



TRANSCERVICAL EXTENDED MEDIASTINAL LYMPHADENECTOMY (TEMLA)

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Transcervical Extended Mediastinal Lymphadenectomy (TEMLA) introduced by our team in 2004 is a technique of preoperative staging of Non-Small Cell Lung Cancer (NSCLC). In this report we present our experience with use of TEMLA in 1410 patients with NSCLC and present our 5-year survival rates in patients who underwent TEMLA with subsequent pulmonary resection

Material and Methods

TEMLA was performed on patients with proven NSCLC who were candidates for pulmonary resection, regardless of the state of the mediastinal nodes on CT or PET/CT, after negative result of EBUS/TBNA and/or EUS. The aim of TEMLA was to maximally accurately stage and possibly to improve late results of treatment of NSCLC. All mediastinal nodal stations (according to the IASLC map), except for the pulmonary ligament nodes (station 9) were removed during procedure [3,4]. Operative technique included a 5-8 centimeters collar incision in the neck, elevation of the sternal manubrium with a special retractor, bilateral visualization of the laryngeal recurrent and vagus nerves and dissection of all mediastinal nodal stations except for the pulmonary ligaments nodes (station 9).

Results

There were 6 postoperative deaths unrelated to the procedure (mortality 0.4 %). Complications of TEMLA occurred in 6.1% of patients with temporary laryngeal nerve palsy in 2.6% and permanent nerve palsy in 0.4 %.. Metastatic N2/N3 nodes were found in 290 patients. Subsequent thoracotomy was performed in 90.4% after negative result of TEMLA. Sensitivity of TEMLA in discovery of N2-3 nodes was 96.2 %, specificity was 100%, accuracy was 98.9%, Negative Predictive Value (NPV) was 98.6 % and Positive Predictive Value (PPV) was 100% In our recent study we showed that TEMLA had a significantly higher diagnostic yield than all other mediastinal staging modalities (PET/CT, EBUS, EUS, and rebronchoscopy).

Retrospective single institutional analysis of 5-year survival rates after pulmonary resection for Non-Small-Cell Lung Cancer (NSCLC) patients preoperatively staged by the use of Transcervical Extended Mediastinal Lymphadenectomy (TEMLA)

Methods

There were 917 patients who underwent TEMPLA in the period from 1.1.2004 to 31.12.2013. 5-year survival rates were reported separately for patients undergoing pulmonary resection primarily (without neoadjuvant), for neoadjuvant therapy after positive TEMPLA and for restaging with TEMPLA after prior neoadjuvant treatment .

The results of this study will presented during the meeting.