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P221 THE ROLE OF SUBCARINAL LYMPH NODE DISSECTION IN ESOPHAGECTOMY - A 5-YEAR SINGLE CENTER EXPERIENCE

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Aim: To evaluate the involvement of subcarinal lymph node dissection (SLND) in the surgical treatment of esophageal cancer, as well as its impact on surgical outcomes following esophagectomy.

Background and Methods: Data on patients that underwent esophagectomy from 01/03/2014 to 01/03/2019 were prospectively collected and retrospectively reviewed. Based on the medical records, the following parameters were collected and analyzed: patient demographics, histopathological parameters, surgical- oncological outcomes. All patients were staged according to the AJCC 8th edition.

Results: A total of 79 patients underwent Ivor Lewis or McKeown esophagectomy for either squamous cell carcinoma (n= 7 patients) or adenocarcinoma of the esophagus or gastroesophageal junction (n= 72 patients). In 26 cases, esophagectomy was performed without SLND, while 53 cases underwent SLND. Among the 53 patients, 50 (94.3%) were men, and 3 (5.7 %) were women. Mean age was 61.4 years, (range 34-78). Mean nodal harvest was 34.7 lymph nodes per patient. Lymph node invasion was noted in 33 patients (62.2%), with a mean of 9 positive lymph nodes per patient. Subcarinal lymph nodes were involved in 5 out of 53 patients (9.4%). The ratio of positive subcarinal lymph nodes to resected ones was 1/2 (50%), 3/3 (100%), 1/2 (50%), 1/2 (50%) and 1/1 (100%) for each patient. Final histopathological report showed adenocarcinoma of moderate or poor differentiation (G2 2/5, G3 3/5) in all five patients (100%). Four out of 5 patients had not received neoadjuvant treatment and their pathological staging was T3N3M0. One patient had received neoadjuvant chemotherapy and his final staging was ypT3N2M0. Noteworthy, the seven patients diagnosed with squamous carcinoma, were subjected to SLND and were 100% negative for invasion histologically.

Conclusion: Subcarinal lymph nodes were infiltrated in 9.4% of patients operated for esophageal cancer. In the squamous cell cancer group, the relative infiltration rate was notably 0%. It seems that omission of subcarinal lymph node dissection during transthoracic esophagectomy cannot be justified.

P222 EVALUATION OF SINGLE- NUCLEOTIDE POLYMORPHISMS IN ESOPHAGEAL CARCINOMA PATIENTS IN GREECE- PRELIMINARY RESULTS OF A CASE CONTROL STUDY

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Aim: The incidence of various single- nucleotide polymorphisms with reported malignant potential in esophageal cancer tissues has only sparsely been investigated in the west, as of today. The aim of our study was to investigate the contribution of four lncRNAs' polymorphisms HOTAIR rs920778, LINC00951 rs11752942, POLR2E rs3787016 and HULC rs7763881c in esophageal carcinoma susceptibility.

Background and Methods: Formalin-Fixed Paraffin-Embedded (FFPE) tissue specimens from 95 consecutive patients operated for esophageal or gastro-esophageal junction carcinoma between 01/03/2014- 01/03/2019 were retrieved and processed. Clinical data concerning patients' demographics, histopathological parameters, surgical, and oncological outcomes were also retrospectively collected from our prospective database. DNA findings concerning rs920778, rs11752942, rs3787016 and rs7763881 of the above mentioned population were compared with 121 healthy controls.

Results: Sixty-seven patients underwent Ivor Lewis or McKeown esophagectomy for either squamous cell esophageal carcinoma (n= 5) or adenocarcinoma of esophagus or gastroesophageal junction Siewert I or II (n= 62). Twenty-eight additional patients were subjected to total gastrectomy for gastroesophageal junction adenocarcinoma Siewert III. Neither HOTAIR rs920778 nor LINC00951 rs11752942 nor HULC rs7763881 polymorphism was found more frequently in esophageal cancer specimens in comparison to healthy subjects. On the contrary, the presence of C allele, as well as CC/TT genotypes of POLR2E rs3787016 were found more often in the control population, and when found in esophageal cancerous tissues it was associated with earlier stages of the disease, as well as with minor lymph node involvement and lesser metastatic potential.

Conclusion: The presence of POLR2E rs3787016 seems to be less common in esophageal cancer patients than healthy controls and is also associated with early stage disease. The clinical implications of this finding need to be clarified with further studies with larger sample size.

P223 BILATERAL RECURRENT LARYNGEAL NERVE LYMPHADENECTOMY DURING THORACOSCOPIC ESOPHAGECTOMY IN PRONE POSITION

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Aim: To present a video of a complete bilateral recurrent laryngeal nerve lymphadenectomy performed during minimally invasive esophagectomy using thoracoscopic video-assisted surgery in the prone position.

Background and Methods: Surgical treatment for esophageal cancer needs detailed lymphadenectomy. Indeed, the number of surgically dissected lymph nodes is important for staging accuracy and also determines patient's prognosis, including those along the recurrent laryngeal nerve. However, recurrent laryngeal nerve dissection remains difficult and increases the appearance of postoperative complications.
This is a video of a bilateral recurrent laryngeal nerve lymphadenectomy during thoracoscopic esophagectomy performed in the prone position in a female patient with esophageal cancer.

Results: A 75 year-old female was diagnosed with recurrent squamous cell middle third esophageal carcinoma. The patient had first been diagnosed eleven years ago, receiving chemoradiotherapy as a radical treatment. The patient achieved a complete response after treatment, which remained for eleven years. Eleven years later, during routine follow-up, tumor recurrence was identified in the middle third of the esophagus. After presentation in a Multidisciplinary Group the patient underwent minimally invasive McKeown esophagectomy.
First, a video-assisted thoracoscopic surgery was performed in the prone position to mobilize the thoracic esophagus and complete a detailed mediastinal lymph node dissection, including infra-carinal lymph nodes, bilateral bronchial lymph nodes and also bilateral recurrent laryngeal nerve lymph nodes.
Afterwards, the abdominal esophagus and lymph node dissection is performed using a laparoscopic approach, and also a left cervicotomy in the supine position. An assistance laparotomy was made to externalize the specimen and make the gastric conduit. A manual end-to end esophagogastric anastomosis was executed and finally, a feeding jejunostomy tube was placed.