

Peer Review File

Article information: <https://dx.doi.org/10.21037/atm-22-1866>

Reviewer A Comments:

Comment: I would like to congratulate the authors on this excellent and very comprehensive work discussing the topic uniportal RATS. Standard techniques and future innovations are clearly presented and the clinical relevance is discussed. Only a few typos should be corrected and a thorough language editing should be performed, otherwise no further changes are needed.

The images and videos are representable and helpful to understand this topic. The work will be surely a milestone and reference in the field of thoracic surgery.

Reply: We thank you for reading our paper and for providing such valuable comments. We are happy to clarify and respond: we corrected the typos and revised the language. Thank you!

Reviewer B Comments:

Comment: The authors present a study detailing their experience with uniportal robotic-assisted thoracoscopic surgery. The authors make comments about comparisons between RATS and VATS. There are still comparisons with respect to costs that are being evaluated. The authors may want to review their comments. The authors provide a detailed description of their surgical approach. However, there is no data with respect to patient characteristics (e.g., BMI), operative characteristics (e.g., operative time, lymph nodes resected), and postoperative outcomes. These would likely provide additional data for the audience and for evaluation of the surgical technique presented.

Reply: We thank you for reading our paper and for providing such valuable comments. We are happy to clarify and respond in the following lines. We designed the article as a technical one (technique, advantages, limits, etc.); data as the patient characteristics (e.g., BMI), operative characteristics (e.g., operative time, lymph nodes resected), and postoperative outcomes are usually presented in an original article type, and not a technical type article. Thank you!

Reviewer C Comments:

Comment 1: Line 87-89 comments on robotic lymphadenectomy being superior, but in the same sentence says the data is similar. Please clarify.

Reply 1: Clarified in text.

Comment 2: Line 225: Please make reference to where the suction trick is published or define what it actually is within this paper.

Reply 2: Added the necessary references.

Comment 3: There are many grammar issues within the text. While the message is true, this is very

distracting. Here are a few minor points:

Line 79: Place RATS in parentheses

Line 79: “proved advantageous by its three”

Line 80: omit “claim and”

Line 81: usually

Line 91-92: separate into two sentences

Line 98: parentheses around MITS

Line 103 and 104: lowercase Uniportal

Line 97 & 109: define U-RATS and then use the abbreviation

Line 110: “since then”

Line 203: op?

Line 221: more improbable

Line 227: making the same mistake?

Reply 3: All corrected, we also revised the language.

Line 79: Place RATS in parentheses

Line 79: “proved advantageous by its three”

Line 80: omit “claim and”

Line 81: usually

Line 91-92: separate into two sentences

Line 98: parentheses around MITS

Line 103 and 104: lowercase Uniportal

Line 97 & 109: define U-RATS and then use the abbreviation

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Line 203: op?

Line 221: more improbable

Line 227: making the same mistake?

Reviewer D Comments:

The authors described their experiences and reviews of the pure Uniportal Robotic-Assisted Thoracic Surgery (U-RATS) in pulmonary resections including lobectomy, sleeve resection, segmentectomy, and pneumonectomy. And they concluded that the use of robotic dissection and staplers through a single incision and the rapid undocking with easy emergent conversion when needed (either to uniportal-VATS or to thoracotomy) are safety advantages.

I would like to suggest some points to improve this paper:

Comment 1: Line 67, 68:

uniportal RATS / uniportal- RATS

→ U-RATS

Reply 1: Corrected.

Comment 2: Line 71:

uniportal RATS

→ U-VATS

Reply 2: Corrected.

Comment 3: Line 75:

uniportal RATS; U-RATS; single port RATS; robotic lobectomy, MITS

→ Robotic-Assisted Thoracic Surgery (RATS); uniportal RATS (U-RATS); single port RATS; robotic lobectomy; minimally invasive thoracic surgery (MITS)

Reply 3: Corrected.

Comment 4: Line 79:

Robotic-assisted thoracoscopic surgery RATS

→ Robotic-assisted thoracoscopic surgery (RATS)

Reply 4: Corrected.

