

Peer Review File

Article information: <https://dx.doi.org/10.21037/jovs-23-47>

Reviewer A

I have only two observations:

- 1) A post operative pain evaluation comparing the two techniques is mandatory.

Reply: In response to your comment, we have added a detailed paragraph in the Discussion section describing our approach to pain evaluation. This includes the use of a numeric rating scale for subjective pain scores.

Changes: Pages 20-21, lines 332-347.

However, we acknowledge the inherent limitations of subjective pain reports from patients. These reports, while important, can vary significantly between individuals, making it challenging to compare pain scores consistently. This variability and subjectivity were the primary reasons we initially omitted this data from our study.

Furthermore, we have included three new figures (Figures 5-7) in the Results section. These figures illustrate the subjective pain scores reported by patients for both techniques. We believe these additions provide a more comprehensive understanding of the pain associated with each approach.

Changes: Pages 15-16, lines 228-250.

- 2) There are a great amount of references but you miss the first experience of a good amount of cases reported in literature. I think you should cite these!

Reply: We agree that these references provide important context and perspective. In response to your comment, we have added these references to our paper. Specifically, we have included a few lines in the Introduction section to acknowledge the first experiences reported for uniportal RATS. We believe this addition will give readers a better understanding of the evolution and current state of this technique.

Changes: Pages 6-7, lines 101-114.

Reviewer B

This report was aimed to evaluate the uniportal and biportal robotic lung surgery without the use of CO2 insufflation. Uniportal approach was used in five patients and biportal approach was used in eight patients.

This report is wonderfully organized.

I have several suggestions.

I think that the use of CO2 insufflation is effective to keep better operative field. If we do not perform the robotic surgery with the over pressure of CO2 insufflation, the risk of complications such as CO2 embolism, hemodynamic alterations are very low.

Reply: In response to your comment, we have revised our manuscript to include the point you raised.

Changes: Page 7, lines 126-128.

What is the advantage of robotic surgery without CO2 insufflation?

Reply: We would like to kindly direct your attention to page 7, lines 120-128 of our manuscript. We believe that this section addresses the point you raised.

In addition, we would like to highlight that while CO2 insufflation can offer certain benefits, it may also limit the flexibility of instrument movement. Furthermore, we have found that one-lung ventilation is typically sufficient for achieving the necessary surgical exposure.

What intercostal space do you use for uniportal robotic port placement. Sixth intercostal space?

Reply: We would like to kindly direct your attention to pages 19-20, lines 313-327 of our manuscript. We believe that this section addresses the point you raised.

You should describe the theory of port placements of uniportal and biportal RATS.

Reply: We would like to kindly direct your attention to page 19-20, lines 313-327 of our manuscript. We believe that this section addresses the point you raised.

What kind of procedure was performed by uniportal and biportal RATS?

Reply: To address your comment, we have included a comprehensive table (Table 2, page 12, line 179) in the revised manuscript. This table shows the resections (segmentectomies and lobectomies) performed by each of the different approaches used (uniportal RATS and biportal RATS). We believe this visual representation will provide a clear and concise overview of the procedures and we hope this addition adequately addresses your concern.

Do you decide uniportal or biportal approaches based on the location of the tumor?

Reply: We would like to clarify that the number of ports we employ is not determined by the location of the tumor.

For further details on the reasons for an additional port, we kindly refer you to pages 19-10, lines 313-327 of our manuscript, where we have elaborated on this topic.

You should describe the detail of surgical procedures of uniportal and biportal RATS in additional table.

Reply: We would like to kindly clarify that the primary focus of this manuscript is to report our initial experience, rather than detailing the surgical technique itself. The decision-making process regarding the use of a uniportal or biportal approach is comprehensively detailed in our manuscript on pages 19-20, lines 313-327.

While we agree that a detailed description of the surgical procedure could be beneficial in a manuscript focused on surgical technique, we believe that in the context of this manuscript, which aims to share our initial experiences, such a detailed description may not be necessary.

If possible, it would be better to have a Table or something about postoperative pain scale.

Reply: We have added a detailed paragraph in the Discussion section describing our approach to pain evaluation. This includes the use of a numeric rating scale for subjective pain scores.

Changes: Pages 20-21, lines 332-347.

Furthermore, we have included three new figures (Figures 5-7) in the Results section. These figures illustrate the subjective pain scores reported by patients for both techniques. We believe these additions provide a more comprehensive understanding of the pain associated with each approach.

Changes: Pages 15-16, lines 228-250.

Reviewer C

I read this paper with great interest. We would like to recommend the authors to collect more cases and report on them. 13 cases are too small to draw any conclusion, especially from their initial experiences.

Reply: We were only able to complete data collection of 13 cases before the deadline set by the journal. However, we are currently launching a randomized, single-blinded multicenter national clinical trial that aims to compare the uniportal video-assisted thoracic surgery (VATS) approach with the uniportal or maximal 2-port robotic-assisted thoracic surgery (RATS) approach concerning short-term as well as long-term results in anatomic lung resections. Hence, the first 13 cases reported in this manuscript show the initial experience gathered in our center in Switzerland.