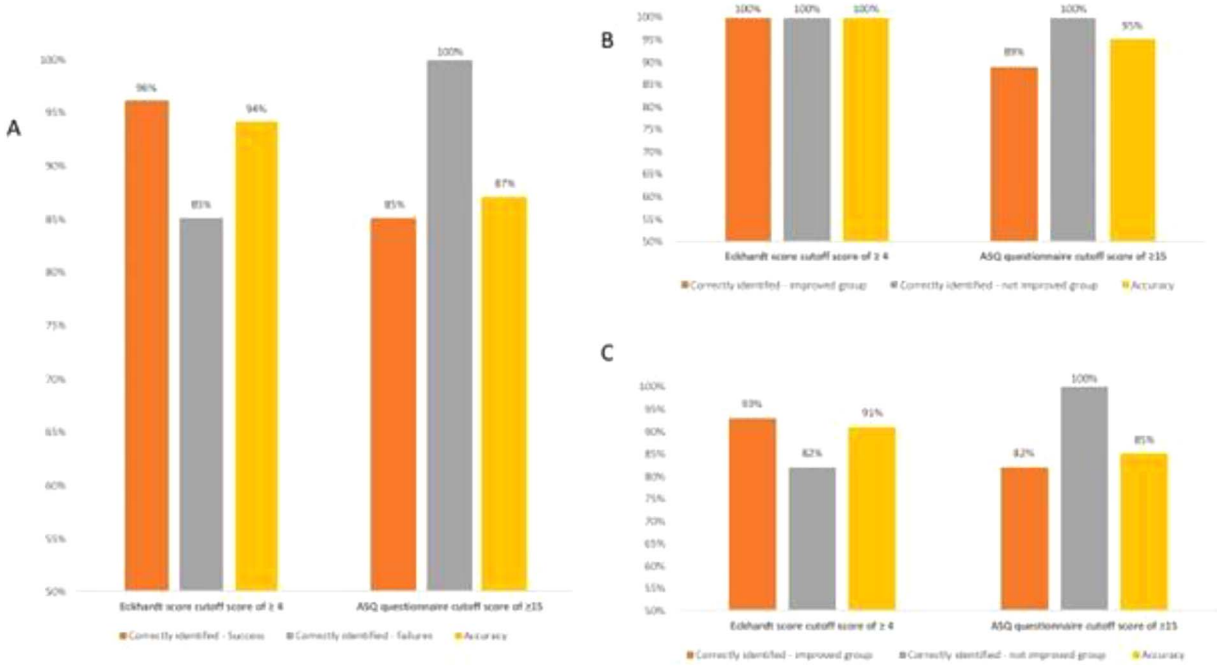

Figure 2.

Methods. From 2014–2018 all patients with LGD and superficial esophageal cancer were included. The patients underwent endoscopic mucosal resection (EMR) and/or radiofrequency ablation (RFA). In June 2019 the patients were contacted per mail for assessment of the level of dysphagia and HRQOL, using the Ogilvie score and the European Organisation for Research and Treatment of Cancer (EORTC) core-questionnaire QLQ-C30 together with the disease-specific module QLQ-OG25.

Results. 59 out of the 86 patients alive (69%) completed the questionnaires after a median follow-up of 28 months (8–65 months). 24% of the patients answering the questionnaires underwent EMR, 31% RFA and 44% both EMR and RFA. There was no significant difference ($p > 0.05$) regarding the level of dysphagia, weight loss, global QoL and emotional status, neither with respect to a non-cancerous reference population nor between the treatment groups. For the other variables in QLQ-C30 and QLQ-OG25, the patients experienced significant lower HRQOL. 12% had minor problems eating solid food (Ogilvie score 1), of whom all underwent EMR.

Conclusion. The majority of patients endoscopically treated for LGD and superficial esophageal cancer experienced no dysphagia after a median follow-up of 28 months. The patients experienced significant lower HRQOL when being compared to an age-matched non-cancerous reference population. There was no difference regarding the level of dysphagia, weight loss, global QoL and emotional status.

