

Peer Review File

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Reviewer A

This is a well presented case report. Despite the case presentation does not add new information to the thoracic surgery community, the case is of potential interest for the readers.

Some concerns for the authors are:

1. The authors state that most surgeons use an inflation-deflation technique. Although the authors used indocyanine green, in the video we can see also an inflation-deflation manoeuvre to identify de intergmental plane. Could the authors comment on how the indocyanine green provided additional information regarding the line of staplers to be applied?

The inflation maneuver in this case report was performed to check that the 6. segmental bronchus was not included in the stapling. Due to the inflation of the lung, especially the posterior part of the intersegmental fissure is difficult to visualize when using an anterior approach. The advantage of ICG is that the intersegmental fissure can be visualized on a deflated lung.

2. In line 106 " the suction level was set to -2 cm H2O". I guess this should be -20 cmH2O.
We routinely use a low suction (-2 cm H2O). This is based on an RCT, we published on this topic in EJCTS in 2019 and on the ESTS guidelines for ERAS after lung surgery.

a) Holbek BL, Christensen M, Hansen HJ, Kehlet H, Petersen RH. The effects of low suction on digital drainage devices after lobectomy using video-assisted thoracoscopic surgery: a randomized controlled trial†. *Eur J Cardiothorac Surg.* 2019 Apr 1;55(4):673-681. doi: 10.1093/ejcts/ezy361. PMID: 30445572

b) Batchelor TJP, Rasburn NJ, Abdelnour-Berchtold E, Brunelli A, Cerfolio RJ, Gonzalez M, Ljungqvist O, Petersen RH, Popescu WM, Slinger PD, Naidu B. Guidelines for enhanced recovery after lung surgery: recommendations of the Enhanced Recovery After Surgery (ERAS®) Society and the European Society of Thoracic Surgeons (ESTS). *Eur J Cardiothorac Surg.* 2019 Jan 1;55(1):91-115. doi: 10.1093/ejcts/ezy301. PMID: 30304509.

3. The video could have been recorded with better resolution. The images of indocyanine green are recorded manually from the screen.

The video is recorded in HD high solution. However, another thoracoscope on the Elevison tower with near infra-red camera is used for ICG and this had to be edited into the video.

4. Could it be possible the addition of a coronal view of hte CT scan to better illustrate the way the artery enters in the chest?

I have added a coronal view of the sequestration as requested (Figure 1b)

5. Some minor spelling errors should be corrected.

They are corrected.

Reviewer B

This is a case report of left basilar VATS segmentectomy for intra lobar pulmonary sequestration using ICG for identification of the intersegmental plane.

The authors emphasize that the novelty of this case is that a segmentectomy was performed for intra lobar pulmonary sequestration, which is usually done by lobectomy, and that ICG was used for identification of intersegmental planes instead of the inflation/deflation technique.

I have some comments and questions as follows:

Introduction section:

_ p2, line 37: "CT" should be listed in full spelling.

Corrected

_ p2, line 37-39: Are there any reports in the literature on the use of segmentectomy as a treatment for sequestration? If so, please cite the literature.

Thank you for this excellent suggestion. The reference below is added to support the statement in the text.

Traibi A, Seguin-Givelet A, Brian E, Grigoriu M, Gossot D. Adult pulmonary intralobar sequestrations: changes in the surgical management. *J Vis Surg.* 2018 Mar 30;4:62. doi: 10.21037/jovs.2018.02.13

Pre-operative preparation section:

Please provide a brief description of the surgical procedure planned preoperatively for this case. Where was the feeding artery thought to be branched from? It is preferable to include this information in the text.

The text is revised accordingly.

Tips, tricks and pitfalls section:

The descriptions are common sense and not special in any way.

Figure 3 (Video)

The authors described as follows: the hilar lymph nodes are inflammatory enlarged and sticky. However, I didn't know how hard it was because I hardly saw the hilar lymph nodes being dissected in the video. Please show the scene more clearly.

Thank you for the comment. Unfortunately, the raw film is not available, but there are sections showing lymph node removal using Ligasure.

Reviewer C

The reviewer is honored to review an article about the usage of ICG intravenous infusion for surgical resection of intra-lobar pulmonary sequestration. ICG is widely used worldwide for performing pulmonary segmentectomy. In this point, this case report is neither very new nor instructive.

- 1) Since there are many grammatical errors in the manuscript, the reviewer strongly suggests an English editing again.

The manuscript has undergone English editing.

- 2) The video is well taken, and so the procedure itself is well described. However, according to the chest CT, there is some possibility that more lungs could be spared. Basilar segmentectomy can be one of the options for this patient, but the sequestration is more limited to the base of the left lower lobe. The authors did not show 3D-CT angiography for this case, but this point should be clarified for the better understanding of the extent of the sequestered lungs.

Thank you for this excellent comment. Definitely 3D-CT angiography is a great advantage especially for complex segment like 9,10. However, this was not available for this case and on MDT with radiologists only in segment 6 the lung tissue was considered normal.

- 3) On line 63, what does “every intercostal space” mean? From the 1st ICS to the 12th ICS? Please specify the meaning to avoid misunderstanding.

The text is revised accordingly

- 4) Regarding “Tips, tricks, and pitfalls”, is there any evidence that tan or purple cartilage is enough for dividing the feeding artery less than 2 cm? Is there any report that the stump will or will not become an aneurysm?

Interesting consideration. I have not been able to find reports on this particular issue.

Reviewer D

This case report described a surgical procedure and outcome for intra lobar pulmonary sequestration treated with VATS segmentectomy using ICG injection method. This case report is well written and almost acceptable. I have one comment on this report.

1. The author conducted 3-port VATS method. However, I assume that uniportal VATS approach would be feasible and applicable in this case. I hope that the authors should describe why they chose 3-port VATS.

The potential superiority of uniportal VATS to multiport VATS is an ongoing discussion that lies beyond the scope of this case report. For this special issue on segmentectomies, I was invited to present the three port Copenhagen anterior approach.