Comment 5: Line 81:

Enhanced Recovery After Surgery ERAS

→ Enhanced Recovery After Surgery (ERAS)

Reply 5: Corrected.

Comment 6: Line 87-88:

VATS (Video-Assisted Thoracic Surgery)

→ Video-Assisted Thoracic Surgery (VATS)

Reply 6: Corrected.

Comment 7: Line 92:

uniportal VATS and RATS

→ uniportal VATS (U-VATS) and uniportal RATS (U-RATS)

Reply 7: Corrected.

Comment 8. Line 96, 97, 104, 112, 129, 130, 152, 153, 158, 159, 356:

uniportal VATS / uniportal RATS

→ U-VATS / U-RATS

Reply 8: Corrected.

Comment 9: Line 98:

minimally invasive thoracic surgery MITS

→ minimally invasive thoracic surgery (MITS)

Reply 9: Corrected.

Comment 10: Line 157:

MITS surgeons (Minimally-Invasive Thoracic Surgery)

→ MITS surgeons

Reply 10: Corrected.

Comment 11: Line 228:

RUL bronchus

→ right upper love (RUL) bronchus

Reply 11: Corrected.

Comment 12: Line 257:

medium and lower lobe

→ middle and lower lobe

Reply 12: Corrected.

Comment 13: Line 365:

indocyanine green ICG

→indocyanine green

Reply 13: Corrected.

Comment 14: Figure legends (line 3499, 521, 522):

RUL / PA

→ right upper lobe / pulmonary artery

Reply 14: Corrected.

Comment 15: It would be better if the authors briefly add the disadvantages in addition to the advantages of U-RATS in the conclusion.

Reply 15: Added before line 395, meaning before the last paragraph of conclusions.

Comment 16: It would be better if the authors added photos of the surgical patients in Figure 1 as shown in Figure 2.

Reply 16: we added a part B in figure 1, presenting a surgical photo. In text, in row 117, "Figure 1" becomes "Figure 1 – 1A, 1B".

Reviewer E Comments:

Comment: I had the pleasure to review your article which is very well written and perfectly fulfils the objectives you state. You have furnished high-quality figures, and I think the videos will be as well. Congratulations for this complete article.

Reply: Thank you for reading our paper and for appreciating our work!

Reviewer F Comments:

Authors demonstrated their experience of uniportal robot-assisted lung surgery. I'm afraid this technique must be possible only for the well-trained surgical team, and this approach is not available for everyone. However, this manuscript should be useful to surgical teams considering the implementation of this technique.

I would like to make some comments on this manuscript:

Major

Comment 1: Compared with the video of uniportal VATS from the same doctor team, the camera seems rather far from the dealing spot. Is there any difficulty in performing surgical maneuvers due to the far field of view of the camera?

Reply 1: Everything is OK, there are no difficulties in surgical maneuvers when camera is far because provides a perfect view in 3D.

Comment 2: I think the assistant's role in the operation is very important in this surgery. I think this is the same as in uniportal VATS; the major difference with uniportal VATS is that the console surgeon is not on the surgical table. Even the slightest interference with each other's operations can cause fatal complications. I would recommend the authors to show any tips on how the surgeon and assistant act in a unison.

Reply 2: Yes, you pointed out the exact situation, we describe it in detail in "Difficulties in performing U-RATS" rows 128-147, then in "Developing and improving aspects of U-RATS" rows 151-153 and 157-160, and in Table 1 the row "Assistant help".

Minor

Comment 1: Line 131. Is "biportal RATS" the same meaning of "two-port RATS"?

Reply 1: Yes, we added (two-port RATS) in line 131 for clarifying.

Comment 2: I could not find the citation site of Reference #19 in this manuscript.

Reply 2: Reference number 19 is cited in the Table 1, row "Bleeding control" and column "U-VATS". Because Table 1 is cited in text the 18th reference (at row 163, at General aspects in U-RATS), this reference from the Table 1 becomes the reference number 19.