREASES THE INCIDENCE OF ANASTOMOTIC STENOSIS IN RETROSTERNAL RECONSTRUCTION AFTER ESOPHAGECTOMY

Yasunori Kurahashi, Yudai Hojo, Tatsuro Nakamura, Tsutomu Kumamoto, Yasutaka Nakanishi, Yoshinori Ishida, Hisashi Shinohara,
Department of Surgery, Upper G.i. Division, Hyogo College Of Medicine, Nishinomiya, Japan

Anastomotic stenosis after esophagectomy is a major cause of long-term morbidity because it leads to poor dietary intake and malnutrition that markedly reduces quality of life. The aim of this study was to test the hypothesis that the risk of anastomotic stenosis is higher when the anastomosis is located behind the sternoclavicular joint than when it deviates from the sternoclavicular joint.

Methods: Among 226 patients who underwent esophagectomy between April 2010 and March 2019, we selected 114 patients who underwent retrosternal reconstruction using a gastric conduit for this study. They were classified into two groups according to the location of the anastomosis as determined by postoperative computed tomography scans: anastomosis located behind the sternoclavicular joint (group B; $n = 71$) and anastomosis deviated from the joint (group D; $n = 43$). The primary endpoint was the difference in the incidence of anastomotic stenosis between the two groups. Whether the occurrence of anastomotic leak affected the likelihood of anastomotic stenosis was also investigated.

Results: The incidence of anastomotic stenosis was significantly higher in group B than in group D (71.8% [$n = 51$] vs 18.6% [$n = 8$]; $p < 0.0001$). The incidence of stenosis in patients who developed an anastomotic leak was significantly higher in group B than in group D (88.0% vs 41.7%; $p = 0.0057$), although the findings were similar in patients who did not develop an anastomotic leak (63.0% and 9.7%, respectively; $p < 0.0001$).

Conclusion: There is an increased risk of anastomotic stenosis independent of anastomotic leak when the anastomosis is located behind the sternoclavicular joint in patients who undergo retrosternal reconstruction with a gastric conduit after esophagectomy.

221 THORACOSCOPIC ESOPHAGECTOMY WITH OR WITHOUT SMALL THORACOTOMY FOR ADVANCED THORACIC ESOPHAGEAL CARCINOMA IN THE LEFT LATERAL DECUBITUS POSITION

Hiroshi Sato, Yutaka Miyawaki, Naoto Fujiwara, Hirofumi Sugita, Shinichi Sakuramoto, Kojun Okamoto, Shigeki Yamaguchi, Isamu Koyama,
Medical University International Medical Center, Hidaka, Japan