Oncological clearance of minimally invasive approaches for clinical N0 non-small cell lung cancer

Since the 1960s, lobectomy with systemic lymph node (LN) dissection has been the standard surgical treatment for patients with stage I or II non-small cell lung cancer (NSCLC). The efficacy of LN dissection for lung cancer depends on the accurate staging and the likelihood of survival benefit. After surgical resection, 10–20% of clinical N0 lung cancer converts to pathologic N1 or N2 disease. Moreover, evaluating the postoperative locoregional recurrences at the dissected area is an important factor to judge the proper approach for lung cancer surgery. Although video-assisted thoracoscopic surgery (VATS) lobectomy for lung cancer is increasingly accepted as a minimally invasive surgery, it is now widely performed with a lack of clear evidence regarding the clearance of the LN dissection. Furthermore, the novel minimally invasive approaches, such as the single-port VATS and the robotic-assisted thoracic surgery, have increased in adaptation for lung cancer surgery in the past decade.

This focused series is directed to the thoracic surgeons who are performing the minimally invasive surgery for early-stage lung cancer. Experts on each minimally invasive approach will comprehensively introduce their techniques and the results of their oncological clearance. Further prospective randomized controlled trials that compare each minimally invasive approach for early-stage lung cancer are needed to evaluate the oncological efficacy of these minimally invasive approaches.

Acknowledgments

Footnote

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