Peer Review File

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Reviewer A

-COMMENT 1

The author mentioned "Therefore, we confirmed that the quality of lymphadenectomy between multiportal VATS and open thoracotomy is equivalent, and several reports support this result" in line 166-168. I recommend adding the sentence "when highly-experienced surgeon performs it".

Reply 1: Thank you for taking time out of your busy schedule to give us your valuable feedback. We agree with the reviewer's comments. As the reviewer suggests, we have added the sentence as follows (p12, line 198-199): Therefore, we confirmed that the quality of lymphadenectomy between multiportal VATS and open thoracotomy is equivalent when a highly experienced surgeon performs it, and several reports support this result.

-COMMENT 2

Did the author use a 5mm thoracoscope? If so, please mention it in the section of Port placement.

Reply 2: Thank you for making an important point. As the reviewer suggests, we have added the terms as follows (p14, line 235-236): The thoracoscopic assistant places a 7 mm port and can visualize all the structures in the chest cavity with a 5 mm 30° rigid thoracoscope.

-COMMENT 3

It might be better that complications related to the lymphadenectomy is added in the manuscript.

Reply 3: Thank you for your important advice. As the reviewer suggests, we have added the section as follows (p18, line 298-304):
(5) Major complications related to lymphadenectomy
We reviewed 1,398 lung cancer patients who underwent radical lobectomy or more extensive pulmonary resection with mediastinal lymphadenectomy between 2010 and 2020 at our institute. Major postoperative complications related to lymphadenectomy were as follows: chylothorax in five, transient recurrent laryngeal nerve paralysis in 11, and bronchopleural fistula in four patients;

morbidity rate of 1.4%. The results were considered to be acceptable.

Reviewer B

-COMMENT 1

Table summarizing standard lymphadenectomy criteria in each hemithorax.

Reply 1: Thank you for taking time out of your busy schedule to give us your valuable feedback. As the reviewer suggests, we have added Table 1 summarized lymphadenectomy criteria.

-COMMENT 2

Demonstration videos of the complete lymphadenectomy in both hemithorax (including territories 10,9,8,5,6,4,2 ...).

Reply 2: Thank you for your important advice. As the reviewer suggests, we have added the video files.

Reviewer C

-COMMENT

The subject of the reviewed article is the issue of lymphadenectomy in the context of VATS-lobectomy with particular emphasis on four-port access. Many previous studies have found that minimally invasive access is associated with a lower number of removed lymph nodes and a lower percentage of upstaging compared to thoracotomy. Paradoxically, the above studies did not show a negative impact of a smaller number of removed lymph nodes on survival. There is a thesis hidden in the title of the presented work that the four-port access has an impact on the accuracy of lymphadenectomy. At the same time, the title suggests that four-port access offers greater opportunities than uniport or robotic VATS-lobectomy. The problem, however, is that the article does not provide any indication of the differences between the types of access and the accuracy of the lymphadenectomy. If the benefits of four-port access are really significant, it should be indicated for what reason, possibly, which node stations are more accessible by this operational technique. However, we receive short information that the four-port technique is just as effective in uniport, and with regard to thoracotomy, the distant survival is similar. At the same time, the authors were not tempted to make a more insightful comment that would explain any possible differences or their lack. Summarizing, the article

does not dispel the doubts contained in the title in any way and the reader, after finishing reading, still does not know whether in the context of lymphadenectomy a four-port access or uniport is better. Theoretically, more ports should facilitate access to the mediastinum and create more favorable conditions for removing more nodes, but this is not found in the above article. In my opinion, the reviewed work does not present a comprehensive compendium of knowledge in this matter and does not provide an answer to the question posed in the title. The way of treating the issue is brief, and the bibliography is mainly limited to older works without citing a number of recent publications, including meta-analyzes of lymphadenectomy in VATS-lobectomy.

Reply: Thank you for taking time out of your busy schedule to give us your valuable feedback. However, we recognize that what the editor has requested us in this review series is not to compare multiporal and uniportal VATS, but to summarize lymphadenectomy via multiportal VATS with specific techniques. If that understanding is correct, we are aware that that our manuscript is not as poor as you suggest.