

Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-22-1073>

Reviewer A

Comment 1: Although the fissureless technique has the risk of injury to the pulmonary artery behind the bronchus in lower lobe lobectomy and left upper lobe lobectomy, it is very suitable for right upper lobe lobectomy. Since right upper lobe lobectomy is a significant risk factor for prolonged air leakage, why was the fissureless technique not routinely used in RUL lobectomy in separated fissure group in your practice?

Reply 1: Your question is reasonable. Some surgeons preferred division of pulmonary artery (ascending A2) at fissure to at hilum because they are familiar with the procedure. We considered it was acceptable in the separated fissure because the exposure of A2 at the separated fissure was easy, which did not cause postoperative air leak.

Change in the text) No change.

Comment 2: Three patients underwent reoperation among seven patients with prolonged air leakage. I think it is a very high percentage because such air leakage is almost self-limited. What are your criteria for surgical intervention for prolonged air leakage?

Reply 2: Thank you for your comment. Unfortunately, the prolonged air leakage continued for more than a week postoperatively in those patients. In my institution, the prolonged air leakage continued for more than a week postoperatively, we planned to perform reoperation to cease it although it depended on the patient condition and degree of the air-leakage.

Change in the text 2) Please see lines 173-175 on page 10.

Comment 3: What is “double-lumen chest tube” in line 143? I did not hear about it and cannot find it in google search.

Reply 3: I apologize for my confusing expression. A 24 Fr double-lumen chest tube was “Argyle™ Trocar Catheter” made by Cardinal Health K.K. in Tokyo, Japan. By using it, we can insert the drug or autoblood for pleurodesis easily.

Change in the text) Please see lines 140-141 on page 9.

Comment 4: There are many errors in writing or spelling in the manuscript. Please examine it carefully again. For example,

- i. Line 99, All surgeries were performed “using” HI or NM,
- ii. Line 137, For all the patients undergoing “lobotomy”
- iii. Line 140, We applied a polyglycolic acid felt (.....) “using” fibrin glue
- iv. Line 174, if the patient's respiratory status “so” permitted.

Reply 4: I apologize for those spelling and writing errors. Those errors were revised.

Change in the text) Please see line 98, 134, 137, and 171 in the revised manuscript.

Reviewer B

Comment 1: This study presents some problems, the most important of which is the low sample size (22 patients vs 118 patients). Moreover you compared two different situations (dense vs separated fissure) treated with two different surgical approach (fissureless vs standard uniportal approach) in a retrospective analysis, which predisposes to many biases.

Reply 1: Your comment is reasonable. We totally understood that they are the limitations in this retrospective study, which was described at the last paragraph in the discussion section.

Change in the text 1) No change.

Comment 2: Finally, you compared the characteristics and perioperative outcomes of propensity score-matched patients undergoing fissureless (n=21) or standard uniportal thoroscopic lobectomy (n=21), without finding any significant difference.

Once again the results could be affected by too few patients. Many of these limitations were correctly acknowledged by you; don't you think that all these limitations could affect significantly the results?

Reply 2: Thank you for your suggestion. In the manuscript, we used Table 5 to prove the safety and feasibility of fissureless lobectomy. However, it seems confusing and not suitable because other reviewer also insisted the same comments. Therefore, Table 5 was deleted in the revised manuscript.

Change in the text 2) Table 5 was deleted.

Comment 3: As for the prolonged air leak, defined as that which lasts more than 5 days, the results could be affected by the fact that a pleurodesis was performed after only 3 days of PAL.

Reply 3: Thank you for your comment. In our department, when air leakage persisted for more than 3 days, we performed pleurodesis in order to cease it more quickly if the patient's respiratory status was permitted. However, it cannot be denied that postoperative pleurodesis affected the occurrence rate of PAL. Therefore, it is added in the discussion section as the limitation in the revised manuscript.

Change in the text 3) Please see lines 266-268 on page 15.

Reviewer C

Comment 1: Congratulations on a well written and interesting manuscript. The fissure last technique is certainly helpful for a vast array of patients and should be publicized more.

Reply 1: Thanks for your positive comment to my manuscript.

Change in the text) No change.

Reviewer D

The authors demonstrated that uniportal thoracoscopic lobectomy is feasible for patients with dense fissure. The data presented here are interesting.

Comment 1: It is difficult to understand what Table 5 means. There are no comments in the Discussion. The data before propensity score-matching is also not provided. Furthermore, propensity score-matching may be inappropriate, because there are no dense fissure cases in the Conventional technique group.

Reply 1: Thank you for your suggestion. In the manuscript, we used Table 5 to prove the safety and feasibility of fissureless lobectomy. However, it seems confusing and not suitable because other reviewer also insisted the same comments. Therefore, Table 5 was deleted in the revised manuscript.

Change in the text 1) Table 5 was deleted.

Comment 2: The authors often use parentheses instead of conjunctions, but this is unusual in the manuscripts and needs to be changed. For example; (if expected), (which is considered technically more difficult than the conventional multiportal approach) in the Objectives of the Abstract.

Reply 2: Thank you for your comments.

All inappropriate parentheses were revised.

Change in the text 2: All inappropriate parentheses were deleted in the revised manuscript.

Comment 3: English of the manuscript has to be checked by a person familiar with geology.

Reply 3: Thank you for your comment. English in the manuscript was checked by a native speaker who was familiar with general thoracic surgery.

Change in the text 3) No change.

Reviewer E

Major concerns

Comment 1: I recommend Table 1 is “Background information of patients in the present” including Fissure sense/separated: number (%) as one factor on the table. It is overview about the population in this study. And Table 2 is the statistical analysis of right upper lobectomy, in which the factors focus on the relation to operation. I’m not sure the necessity of Table 5.

Reply 1: Thank you for your comments. I revised the title of the Table 1. Moreover, in

the manuscript, we used Table 5 to prove the safety and feasibility of fissureless lobectomy. However, it seems confusing and not suitable because other reviewer also insisted the same comments. Therefore, Table 5 was deleted in the revised manuscript. Change in the text 1) Please see the new title of Table 1 in the revised manuscript. In addition, Table 5 was deleted.

Minor concern

Comment 1: The post operative prolonged air leakage was associated with right upper lobectomy and intrathoracic adhesion regardless of the any fissures in uniportal thoracoscopic surgery. The results have to be compared with multiportal approach or thoracotomy in previous studies on Discussion.

Reply 1: Your comment is reasonable. We added the article describing the contribution factor of PAL in pulmonary resection written by Seder et al.

Change in the text 1) Please see lines 253-256 on page 14 and the ref. No. 18 in the revised manuscript.