This was a retrospective study of patients with locally advanced esophageal squamous cell carcinoma who received nCRT followed by esophagectomy between January 2011 and December 2018 at the Tri-Service General Hospital in Taipei, Taiwan. Survival analysis was performed using the Kaplan–Meier method and the Cox proportional hazards model. Univariate and multivariate analyses were used to determine the independent prognostic factors.

A total of 79 patients with esophageal cancer underwent esophagectomy, and 50 of them were enrolled in the study. Among the 50 patients enrolled, 18 had a pCR. A post-nCRT maximum standard uptake value (SUVmax) ≥ 3 was a poor prognostic factor associated with OS (hazard ratio [HR]: 3.665, P = 0.013) and PFS (HR: 3.417, P = 0.011). Poor prognosis was found in patients with pCR and a post-nCRT SUVmax ≥ 3 as compared with those with pathological partial response and a post-nCRT SUVmax <3.

SUVmax ≥ 3 is a poor prognostic factor in ESCC after trimodality treatment, even in patients with pCR.

251. COMPARISON OF LAPAROSCOPIC SURGERIES WITH OR WITHOUT HAND-ASSISTED PROCEDURE IN THE ABDOMINAL PHASE OF THORACOSCOPIC ESOPHAGECTOMY IN THE PRONE POSITION


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Laparoscopic surgery is less invasive than open surgery in the abdominal phase of thoracoscopic esophagectomy in the prone position (TEP). Laparoscopic surgery (LAP) and hand-assisted laparoscopic surgery (HALS) for mobilization of the stomach and abdominal lymph node dissection have been standard procedures. We aimed to compare the safety and feasibility of those procedures in patients undergoing TEP.

We evaluated 69 patients who underwent TEP and received gastric conduit reconstruction for esophageal cancer. The LAP group consisted of 42 patients, whereas the HALS group consisted of 27 patients. Surgical outcomes and postoperative complications (Clavien-Dindo classification, grade II or higher) were evaluated by comparing the two groups.

All significant differences were found in age, sex, clinical T stage, clinical N status, and neoadjuvant chemotherapy status between the two groups. According to surgical outcomes, there were no significant differences in overall operation time and reconstruction route. Abdominal operation time was significantly shorter in the HALS group than in the LAP group (LAP: 157 min, HALS: 96 min). No significant differences were found in age or sex. The abdominal operation time and reconstruction route showed no significant differences in the LAP group and HALS.

There were no significant differences in postoperative complications between the two groups. HALS is a feasible procedure with short abdominal operative time for patients with esophageal cancer.

253. RABEPRAZOLE IS EFFECTIVE FOR BILE REFLUX ESOPHAGITIS AFTER TOTAL GASTRECTOMY IN A RAT MODEL

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To evaluate the effect of PPI (Rabeprazole) on esophageal bile reflux in esophagitis after total gastrectomy.

Twenty-one 8 week old male Wistar rats were studied. They were performed esophagogastroduodenoscopy of total gastrectomy to induce esophageal bile reflux of biliary and pancreatic juice. Five rats were performed the sham operation (Sham) (n = 8). On the postoperative day 7, they were treated with saline (Control) (n = 8) or PPI (Rabeprazole 30 mg/kg per day, ip) (n = 8) for 2 weeks. On the postoperative 21 days, all rats were sacrificed and each esophagus was evaluated histologically. Esophagitis injury was evaluated by macroscopic and microscopic findings as well as the expression of COX2. We measured bile acid in the esophageal lumen and common bile duct.

The macroscopic ulcer score and microscopic ulcer length of the control group were significantly higher compared to those of the rabeprazole treated group. The expression of COX2 was significantly increased according to the immunostaining in the control group compared to rabeprazole treated group. Although there was no difference between the control and PPI groups in the total bile acids in the common bile duct, the bile acid in the esophageal lumen was significantly decreased in rabeprazole treated group due to augmentation of the duodenal motor complex.

With this model, rabeprazole is good effect for reflux esophagitis after total gastrectomy. Bile acid is an important factor in the mucosal lesion induced by duodenal reflux.

PPI does not inhibit the secretion of bile acid from the common bile duct. Therefore, we speculate PPI accelerates duodenal phase III migrating motor complex, accelerating duodenal passage of duodenal contents (bile acids), which should reduce duodenoesophageal reflux.

254. TODAY’S ISSUES IN ROBOT-ASSISTED ESOPHAGECTOMY

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Recently, effectiveness of robot-assisted minimally invasive esophagectomy (RAMIE) has been reported however, there are some issues specific to RAMIE which may lead to major complications. The issues include 1) interference with the right shoulder, 2) compression of vertebral bodies and blood vessels, 3) energy devices, and 4) education to young surgeons. In this study, we evaluated the short-term outcome of RAMIE in our department, and show the ideas for improving those issues.

For 1), the assistant gives instructions to the surgeon, and uses a protector on the right shoulder. In 2), port arrangement depending on the cases and switching the camera port is useful. 3) Because those devices are still under developing, careful procedure is required while using energy device. 4) Double console and extra thoracoscopic camera is useful in operating under the education.

We conducted a comparative study of 81 cases of RAMIE performed at our institution from 2014 to January 2022 and 392 cases of prone thoracoscopic