147 EFFECTIVE UNDERWATER ENDOSCOPIC SUBMUCOSAL DISSECTION FOR A SUPERFICIAL CERVICAL ESOPHAGEAL CANCER

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Underwater method is now mainly used in endoscopic mucosal resection of colorectal and duodenal lesions based on the fact that mucosa and submucosa float into the lumen moving away from the muscularis propria after filling with water without submucosal injection. We performed underwater endoscopic submucosal dissection (ESD) for a cervical esophageal lesion.

Methods. Case report.

Results. An 81-year-old man with a history of drinking and smoking underwent endoscopy, revealing a 1/3 round superficial cancer in the cervical esophagus. ESD was performed under general anesthesia and tracheal intubation. The lumen was so narrow from natural constriction that a good view could not be secured under CO2 insufflation. Therefore, we tried the underwater method. As the lumen was expanded by filling with 0.9% saline solution, it was possible to secure a visual field. Because the submucosal layer floated up underwater, a circumferential incision and submucosal dissection were completed easily and quickly.

Conclusion. Endoscopic resection for lesions within a physiologic narrow space is difficult. The underwater method is reported to be useful for treatment of rectal tumors near the dentate line and cecal tumors in the appendiceal orifice. We found that the underwater method made ESD for the cervical esophageal cancer even easier by securing a good view. To our knowledge, this is the first report of underwater ESD for a cervical esophageal cancer.

160 SURVIVAL ANALYSIS OF 18F-FDG PET/CT QUANTITATIVE PARAMETERS MEASURED IN PRIMARY TUMOR AND SUSPICIOUS LYMPH NODES IN PATIENTS WITH ESOPHAGEAL CARCINOMA

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18F-FDG PET/CT quantitative techniques have been described as prognostic indicators in esophageal cancer. Objective: To evaluate the prognostic value of the maximal Standardized Uptake Value (SUVmax), the Metabolic Tumor Value (MTV) and the Total Lesion Glycolysis (TLG) measured in the primary tumor and in the suspicious lymph node.

Methods. A cohort study was performed to assess the association of SUVmax, MTV and TLG measured prior and post to neoadjuvant therapy, as well as the variation of these values between the two studies, with overall survival (OS) in patients with esophageal cancer submitted to trimodal therapy. The quantitative techniques were applied in the primary tumor (PT) and in the suspicious nodes (LN) by a nuclear medicine physician. The OS rates were analysed. Before neoadjuvant therapy, 106 patients had PET/CT, and 39 patients had post neoadjuvant PET/CT exams.

Results. Before neoadjuvant period all the variables related to LN were able to predict OS. MTV of primary (HR: 1.89; 95%CI: 1.01–3.52) tumor were also able to predict OS. On post neoadjuvant period and the variation pre-to-post neoadjuvant periods, none of the PET/CT variables related to LN were related to prognosis. All primary tumor volumetric variables were related to OS. MTV (HR: 4.66; 95%CI: 1.54–14.08) and TLG (HR: 4.86; 95%CI: 1.66–14.26) of PT of post neoadjuvant period; and the variation of MTV (HR:

2.95; 95%CI: 1.01–3.52) and TLG (HR: 3.49; 95%CI: 1.01–3.52) of the PT pre-to-post neoadjuvant periods were prognostic variables.

Conclusion. In patients with esophageal cancer, the burden of disease in the suspicious nodes and primary tumor prior to therapy and the residual burden of disease in PT in post therapy 18F-FDG PET/CT were associated with dismal prognosis.

162 IMPACT OF FLOW SPEED OF ICG FLUORESCENCE IN THE GASTRIC CONDUIT AND THORACIC INLET SPACE ON ANASTOMOTIC LEAKAGE AFTER ESOPHAGECTOMY

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We have previously demonstrated that the flow speed of indocyanine green (ICG) fluorescence in the gastric conduit wall could predict anastomotic leakage after esophagectomy. Surround organs via retrosternal route is considered to affect the blood flow in the gastric conduit and anastomotic leakage. In the study, we investigated the impact of the flow speed of ICG fluorescence in the gastric conduit wall and thoracic inlet space on anastomotic leakage after esophagectomy.

Methods. A total of 142 patients, who underwent esophagectomy with three-field lymph node dissection, simultaneous reconstruction using a gastric conduit, and cervical anastomosis via retrosternal route, were prospectively investigated. Using ICG fluorescence imaging, blood flow speed of the gastric conduit wall was assessed before and after anastomosis (pre speed and post speed (cm/s)) and correlated with clinicopathological findings. Parameters of thoracic inlet space was assessed using CT scan and correlated with blood flow speed of the gastric conduit wall and anastomotic leakage.

