Peer Review File

<mark>Reviewer A</mark>

The aim of this manuscript is to describe the operative steps, tips, pitfalls and caveats of VATS right lower lobe common basal segmentectomy.

I have some comments and questions as follows:

Abstract section:

P2, line 12: "Contrast-enhanced"

"contrast-enhanced" is correct.

Response: We are sorry for our typo. We have corrected it.

Changes made: "The preoperative contrast-enhanced high-resolution computed tomography scan must"

Introduction section:

- The authors should cite the more major papers on segmentectomy.

Response: Thanks for your comment. New references have been added to the text.

Changes made:

 Berry MF. Role of segmentectomy for pulmonary metastases. Ann Cardiothorac Surg. 2014 Mar;3(2):176-82. doi: 10.3978/j.issn.2225-319X.2014.02.08. PMID: 24790842; PMCID: PMC3988295.

 Shiono S, Okumura T, Boku N, Hishida T, Ohde Y, Sakao Y, Yoshiya K, Hyodo I, Mori K, Kondo H. Outcomes of segmentectomy and wedge resection for pulmonary metastases from colorectal cancer. Eur J Cardiothorac Surg. 2017 Mar 1;51(3):504-510. doi: 10.1093/ejcts/ezw322. PMID: 27773868.

 Leshnower BG, Miller DL, Fernandez FG, Pickens A, Force SD. Videoassisted thoracoscopic surgery segmentectomy: a safe and effective procedure.
Ann Thorac Surg. 2010 May;89(5):1571-6. doi: 10.1016/j.athoracsur.2010.01.061. PMID: 20417779.

6. White A, Swanson SJ. Video-assisted thoracic surgery (VATS) segmentectomy: state of the art. Minerva Chir. 2016 Feb;71(1):61-6. Epub 2015 Nov 6. PMID: 26544908.

- In JCOG0802/WJOG4607L, a common basal segmentectomy (S7-10) is an exclusion criteria. As described by the authors, basal segmentectomies are usually more technically complex than other types of segmentectomies, however, the common basal segmentectomy (S7-10) is not a complicated procedure. Shouldn't the authors investigate for the resection of each segment of basal segmentectomy?

Response: Thanks for your comment. This specific segmentectomy (common basal segmentectomy) was assigned to me as an editorial invitation. Another types of basal

segmentectomies are described in other chapters.

Changes made: No changes have been made.

<mark>Reviewer B</mark>

The authors reported their surgical experience regarding the basic right lower lobe basal segmentectomy and demonstrated the surgical steps, tips, and caveats through video clips.

As we know, basal segmentectomy either in left or right lower lobe is tended to be easier than the single segmentectomy involved S7, S8, S9, or S10. So I think the most key know-how has been properly explained in the paper.

However, I still have some questions regarding your manuscript.

 As the incomplete/thick parenchymal fissure was encountered, you seemed to use the ligasure to dissect this plane, do you have comment on the use of single direction approach (vein-> bronchus-> artery) in such circumstances?

Response: Thanks for your consideration. Based on our experience, we usually open the major fissure in order to identify the pulmonary artery and its segmental branches. This maneuver substantially increase the safety of the procedure with low rate of postoperative air leak. Changes made: No changes have been done.

2. As the aforementioned statement, the basal segmentectomy is not considered to be the most complex one in all anatomical segmentectomies, how did you determine the surgical indication for the lung nodules? based on the solid-part or size or location?

Response: Thanks for your valuable comment. This chapter is mainly focused on technical aspects. As stated in the introduction, anatomical segmentectomies are preferred for patients with pulmonary metastases or patients with non small cell lung cancer (NSCLC) and limited cardiopulmonary reserve or multiple comorbidities as long as wedge resection is not possible. The recent clinical trials extend the indications for patients with small-sized (<2 cm, CTR >0.5) peripheral c-stage IA NSCLC. Regarding the localization. The nodule should be located far away from the intersegmental line with S6 in order to achive a optimal surgical margin. We have included this essential information in the text.

Changes made: "The pulmonary nodule should be located far away from the intersegmental line with S6 in order to achive an optimal surgical margin."

Reviewer C

This is a well-presented paper with sufficient quality of videos. Although the technique described has been widely presented previously, the present work may be useful for

readers.

Response: Thank you very much for your kind comment.