Results. Median pre speed was 2.54 (0.73–6.10) cm/s and median post speed was dropped by 1.77 (0.32–8.67) cm/s. Speed reduction (pre speed—post speed) and speed reduction rate ((pre speed—post speed)/pre speed) were negatively correlated with thoracic inlet area (TIA) ($P = 0.004$, $P = 0.021$). Pre speed and post speed of the patients with anastomotic leakage were significantly slower than those of the patients without anastomotic leakage, respectively ($P < 0.001$ and $P = 0.050$). In 115 patients with pre speed more than 1.98 cm/s, TIA was significantly associated with anastomotic leakage after esophagectomy ($P < 0.001$).

Conclusion. We clearly demonstrated that retrosternal route reduced the blood flow of the gastric conduit wall using ICG fluorescence imaging. Narrow thoracic inlet space might obstruct the blood flow of the gastric conduit wall and cause anastomotic leakage after esophagectomy.

163 TRANSHITAL ESOPHAGECTOMY IN THE TREATMENT OF ESOPHAGEAL SQUAMOUS CELL CARCINOMA

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In the state of Rio Grande do Sul, Brazil, it is encountered a very high incidence of.
esophageal squamous cell carcinoma in the world.(1).
Advances in surgical procedure techniques and.
postoperative treatment have arisen in esophagectomy, which remains as with significant morbidity.
and mortality.
Compared to other esophagectomies.
conducted with thoracotomy, such as Ivor-Lewis and McKeown techniques, the Transhiatal.
esophagectomy has a shorter surgical time, a lower rate of mediastinitis and then lower morbidity.

Methods. Ninety-six patients undergoing transhiatal esophagectomy in the Hospital de Clínicas de Porto Alegre, between 2005 and 2017 were evaluated.

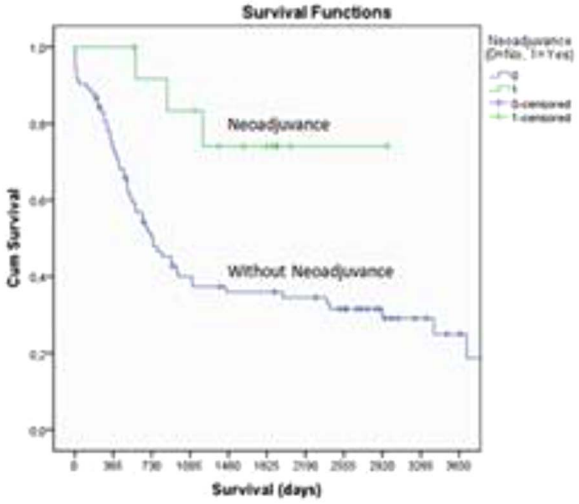

Figure 1. Survival in patients submitted or not to neoadjuvant therapy ($p = 0.01$).

Thirteen patients underwent neoadjuvant treatment with chemoradiotherapy. Ninety-day survival and 5-year survival were evaluated.

Results. Overall 90-day survival was 91.7%. The overall 5-year survival was 41.2%. Patients undergoing neoadjuvant therapy had a 90-day survival of 100% and a 5-year survival of 74.1%. Patients undergoing frontline esophagectomy had a 90-day survival of 90.3% and 5-year survival rate of 36%. Non-neoadjuvant patients with negative lymph nodes had a 5-year survival of 50.2%. The average surgical time was 253 minutes. Thirty-seven patients (38.5%) had positive lymph nodes in the surgical specimen. Multivariate analysis showed that surgical time and presence of positive lymph nodes are associated with a worse outcome.

Conclusion. Patients submitted to transhiatal esophagectomy present considerable long-term survival, which can be amplified in the absence of lymph node involvement. Operated patients who have undergone neoadjuvant therapy prior to surgery demonstrate increased survival times compared with those without treatment.

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164 EFFECTIVENESS OF ONE-TIME ENDOSCOPIC SCREENING PROGRAM IN PREVENTION OF ESOPHAGEAL CANCER IN CHINA: A MULTI-CENTER POPULATION-BASED COHORT STUDY

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